



Embedding forest carbon in Vietnam's Forestland Property Relations

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Abstract

Recent decades have witnessed the introduction of forest carbon as the basis of exchange and financing for climate change mitigation throughout the world. Increasingly, forest carbon is known as a new commodity to be produced and traded through market based mechanisms that reduce emissions from deforestation and forest degradation (REDD+). Drawing on insights gained from the discussions at the national policy level and a case study of forest carbon production in Vietnam's Central Highlands, this study examines how emerging REDD+ carbon property relations are unfolding in terms of national and local property rights systems in the forestlands. REDD+ forest carbon has emerged in Vietnam with the hope of bringing new financial incentives for forest protection efforts and local livelihoods. However, the contestation of current forest and land property systems have posed challenges that restrict the clarification of property rights and claims over forest carbon and associated forest resources local people still depend upon. This situation, consequently, will have some initial impacts on the success of REDD+ and forest carbon commodification in the future in Vietnam.

Keywords: Forest carbon, REDD+, Vietnam, Property Relations, Political ecology.

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List of Abbreviations

CIFOR	Centre for International Forestry Research
CBFMU	Community-based forest management units
CCP	Community Forest Carbon Pools Program
CPC	Communal People's Committee
FAO	Food and Agriculture Organization of United Nations
FFI	Fauna and Flora International
FPDL	The Forest Protection and Development Law
Ibid.	Ibidem (in the same place)
NGO	Non-governmental Organization
MARD	Ministry of Agriculture and Rural Development
MB	Management Board
MRV	Measurement, Reporting and Verification
PanNature	People and Nature Reconciliation
PFES	Payment for Forest Environmental Services
REDD+	Reducing Emission from Deforestation and Forest Degradation
STWG	Sub-technical Working Group
SFE	State Forest Enterprise
VNFOREST	Vietnam Forestry Administration
VND	Vietnamese Dong (Vietnamese currency)

CHAPTER 1-INTRODUCTION & BACKGROUND

In the last few decades, neoliberalism has become the political and economic ideology of our time (Humphreys, 2009). The application of this ideology globally has led to changes in the form of commodity production and creation of new commodity trading networks. According to this view, the commodification of nature (Castree, 2003) has been accelerated and reinforced. With the fundamental premise of “selling nature to save it” (McAfee, 1999, p. 133), natural goods and processes are converted into tradable items over time. The latest example is the carbon commodity boom after the Kyoto Protocol 1997 through Joint Implementation (JI) and Clean Development Mechanism (CDM) initiatives. These mechanisms allowed industrialized countries to implement emission-reduction projects in developing countries. Such projects can produce certified emission reduction credits (CERs) for sale in the market as a commodity. A variety of carbon emission markets have now been established to exchange this commodity in Australia, Canada, New Zealand and parts of the United States (Corbera & Brown, 2010). The measurement and exchange of carbon has even reached the local level through private investment in various carbon projects.

Ten years after the Kyoto Protocol in 1997 forest carbon commodification returned to the main agenda of climate change mitigation as a proposed mechanism for Reducing Emission from Deforestation and Forest Degradation in developing countries (REDD+). In this context it is not only timber or forest fruits that can be bought and sold, but also the capacity of forests to absorb carbon dioxide that is translated into certified carbon credits¹ for exchange in the carbon markets. REDD+ now provides the opportunity to progress the commodification and exchange of forest carbon in developing countries of the tropics.

Similar to other conventional types of commodity, forest carbon commodities are embedded in and perceived as an outcome of socio-natural relations. In other words, forest carbon commodification is inserting new market relations around forest carbon commodities, which, in turn, may “reshape social, cultural, political and geographical relations in the place” (Nevins & Peluso, 2008, p. 225) where forest carbon is produced as a commodity. Recently, critical scholars have tried to tell the stories of forest carbon commodities, as well as untangle the link between this commodification and social relations in rural areas (Nevins & Peluso, 2008). Numerous studies have built on this work by exploring the political-ecological dynamics of commoditizing forest carbon, as well as the local implications of this commodification in various parts of the world (Barr & Sayer, 2012; Dressler et al., 2012; Mahanty, et al., 2012; Phelps, Friess, & Webb, 2012).

Given that REDD+ development is still at an early REDD+ readiness phase, the above-mentioned studies mostly focus on the initial production stage of forest carbon, when all the basic infrastructure for producing carbon commodity is set up, and the agreements, claims or appropriations over forest carbon are negotiated (Mahanty, et al., 2013). At this stage the relationship between forest carbon and the forestland property tenure systems constitute critical issues which should be taken into account. As Corbera et al. (2011) argued, the particularities of forestland tenures in certain places have decisive implications for the nature of forest carbon production due to the influences these systems have on who becomes involved and on how the benefits should be distributed. Similarly, the emergence of forest carbon has also led to changes in the forests and landscapes from which the commodity is derived, especially in terms of re-shaping social relations over these resources (Nevins and Peluso, 2008).

¹ Each CER is equivalent to one tonne of CO₂

These studies also mention the thorny issue of property in the context of carbon (UNREDD, 2013) referring to forest carbon commodity, through the appropriation and claims negotiation process, as a new type of property. However, these studies also emphasize that the claims of ownership, control, access and benefit from forest carbon are ill-defined in most developing countries. The underlying causes of this problem are not only the lack of understanding of the new commodity, but also the contestation and fuzziness (Sturgeon & Sikor, 2004) of existing local property rights to land and forests that carbon depends upon. They also show that applying individual rights to forest carbon in fluid, local social organization, property dynamics and biophysical processes is a problematic and contested issue (Dressler, et al., 2012).

In addition, the idea of carbon property has come from a Western perspective, which defines the rights of forest carbon as individual rights. This view seems to neglect an important aspect about how individual carbon rights apply to forests that are collectively owned. In developing countries community management systems and communal ownership of natural resources are often not formally recognized in the State legal system even though they exert a strong influence on forest/land practices on the ground. This inconsistency between legal tenure system and practices around forest and land has therefore led to conflicts among local communities and the State or non-stage agencies (To, 2007) in the forestry sector. Hence, it is probable that forest carbon production and its high potential returns may aggravate these problems if the rights of communities to forest carbon are not clarified and protected.

These authors also point out that holding property rights over forests, lands and carbon is not a sufficient guarantor for local people or organizations to derive benefits from carbon commodity. They argue that carbon benefits are influenced by a combination of political and economic factors emerging from capital, technology or power relations (Corbera & Brown, 2010). As such there is therefore value in considering this problem at an early stage of forest carbon production.

Following this literature, I focus my attention on the emergence of forest carbon property in the current forestland property relations of Vietnam. Drawing on scholarship in political ecology, property and access, I aim to examine how the existing forest and land property systems (both legal and practice) respond to the emergence of forest carbon and the negotiation of property rights over this resource among multiple actors. Moreover, the initial implications of emerging forest carbon on access to and benefit from forest carbon and forestland resources are also investigated. The example from REDD+ in Vietnam helps to illustrate all these concerns. The findings of the study are drawn from: (i) the negotiation surrounding forest carbon rights and claims at the national policy level, and (ii) a case study conducted in Hieu commune of the Central Highlands Vietnam. Overall, not only does the study make empirical contributions to the field of political ecology studies but it also has practical implications for the practice of forest carbon commodification and REDD+ in the Central Highlands in Vietnam.

1.1. Background: The contested forestland property relations in Vietnam

The Social Republic of Vietnam is located in Southeast Asia. It covers an area of 33.04 million hectares administratively divided into 64 provinces and municipalities (Nguyen, Nguyen, & Vu, 2008). The country is home to some of the most extensive, high-biodiversity tropical forests in the world. The complicated topography and climate also result in a diversity of the natural forests in Vietnam (De Jong, 2010).

As much as the forests and resources are diverse, so are Vietnamese forest property systems due to the intersection of different forest and land tenure reforms during the country's complex history (McElwee, 2012; To, 2007; Tran & Sikor, 2006). This situation, therefore, has led to unclear

property rights and contestation of claims over forestland and forest resources in practice. The fuzziness and contestation in forest/land property relations are considered as key features that almost all post-socialist countries, such as Vietnam, face (Sturgeon & Sikor, 2004).

Prior to Vietnam's independence, forests were managed by the colonial states (To, 2007a): French in the North and Americans in the South. However, during this time most of the forests in upland areas were still accessed, controlled and used by local communities under their long-standing norms and rules (ibid.). This system amounted to *customary tenure* (Nguyen, Nguyen, & Vu, 2008), which had been established gradually during the community's history, and intertwined with typical cultural and political features, as well as with the traditional livelihoods.

Shortly after the national unification (1954 and 1975) the State aimed to completely nationalize forests (McElwee, n.d.). The State-owned Forestry Enterprises (SFEs) were established to operate the State-controlled management system and to log timber in forestlands nationwide. However, the SFEs focused only on exploring timber, neglecting forest management duties almost entirely. During this time local people were excluded from forest use and management. However, the customary norms and rules were disregarded in the State law system. As Tran and Sikor (2006) observed, many forest conflicts arose between the SFEs and local villagers due to the land/timber grabbing policy versus villagers' forest use demands at this time. The forest areas in Vietnam were recorded as decreasing rapidly in many years.

As a consequence of Doi Moi² (Revolution) policies in 1986, there was big forest and land reform in Vietnam. The 1991 Forest Protection and Development Law (FPDL) classified all forests in Vietnam into 3 different categories: (i) *Production forests*, which were the source of timber and non-timber products; (ii) *Protection forests*, established for the protection of environment, such as watershed or soil; and (iii) *Special-use forests*, designed for conserving nature, ecosystems and gene resources, as well as for maintaining environmental, historical and cultural values. Besides this, on the ground local people perceived forests in way different from the State's perspective, embracing their traditional, cultural, economic and social values (To, 2013). Forests and land under such customary norms are referred to as a common property (Nguyen, Nguyen, & Vu, 2008) and belong to the entire village (To, 2013). They classified forests into different types based on their cultural and social values, such as residential land, forestland in use for cultivation, intact forestland (e.g. primeval forest or generating forests) and forbidden forestland (e.g. sacred forests, watershed protection forests and cemetery forests (Nguyen, et al., 2008). In daily life villagers share these common properties equally among their community's institutions to govern the use of these resources (To, 2013).

The Vietnamese government started the forest devolution policies (Nguyen, et al., 2008) in 1990s, under which large areas of forestland previously controlled by the State were transferred to different non-state actors. Moreover, in 1993 the Land Law was approved, effectively giving support to these policies. Forestland was allocated to land users (state and non-state entities) for a long term (50 years) with the Land Used Certificate (Red Book). Each forestland user was given clearly defined and exclusive rights to the land: exchange, transfer, inheritance, mortgage and lease (Nguyen, et al., 2008). The State also designed different schemes for 3 different forest categories. They gave special-use and protection forests to State agencies, such as Management Board (MB) and SFEs for strict forest protection and management purposes. These agencies held the Red Book, which ensured full use and management rights. The non-state actors, such as households, were

² Note: In 1986, Vietnam launched a political and economic renewal campaign named Doi Moi (Renovation) policies. It made big changes in the country's economy, from a State centrally planned to a form of a 'socialist oriented market' scheme.

usually allocated (*giao*) forest for re-plantation purposes with five rights promulgated by the Land Law. In addition, individual households, group of households or a whole community could also participate in the management of special-use or protection forests under forest protection *contracts* (*khoan*) with SFEs or MBs. In this case the control over forest land still rested with the forest users while rights grants to households and communities were very restricted, and could only be accessed and withdrawn. The 'lease' of forest land has been launched recently although mostly for private forestry enterprises. Apparently, by classifying three types of forests and establishing separate legal regulations for managing them, the Vietnamese government has still maintained its primary control over forests. Therefore, local people have received very restricted rights over forestland and forest resources. They have been merely given rights to the poor value forests for harvesting firewood, NTFPs or selectively cutting trees for individual use, but not allowed to extract timber commercially (To, Tran, & Zagt, 2013).

Additionally, the State only views an individual (usually household's representative) as the legitimate property holder (To, 2013). Thus, through the devolution policies, local households were the main target group with clearly defined and exclusive rights to a certain forest area. In this way the State's perspective proved to be totally inconsistent with the customary arrangement, where local people perceive forests as belonging to an entire village and managed under a communal tenure. Moreover, due to sensitive political reasons, in comparison with other forest recipients the State only gives very limited rights to community over forests (McElwee, n.d.), such as access and withdrawal rights to timber and NTFPs. In addition, the community is not counted as one object of property holder in the Civil Code. The communities also do not have a legal status to apply for a civil transaction. The customary systems have still not been recognized and applied formally in the legal framework (Luong & Genotiva, 2008).

In sum, the fuzzy and contested features of the forestland property relations in Vietnam are asserted in the sense of the inconsistent pattern. It encompasses multi-property holders (State and non-state), multiple uses of resources (forest protection purposes versus traditional forest-depend livelihoods) and different systems (formal and customary). It has led to difficulties in clarifying access and benefits from forestland and forest resources among local people and various state and non-state agencies. As the literature review and many field studies (Tran & Sikor, 2006; Sikor & Nguyen, 2007; Marschke, et al, 2012; To, 2013) concluded, the Vietnamese government with its rigid perspective focuses only on protecting forests fails to capture the complexities in practice, especially regarding the social dimension and poverty alleviation. This failure was considered one of the main causes obstructing the success of forestland tenure reforms and of efforts to protect forests during recent decades in Vietnam.

Against this backdrop, REDD+ has emerged as the new forest policy. On the one hand it is expected to improve the quality and quantity of forests by efforts to protect forests while on the other hand REDD+ and its financial incentives can compensate for social costs caused by strict forest protection under REDD+, potentially changing local livelihood pattern from forest high-dependent way to forest protection for commoditizing forest carbon. The emergence of REDD+ and forest carbon commodification in the long line of efforts of forest protection over time in Vietnam is presented below.

1.2. The emergence of forest carbon commodification under REDD+ in Vietnam

Forest cover in Vietnam has substantially decreased during the last several decades. The situation is a consequence of the American War, as well as of the impacts of a rapidly growing population and an unsustainable economic development in the post-colonial period. Forest cover decreased from

43 % in 1943 to 28 % in 1992 (Forest Science Institute of Vietnam (FSIV), 2009), but has increased slightly in recent years. Moreover, over two-thirds of the Vietnamese natural forests are considered poor quality, the high-biodiversity forests only accounting for 4.6 per cent³.

Since 1990s, the Vietnamese government has already made efforts to solve this problem through different approaches, especially through encouraging participation of local people in forest protection and management tasks. Some direct approaches in order to increase the quantity of forests by the reforestation programs were launched such as *Program 327* in 1992, encouraging forest-dependent people to use barren land and hills in an effective way; or *Five million hectare Program* (Program 661), aimed to create five million hectares of forests in Vietnam by the end of 2010 (To, 2008). These programs were implemented under the forest devolution policies. By giving more autonomy on forestlands and forest resources, these policies are expected to trigger an increased participation of local people, motivating them to make more efforts to protect forests and then, more benefits can accrue to them (To, 2007). In the 2000s more inclusive models of resource management, the so-called '*integrated conservation and development projects*' (McElwee, 2012), were applied with the aim to support the link between forest conservation and poverty reduction. In this approach, win-win outcomes are expected by assessing different trade-off scenarios among development, people livelihoods and nature conservation. Unfortunately, all of these programs were less successful than previously anticipated (McElwee, 2012). The fuzzy and contested property relations over forestland and forest resources (see [1.1](#)) are recognized as one of the biggest problems that hindered the success of these programs (Tran & Sikor, 2006; To, 2007; McElwee, 2008). The overlap of authority control in one specific area; 'symbolic and unreal' rights and benefits, opposed by stringent management obligations made local people less motivated to participate; the gaps and inconsistencies between statutory and customary regimes and so on are some main specific features of these problems.

In 2008, following the trend of forest policy globally, a new forest policy approach began in Vietnam which involved market-based incentives for natural conservation, and was known as Payment for Forest Environmental Services (PFES). Based on the idea of commodification of nature (Castree, 2003), the PFES initiative aimed "to assign new market values to ecosystem services and natural resources, in order to finance their conservation over time, placing faith in the market incentives of liberalized economy" (To, et al., 2012, p. 237). The Vietnamese Government demonstrated its commitment toward developing a national PFES Policy by issuing Decision No.380/QĐ-TTg/2008. Since 2010, this initiative has been officially applied nationwide under Decision No.99/2010/NĐ-CP. It emphasized establishing market-style trading through the valuation of ecosystem services, and contained legal, institutional and financial guidelines, as well as a benefit sharing mechanism pertaining to PFES. Currently, more than 20 PES projects are operating, focusing on different types of ecosystem services, such as landscape protection and ecotourism user fees. The PFES system in Vietnam works through contracts based on existing forestland tenure system (To et al, 2012). However, similarly to previous approaches in forest policy, it is too early to assess whether these market-oriented PES projects will succeed in forest conservation in Vietnam given the problematic context characterized by uneven forestland tenure and benefit distribution (To et al., 2012; McElwee, 2012).

³ The situation of land use, forest policy and governance in Viet Nam (2011). In *Vietnam REDD+*. Retrieved 10 May 2014 from <http://vietnam-redd.org>

REDD+ mechanism has been piloted in Vietnam since 2008. This mechanism is similar to the PFES idea but it lies in the context of climate change mitigation. It works under the assumption that if governments and households in Vietnam can be given payment or other rewards at least equal or exceeding what they can get by cutting down forests, then forests can be better protected, carbon can be conserved and emissions reduced (McElwee, n.d.). Therefore, from the State's view, REDD+ is anticipated to be a potential 'win-win' scenario that will support forest conservation, poverty alleviation and climate change mitigation. Based on this assumption, the Vietnamese government welcomes all the pilot REDD+ programs and projects with the participation of different multi-stakeholders such as governmental offices, international/local NGOs and private sectors. In 2009, the National REDD+ Network was set up to welcome advice and contributions from multi-stakeholders in the implementation process. In 2011, the Ministry of Agriculture and Rural Development (MARD) established a new national REDD+ steering committee to coordinate all REDD+ activities within the country. To date, at least 35 different pilot studies (Nguyen & Dang, 2013) are currently being conducted or are in planning stage with the aim to publicize REDD+ nationwide.

Due to joining REDD+, it is the first time that intangible forest carbon stored in Vietnam forests can be commoditized; forest holders and users become carbon producers, accruing benefits from carbon trading. As Ebeling and Yasué (2008) estimated, the possible economic benefits of REDD+ to Vietnam in particular have amounted to around US\$ 60-100 million per year. It constitutes strong evidence that Vietnam might become a potential forest carbon producer in the future.

1.3. A Case study on a REDD+ Community Carbon Pool Project: Taking the community to the carbon market

Reducing Emissions from Deforestation and Forest Degradation (REDD+) Community Carbon Pools Program is a regional initiative in Southeast Asia. Vietnam is one of the selected countries to implement this initiative. The program is managed by Fauna & Flora International (FFI), Kon Tum Provincial People Committee, Kon Tum's Agriculture & Rural Development (DARD), in close partnership with NTFP-Exchange Program (Philippine) and PanNature (Vietnam).

The selected project site is Hieu commune (Kon Tum Province), in the Central Highlands region, one of poorest areas in Vietnam (Figure 1). Hieu commune includes 11 villages of M'Nam, Xe Dang, K'Dang and H'Re (ethnic minority groups) people. In Hieu, forests, mostly classified as natural forests, account for 84 percent⁴ of total natural area, with most local people being heavily dependent on forestland and forest resources. Most still lives in traditional wooden houses, with rice paddy, swidden cultivation, small timber logging and non-timber products extraction being their main livelihood options.

Traditionally, M'Nam people have held forest land and forest resources as common property, allowing their community institutions to govern the use of these resources. However, since the nationalization period in 1975, all forests in Hieu commune have officially been owned by the State, with the management obligations being assigned to the local authority (Hieu Communal People's Committee), Mang La State-owned Forest Enterprise (Mang La SFE) and Thach Nham Protection Forest Management Board (Thach Nham MB). Since 1995 forestland has been allocated or contracted to individual households, groups of households and entire villages in the area. However, the process only gave limited rights (access and/or withdrawal rights) with very stringent management obligations that restricted any rights and benefits allocated to villagers. Additionally,

⁴ Source: Hieu Communal Forest Ranger (Kiem lam xa), personal interview, 4 January 2014

the customary system of the local people was not formally recognized, despite still existing and influencing property relations over forestland and forest resources in Hieu commune.

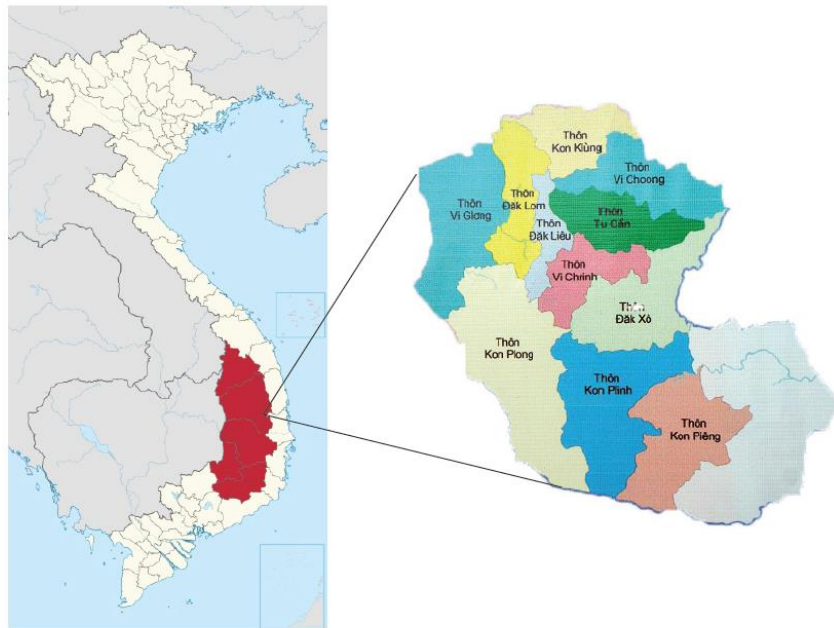


Figure 1 - The project site: Hieu commune, Kon Plong District, Kon Tum Province

(Source: Fauna and Flora International Vietnam, 2013)

Based on these socio-political particularities of Hieu commune, the community carbon pools initiative was designed to support implementation of pilot REDD+ market-based project. The main aims of the project were to establish a new local community-based institution which would have locally derived and implemented rules, giving equal rights to members, and having a potential to effectively reduce emissions while providing more benefits to forest-dependent local and indigenous people. In addition, the project intends to build capacity for local authorities and communities in order to directly implement REDD+ activities in practice.

Through the project implementation, it is anticipated that suitable infrastructure for forest carbon production will be established within the particular context of Hieu commune. This will be conducted firstly by promoting the negotiation process to re-allocate ancestral forests in the project site, which will lead to local communities becoming official forest recipients with more extensive rights to access and control forestland and forest resources. The community carbon pools for carbon production will therefore be established. Secondly, one local community forest management institution will be developed in each village of commune with real participation of a whole community. Then, new communal rules will also be established to distribute rights, obligations and benefits over forest carbon to each villager within the community. Finally, the project expects that the rate of forest degradation and forest degradation in this area will decrease, and that ‘certified carbon’ commodity can be produced. After being exchanged in the voluntary carbon market, forest carbon commodity will bring financial and livelihood benefits back to local people who are directly participating in the forest carbon production.

Furthermore, the local practical field experience and local stakeholder dialogues in the pilot projects will provide input needed for the development of national and regional policies surrounding REDD+ based on community forest management as well as on the lessons learnt from

the model of communal carbon property system. This is what distinguished this project from other REDD+ projects in Vietnam.

1.4. The Problem Statement

One of the very first stages in carbon commodification is privatization (Castree, 2003; Mahanty et al., 2013), which refers to assigning a legal title of forest carbon to a named individual, group or institution. Moreover, the benefits from carbon trading need to be distributed in a transparent and equitable fashion down to the level of each stakeholder. Clear claims and property rights of forest carbon, therefore, are critical to implementing REDD+ forest carbon production. However, in order to meet this requirement, REDD+ projects, which were developed to sell forest carbon credits face significant risks, not only from uncertain international discussion or incomplete national legal framework, but also (mostly) from contested property relations with fuzzy rights and claims over forestland and forest resources (Corbera et al., 2011).

At international discussions, issues of claims and rights to forest carbon are considered rather abstract and difficult to understand. As Peskett and Brodnig (2011) emphasized, it is a ‘widely used’ but ‘poorly defined’ term (p.1). The reasons for this are not only due to the nature of new forest carbon itself (Peskett & Brodnig, 2011), but also a result of its implications surrounding how it is embedded within the mix foundation between old and new resource property relations (Angelsen, 2008). Until now there has been no commonly accepted definition of carbon property rights in general. It is suggested that depending on the particular context of each country REDD+ carbon property rights will be interpreted and embedded in forestland property relations, complicating its delivery and implementation (Mwayafu 2010; Corbera et al., 2011; REDD-net, 2011; Ogle, 2012).

At the national level, Vietnam has been working to design and implement REDD+ policy framework (Dressler et al., 2012) to fulfil international requirements and to suit them with the national context. Clarifying the ownership, access and control over forest carbon is one of the most pressing priorities, especially when Vietnam has already turned into Phase II REDD+ Operationalizing since November 2013. However, the negotiation for clarifying property rights and claims to forest carbon are still at the initial stage in Vietnam. It is also deemed a problematic issue due to the contested feature of property relations over forestland and forest resources that carbon relies on. As mentioned in [1.1](#), even though the State law embraces the notion of clearly defined rights among the different stakeholders, this is not implemented well on the ground since it fails to capture the complexities of forest practices at local level, which are shaped by a complex set of factors, including statutory regulations, customary rules and norms, local livelihood strategies, market forces and others (To, 2013). In the new context of REDD+, this complicated picture of forest and land property relations may become even more complicated due to the emergence of forest carbon.

1.5. Research Objectives and Research Questions

Given this background, I aim to examine *how emerging REDD+ carbon property relations are unfolding in terms of national and local property rights systems (policy and practices) in the forestlands of Vietnam*. In other words, the study examines the issue of property in the case of forest carbon in Vietnam. It demonstrates the situation in which forest carbon property emerges from and is embedded in the Vietnamese context of forestland property relations.

My main argument is that the fuzziness and contestation of property systems over forest/land in Vietnam have posed challenges that restrict the negotiation of property rights, claims and benefit

sharing over forest carbon, as well as of associated forest resources local people still depend upon. This interrelated process will influence the outcomes of REDD+, which is expected to bring new financial incentives for forest protection and local livelihoods.

Following this, I examine national policy level and local practice to obtain insights into how the emergence of forest carbon property unfolds in Vietnam. At the national level, the study considers how forest carbon property can be interpreted and legalized as a new layer overlain upon the current property (formal and customary) rights systems. This question is determined through the process of development of forest carbon commodification as well as through the debates surrounding forest carbon property rights among multiple actors at the national policy level.

At the local level based on the REDD+ Community Forest Carbon Pools Program in Hieu commune, the study focuses on examining local responses to the emergence of forest carbon property. On the one hand, it explores the local practices of forest carbon as well as the process that the local actors negotiate for property rights, claims and benefit sharing over forest carbon. On the other hand, the study also emphasizes how the newly established forest carbon property system can lead to initial changes in property relations over natural resources in this place. I therefore raised the question on how the emergence of forest carbon influenced the livelihood strategies of local people.

To meet this objective, my study is framed in terms of answering the following research questions in sequence:

1. *How do Vietnamese forestland law and policy (property rights) define REDD+ carbon rights?*
2. *How and why does local customary tenure affect village level rights to livelihoods and carbon?*
3. *How do the overlapping property rights (national and local) affect carbon right and benefit distribution mechanisms at the local level?*
4. *What are the outcomes for local people's livelihoods? (Impacts and consequences)*

1.6. Overview of chapters

After this introductory, [chapter 2](#) provides an outline of the theoretical background and conceptual framework of the research, whose key concepts and methodologies to collect and analyse my research data are identified in [chapter 3](#). In [chapter 4](#), I discuss how current forest and land tenure systems (formal and customary) define the concept of forest carbon in terms of being a new commodity and property. [Chapter 5](#) introduces the main characteristics of my case study site (Hieu commune) in order to provide the backdrop for greater detail analysis in the next chapters. [Chapter 6](#) and [7](#) describe the emerging process of forest carbon within the local forest and land property relations, as well as examining some initial implications on local livelihoods in Hieu commune. The last chapter, [chapter 8](#), summarizes and discusses the main findings of the research, offering some contribution to the theory and some implications for the Vietnam REDD+ and forest carbon policy-making.

CHAPTER 2 –UNDERSTANDING THE EMERGENCE OF FOREST CARBON AS PROPERTY

This chapter lays out the theoretical background for my study. It critically examines several bodies of theory and concepts that help to frame the study on the emergence and embeddedness of forest carbon in current forest and land property relations in Vietnam. Overall, I use a political ecology perspective with the concept of forest carbon as commodity. I then use the property and access analytical framework in order to obtain insights into the emergence and embeddedness of forest carbon, especially in the negotiation process for clarifying property rights and claims surrounding forest carbon in Vietnam at national policy level and in local practice.

The discussion first tackles studies on the political ecology of forest carbon commodification (see [2.1](#)). This enables me to examine the social, political and economic backdrop within which forest carbon has emerged and been situated as one new layer of the existing property system. The implications of this emergence on the existing context of the Vietnam rural upland area are also critically examined. What follows is a conceptual approach that includes two main concepts: property and access. The property analytical framework (see [2.2](#)) emphasizes the process of property emergence and embeddedness, whereas the access analytical framework (see [2.3](#)) helps to understand the mechanisms that different actors use to derive benefits from properties, such as forestland, forest resources and carbon. Following this, I explain how these theories and concepts assist in framing my study (see [2.4](#)).

2.1. Forest carbon commodification and political ecology studies

The commodification of nature is now a distinctive, dominant approach to managing and protecting nature in the 21st century. As Marton-Lefevre (2013) notes, “*Nature is not just something that we should cry about. We must talk in a positive way about nature providing solutions [...] Natural as capital must be the way forward*” (as cited in Smedley, 2013⁵). This quote reflects contemporary trends towards the emerging markets turning to ecosystem products and services worldwide. In this sense, the market turns always intangible capacities of nature (e.g., capacity for producing food, conserving biodiversity or providing cultural services and so on) into commodities.

The commodification of carbon under REDD+ is part of this trend. With the idea of paying for “not cutting down trees” (Stephan, 2005, p. 155), Reducing Emission from Deforestation and Forest Degradation (REDD+) has generated forest carbon in its tradable form so that it can be exchanged as a new type of commodity through market-based mechanisms. Following Castree's (2003) and Bakker's (2005) understanding of commodification, forest carbon only becomes a commodity when we assign clearly who has what rights over this commodity and establish an institutional market-based framework for calculating, valuing and trading, as well as rendering it alienated from its socio-ecological context (cited in Corbera & Brown, 2010).

The commodification of forest carbon under REDD+ has received much recent academic and policy attention. Early discussions have focused on various technical or general issues, such as calculating, valuing and monitoring forest carbon, or struggling with questions of the additionality and leakages of REDD+ projects (Plugge & Köhl, 2012; Herold & Skutsch, 2009; Angelsen, 2008). More recent scholarship has begun to address social and human dimensions of forest carbon, such

⁵ Smedley, T. November 11 2013. *Natural capital must be the way forward*. Retrieved 20 May 2014 from: <http://www.theguardian.com/sustainable-business/natural-capital-way-forward-iucn>

as around issues of rights and equity (Corbera & Brown, 2010, Schroeder & McDermott, 2014), discourses, institutions and governance (Johns et al., 2008; Corbera & Brown, 2008), evaluations of local sustainable development and local livelihoods (Chhatre & Agrawal, 2009), or the ways REDD+ schemes and projects are experienced on the ground (Corbera et al., 2011; Mertz et al., 2012; Wieland, 2013).

A growing body of more recent scholarship is centrally engaged with the political ecology and practice of a neoliberal nature in the context of forest carbon. Osborne (2010) called this as “a lineage of political ecology scholarship concerned with the intersection of markets and nature in terms of impact and processes of nature’s commodification” (p. 11). In other words, it is connected to a relational approach to critical ethnography, according to Osborne (2010), that focuses on the nexus between the emergence of forest carbon commodification, on the one hand, and the changes in environmental governance, politics, society, and so on, on the other. This scholarship is similar in approach to that applied by Nevin and Peluso (2008) to examine a wide variety of newly-emerging commodities within recent spatial and temporal contexts in Southeast Asian countries. In this way, the commodification is perceived as a social and cultural process, even as “creative destruction” (Nevin & Peluso, 2008, p. 225), which reshapes the existing social, cultural, political, economic and geographic relations to embed new commodities in a certain local context. However, to date, little empirical evidence has been obtained to examine forest carbon commodification and local responses to this newly process in practice. Especially in the initial stages of forest carbon commodification, less is known about the process in which forest carbon has emerged as a new layer and then become embedded in the forest and land systems, or of the implications for particular landscapes and local forest-dependent livelihoods.

These studies have been incredibly useful for thinking about forest carbon commodification from the political ecology perspective. They consequently served as an important jumping-off point for my study. Through the lens of political ecology, I empirically investigate the emergence of forest carbon under REDD+, considering the complex nature-society relations through an analysis of control and access in relation to resources, environmental politics and outcomes for local livelihoods (Watts, 2000) in the case of Vietnam and its rural upland area. As the centre of my analysis, the concepts of property and access are employed in order to scrutinize the emergence of forest carbon commodification as well as issues surrounding it. This content will be described in greater detail in the sections below.

2.2. Property analytical framework

Property is commonly perceived as a bundle of rights and obligations over a property object, such as forest, land or forest carbon in the case of this study. According to Schlager and Ostrom (1992), there are five basic rights to these natural resource properties. *Access* rights concern the rights to enter a defined physical property (such as forest, land and even carbon, as considered in this study). *Withdrawal* rights allow users to obtain the products of resources (e.g., to catch fish, collect timber or non-timber products in forests, or environmental services, etc.). Users with *management* rights are allowed to establish the rules and sanctions, under which the resources can be managed. Property rights also consist of *exclusion* rights over resources, meaning users can determine who will have access and withdrawal rights and how these rights may be transferred. Finally, a user with *alienation* rights can sell or lease their acquired rights to other parties (as cited in Corbera et al., 2011).

Additionally, Hanna et al. (1996) point out that the property system can be characterized under four basic categories of property regimes – open access, State, communal and private property regimes -

depending on how rights to properties can be structured (as cited in Corbera et al., 2011). Natural resources subject to an open access regime can be claimed and utilized by everyone. There are no rules of exclusion or regulation across resource users. Private property refers to situations under which individuals or households hold full rights over resources, while State property implies that the State is the only institution with the legitimacy to grant access rights and management quotas over resources to other users (such as individuals, groups, organizations or communities). The last regime is characterized by collective ownership that is held in common by a limited group of individuals over a certain territory or over a natural resource. This group is entitled to exclude other individuals from using these resource properties within their territory, and use of such properties is decided and supervised by the group (ibid.).

Furthermore, Schlager and Ostrom (1992) also state that property rights can be defined under various formal and informal institutions. In a formal way, government defines and protects these property rights officially (*de jure* rights) and grants such rights explicitly to social units, which can be individuals, groups, organizations or the entire community. These social units can enforce claims to rights over properties under the *statutory law tenure system*. Moreover, on the ground, property rights may have originated among resource users within cultural and traditional rules and norms since a long time ago. Usually, these *de facto* rights are not recognized formally by the State in most developing countries, but they still exist in parallel with the State Law and belong to the system called the *customary tenure system*.

It is said that the property system in each country is established depending on the nature of the underlying political systems as well as results of the country's history (Von Benda-Beckmann et al., 2006). These authors argue that the previous notion of property offered by Schlager and Ostrom (1992) was too narrowly defined. They propose the view that property concerns "the way in which the relations between society's members with respect to valuables are given form and significance" (Von Benda-Beckmann, et al., 2006, p. 14). Empirically, property relations simultaneously exist at multiple layers of society: in cultural ideas and social values, in the legal laws and regulations, in actual social relations among social entities, and in social practices (as cited in Tran & Sikor, 2006). Rights to property as usually specified in property laws and regulations are often referred to as statutory or legal rights, while the rights defined under actual social relations are known as customary rights. The social practice of property relations is referred to as structure in which legal rights and customary rights systems, as well as other factors of social life, in practice interact (as cited in Tran & Sikor, 2006).

Recent political ecology studies in the Southeast Asia region (SEA) touch on these issues of property and property relations in the context of forest carbon (UNREDD, 2013). These studies have perceived forest carbon, which is commoditized under REDD+, as a new type of property. They have also focused on examining how the negotiations for clarifying property rights and claims to control, access and obtain benefits from forest carbon have been performed in certain local contexts (Mahanty et al., 2012; Dressler et al., 2012; Milne, 2012; Filer & Wood, 2012). These studies use the term "embeddedness of property" (Hann, 1998, p. 1) to delineate the situation in which forest carbon property rights emerged and became embedded in a socio-economic, political and cultural context. They reveal that, currently, the negotiations for clarifying property rights and claims over forest carbon vary in different contexts, due to the different features of existing land and forest tenure systems that forest carbon depends on. However, the most common situation of this negotiation in SEA countries is difficult and problematic. If we exclude the ambiguities and uncertainties surrounding forest carbon as a new thing, the contestation and fuzziness (Sturgeon & Sikor, 2004) of existing property claims over forest and land are presumed to be main causes. It is

said that the emergence and embeddedness of forest carbon have added one more layer to the already complicated forest and land property relations in these countries. Initially, it influences existing forest land tenure by changing property dynamics, modifying positions of actors and creating new property relations in the new context of forest carbon. It can also change land-use practices, current access to forest and land resources and then influence local livelihood strategies (Dressler et al., 2012; Milne, 2012; Filer & Wood, 2012). Thus, with the complicated and uncertain situation surrounding carbon property negotiation, as Mahanty et al. (2013) conclude, “efforts to promote markets for forest carbon commodity may easily become mired in and derailed” (p. 202) in Southeast Asian countries.

In this study, the analysis of forest carbon as a new form of property and in relation to existing forest and land property systems can be supported by a range of theoretical perspectives on property. They help me investigate the process within which forest carbon has emerged and become embedded in the existing forest and land property relations in Vietnam. My analytical framework focuses on the property relations surrounding forest, land and forest carbon, which can include several components such as the State Law system, the customary norms and rules and the property practices surrounding these resources on the ground. Besides this, in order to explore the broader implications of forest carbon in practice for access dynamics of properties, derived benefits and impacts on local livelihood strategies, the concept of access should be considered. The section below provides greater detail in this regard.

2.3. Access analytical framework

The concept of access has become an important analytical lens and is closely associated with property rights. Scholars have noted that property rights to property alone are insufficient for delivering benefits (Ribot & Peluso, 2003) in practice. They suggest that a certain access mechanism ought to enable people to benefit from resource properties. The access concept, therefore, helps to understand “why [...] some people or institutions benefit from resources, whether or not they have rights to them” (Ribot & Peluso, 2003, p. 154).

Ribot and Peluso (2003) identify social action with *access control*, referring to the ability to mediate, check, direct and regulate others’ access, whereas *access maintenance*, by contrast, refers to “expanding resources or powers to keep a particular sort of resource access open” (p. 159). The idea of property being composed of rights and duties can be seen as a claim that the right to property expresses as a means of access control, while the execution of duties is a form of access maintenance aimed at sustaining those rights (ibid.). Following this, these authors proposed the term “access gaining” (ibid, p. 159) to refer to the process within which access is established. The access mechanisms to property unfold in two ways: (i) rights-based access defined by formal law and customary rules in order to protect the claims of actors to properties, and (ii) structural and relational access mechanism, in which a number of factors, such as power, market, technology, authority and knowledge, can be included (ibid.). All of these mechanisms help people derive benefits from resources. The access concept seems to be consistent with the broader notion of property which was proposed by Von Benda-Beckmann et al. (2006), as set out above.

In the new context of forest carbon as property, according to Corbera and Brown (2010), the access concept developed by Ribot and Peluso can be applied. They argue that access to carbon and to its benefits depends on a variety of factors across scales. In practice, it critically depends on clear and well-defined forest carbon property rights and on social entities’ responses to this property. Moreover, they also emphasize that benefits from forest carbon hinge not only on the clarification of ownership of carbon entitlements, but also on existing forest and land property relations that

forest carbon is predicated on. As such, all of these factors can affect who owns carbon, who can use it and who can derive benefits from it and in what way.

The theory of access, which concerns the ability to benefit from properties, is a useful analytical device. In this study, I applied this access analytical framework to analyse the ability of multiple actors to derive benefits from forest carbon based on their positions in the existing forest/land property relations as well as their participation in REDD+ and forest carbon commodification projects. This approach is especially suitable in the situation of the ill-defined forest carbon rights in Vietnam.

2.4. Conclusion: Linking objective, theory and concepts

The sections above outline some main bodies of theories and concepts that help to frame the study. As mentioned in the introductory chapter, the objective of the study is to examine *how emerging REDD+ carbon property is unfolding in terms of national and local property rights systems (policy and practices) in the forestlands of Vietnam*. The study, thus, sits at the intersection of the social, economic and political conditions surrounding the causes, experiences and management of environmental changes within the framework of political ecology (Blaikie & Brookfield, 1987; Bryant, 1992; Zimmerer, 2000) (see [2.1](#)). The political ecology studies help highlight the nexus between the existing social-political relations and the new emergence of forest carbon through examining patterns of forest and land control, access and benefit acquisition in the context of Vietnam. This study positions itself in relation to both the national policy level and local practice of Vietnam in order to obtain more empirical evidence for the deeper analyses in the study.

The property analytical framework helps to guide my analysis with a greater focus on the emergence of forest carbon as new property in Vietnam. Following this, the new property relations surrounding forest carbon can be included in the various formal and informal property tenure systems, which in my case are the State Law and customary tenure systems. These systems can define rights and obligations over forest carbon as well as the distribution of this property in social practice. This analytical framework also helps me to find answers for my research questions 1 and 2, relating to how the existing formal and customary system can define forest carbon rights.

Moreover, in contrast to previous studies that only look at forest carbon as one individual layer, my study scrutinizes how the emerging forest carbon is embedded in the forest and land property relations in practice and on the ground. It is noted that, usually, embedding the new property in a contested social-political and cultural context and then turning such rights into benefit streams among multiple actors is extremely difficult. Drawing on the property (see [2.2](#)) and access analytical frameworks (see [2.3](#)), my study explores particular access mechanisms surrounding forest carbon in practice. This begins to answer research question 3, about how the current forest and land property systems (the State Law and customary system) affect carbon rights and benefit-sharing mechanisms in practice.

Moreover, it is argued that the emergence and embeddedness of forest carbon in the current social context will “reshape social, cultural, political and geographical relations” (Nevins & Peluso, 2008, p. 225) in this location. Through considering this, I address my last research question, relating to the initial outcomes of this intervention in term of changing access to forest and land resources and the consequent impacts on local livelihood strategies.

The overall linking objectives, theory and concepts of my study are illustrated in Figure 2.

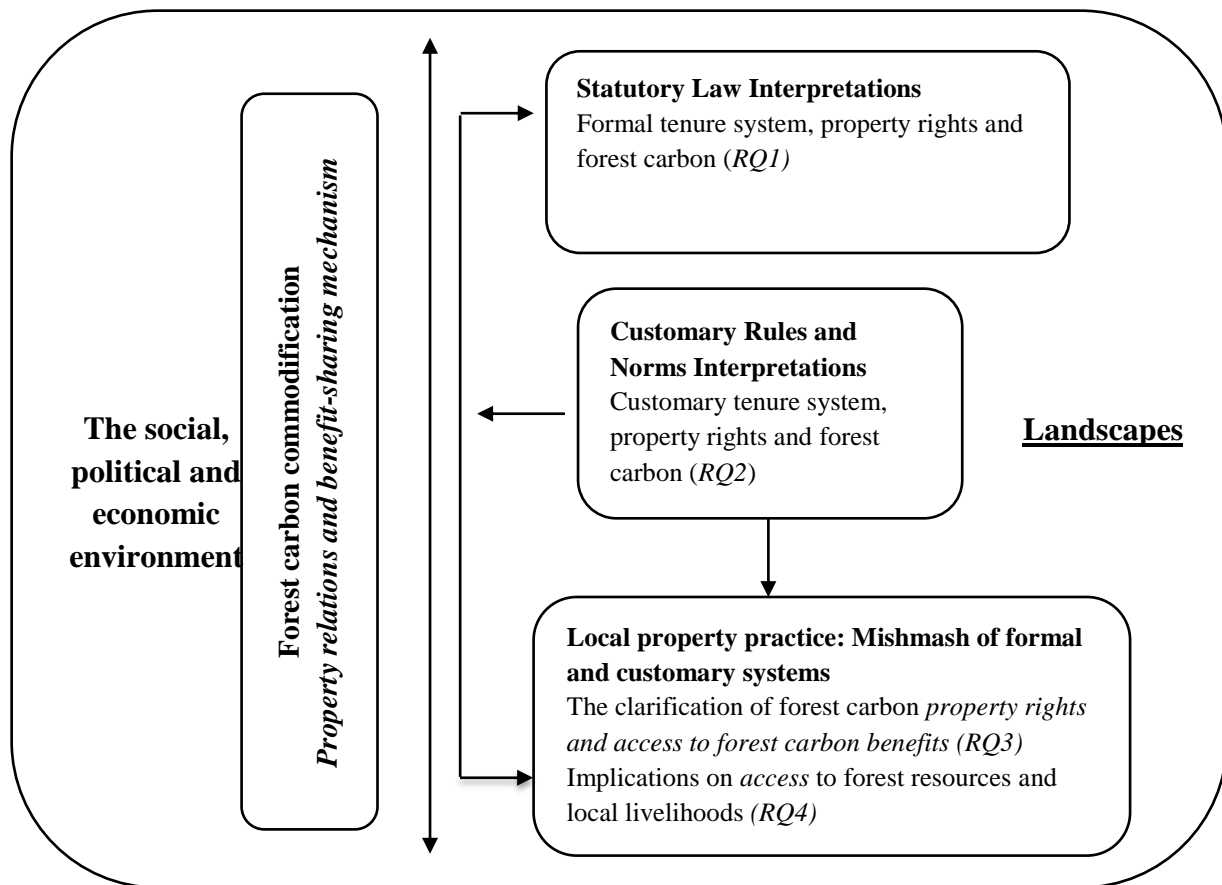


Figure 2 – Linking objectives, theory and concepts

CHAPTER 3 - METHODOLOGY

In this chapter, I begin with the brief description of the methods ([see 3.1](#)) used in my study that fall in line with a political ecology approach to studying property rights and access to forest carbon in Vietnam. I then present the conceptual framework and the operationalization ([see 3.2](#)). The selection of the research location is introduced in the next section ([see 3.3](#)). I also describe the methods used for collecting data in [3.4](#) and analysing data in [3.5](#). Following this, the limitations of my study are then discussed ([see 3.6](#)).

Data in the study were collected through my involvement in the Vietnamese National REDD+ Network from 2009 to 2014 and field research in Hieu commune (Kon Tum Province, Vietnam) from October 2013 to February 2014.

3.1 Empirical research with qualitative and quantitative methods

The study corresponds with previous empirical studies exploring the issues of property in the case of forest carbon. In it, I try to explain what happens surrounding these issues in a particular national context, as well as focusing on the case study of Hieu commune in the Central Highlands of Vietnam.

I employed qualitative and quantitative approaches in this research. At the national level, I used qualitative methods through semi-structured in-depth interview with key stakeholders, as well as policy document analysis. The data I wanted to obtain at national level are the different perspectives of multi-stakeholders as well as interpretation of different property rights systems related to claims and property rights over forest carbon. At the local level, I used both qualitative and quantitative methods. The quantitative method by the household survey was intended to generate data such as general information about households, incomes, assets and other social-economic features. The qualitative methods were meant to extract data such as information about the property system, access mechanisms over forestland and forest resources in practice, changes in property systems and access facilities for such resources over time, different notions of forest carbon in terms of rights and benefit-sharing mechanisms among local actors, and so on. I used various data-collection techniques, such as semi-structured in-depth interviews for household surveys, and formal/informal interviews with key individuals to obtain qualitative data. In essence, the combination of qualitative and quantitative research was time-consuming and required the use of different skills. I tried to balance these two issues by taking an ethnographic approach through participatory observation and informal interview, in order to get a better understanding of my research field before conducting the household social-economic survey in four selected villages of Hieu commune.

Furthermore, I applied several observation techniques to understand how local actors interacted with the forests and other members of communities. It is important to note that in two villages, as I found interesting stories, I tried to employ group interviews on forest management activities over time, as well as on property relations around land and forests. The participatory swidden plot counting was carried out accidentally.

A detailed description of each method and technique is outlined below.

3.2. Conceptual framework, variables and operationalization

The study demonstrates the process by which the forest carbon commodity emerges from and is embedded in the existing Vietnamese forest and land property relations. However, due to the early

stage of REDD+ and forest carbon commodification in Vietnam, in this study I mostly focus on the negotiation process for clarifying property rights, claims and benefit-sharing mechanisms over forest carbon in Vietnam.

I use property and access concepts as a basis for the conceptual framework in this study, as presented in Figure 3, below. These concepts serve a useful lens for examining the factors that influence the clarification of property rights, claims and benefit-sharing mechanisms over forest carbon. The property concept allows me to answer the question of who has what rights and obligations over forest carbon under REDD+. The access concept helps in determining who really benefits from forest carbon, and in what way.

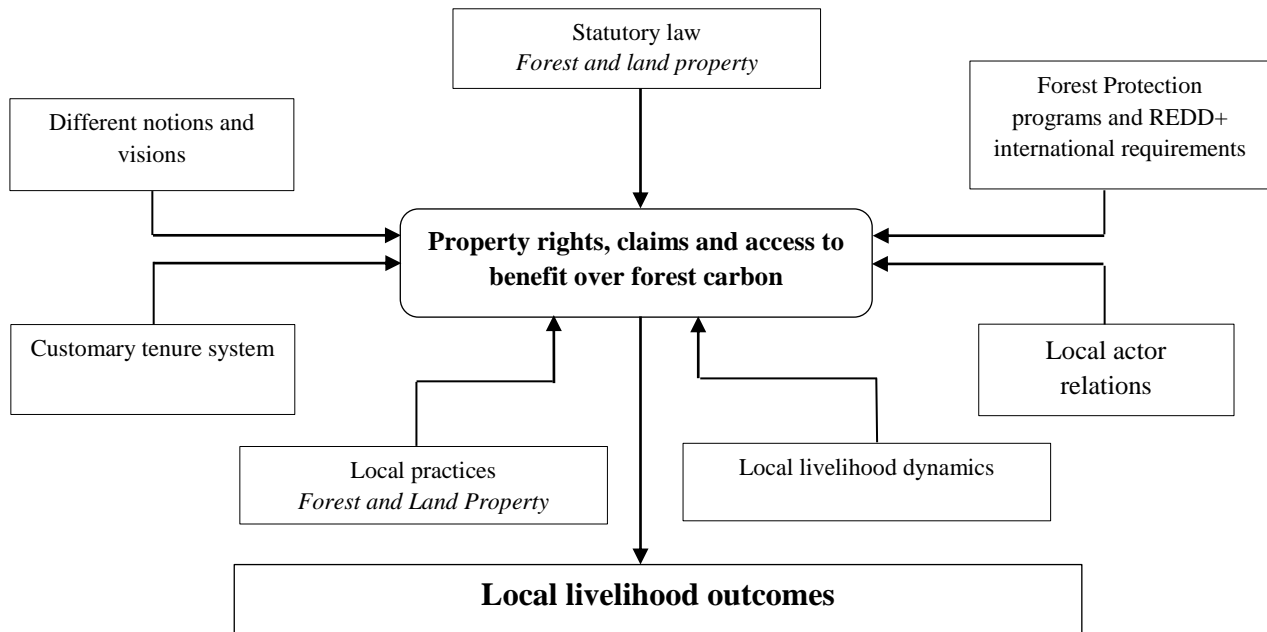


Figure 3 - The conceptual framework of this study

The forest and land property practices in Vietnam are shaped by two different property systems. The first is the *statutory law*. In this system, the rights to forestland and forest resources are often emphasized as individual and exclusive rights over resources. The second is the customary system, which is characterized by communal rights and equal access to forestland and forest resources in practice. The customary system in Vietnam is not recognized and applied officially, but plays an important role in local practices, especially in upland areas. These two systems co-exist and are applied to the same resources, serving as a foundation for the different property rights and claims over forest and land among actors in practice (*property practices*) in Vietnam (To, 2007b).

In the new context of REDD+, Vietnam is still in the early stages of the process of establishing a forest carbon property system. Hence, the current forest and land property rights systems, which forest carbon relies on, are used as a starting point to clarify property rights, claims and benefit-sharing mechanisms over forest carbon in the country. These systems may refer to forest carbon through: the current forest and land property laws and policies (such as the 2013 Constitution of Vietnam, the 2003 Land Law, the 2004 Forest Protection and Development Law, the 2005 Civil Code and so on); the forest land allocation and forest protection programs; the international requirements under REDD+ related to forest/land tenure and carbon rights; and/or customary norms and rules. Moreover, the *different perspectives and notions* of relevant stakeholders at the national policy-making discussions also influence the way in which forest carbon rights and claims are defined.

REDD+ has been piloted in practice in Vietnam since 2008. The Vietnamese State expects that local people will be encouraged in forest protection activities to conserve forest carbon stocks and then derive economic benefits for local people. These benefits can include direct cash income from selling carbon credits, or indirect benefits, such as holdings of forestland or benefits from timber and NTFPs. The REDD+ intervention on the ground may shape and re-shape the following: (i) *the notions of local actors* in relation to forest, land and carbon resources; (ii) *the property relations among local actors* in relation to forest, land and carbon; and (iii) *the local livelihood dynamics*. All of these factors can influence the way in which benefits from forest carbon can be derived among local actors, and then local livelihoods.

3.3. Selection of research location

Vietnam is the first country in the world to move into its REDD+ operationalizing phase. In this context, clarifying the ownership, access and control over forest carbon is one of the priorities. However, no study has yet been done on this issue until now. This is the reason I conducted the study in this country.

In order to get insights into what happens in practice, the case study of Hieu commune, in the Central Highlands of Vietnam, was selected. This community is the project site of the REDD+ Community Forest Carbon Pools project (see [1.3](#)). During three years' implementation, this project has already designed a basic infrastructure for forest carbon production under REDD+ activities. Under this infrastructure, the new community-based institutions, new rules and principles regarding forest, land and carbon, as well as initial forest protection activities have already been taken up in the field. In addition, the negotiation of property rights and claims to forest carbon has started among local actors. Due to all of these characteristics, I considered this case study suitable for my study's objective.

Moreover, the selection of my case study for this study was not intended to be representative for all REDD+ projects taking place in Vietnam, but rather to permit an in-depth analysis of the dynamics of change in a certain location.

3.4. Methods of data collection

The majority of data were collected during five months from October 2013 to February 2014. As a member of the Vietnamese REDD+ Network, I participated in network meetings as well as policy group discussions in the sub-technical working groups on social and environmental safeguards and engagement of private sector in REDD+. I conducted my fieldwork in Hieu commune through the field visits: (i) the first trip was from 25th October 2013 to 12th November 2013; (ii) the second trip was from 20th December 2013 to 10th January 2014) and (iii) the third trip was from 11th to 20th February 2014.

I summarize the measures of all my main variables in the conceptual framework and the methods I used for collecting data in Table 1, below.

Table 1 - Measures of main variables and data collecting methods

Variables	Measures	Data-gathering techniques
<i>REDD+ international requirement on carbon rights</i>	Regulations, components, process, etc.	Literature review

<i>Forest carbon rights and claims</i>	Components, objectives, implementation of process, enforcement mechanisms, rights, duties of actors involved	Literature review, key informants' interviews, observations
<i>Statutory law (forest, land and property)</i>	Regulation, components, process, legal rights, duties of actors.	Literature review, key informants' interviews, observations
<i>Customary tenure system</i>	Rights and duties expressed in the patterns of local livelihoods and behaviour of villagers in using and managing natural resources	Key informants' interviews, observations
<i>Forest/land property practices</i>	Local people's access to natural resources and implications for their livelihoods	Households survey, focus group discussion, key informants, observation
<i>Forest carbon property rights and claims negotiation</i>	Actors' perspectives on forest carbon at present and in the future, on the set of rights and the duties attached to the forest carbon that different actors should be bound to	Focus group discussion, key informants' interviews, observations
<i>Local livelihood dynamics</i>	The changes in ability of local people to access natural resources in term of livelihood	Focus group discussions, key informants' interviews, observations

3.4.1. Stakeholder analysis

Stakeholder analysis (SA) is an approach and procedure for understanding a social system by identifying the key actors or stakeholders, as well as assessing their interests in that particular system. In this study, I used SA to explore stakeholders who are concerned with carbon market development and carbon property rights in Vietnam at national and local level. Five main targeted stakeholder groups are examined:

(a) *Governments and local authority representatives* represent the Vietnamese government's opinion in the negotiation of rights and claims to forest carbon. As I discovered, the Vietnam Administration of Forestry (VNFOREST) and the Vietnam REDD+ office were my key informants from the State sector at national level. The Hieu Communal People's Committee and Thach Nham Protected Forest Management Board were my key informants at the local level.

(b) *Forest enterprises*: Recognizing forest carbon as a new commodity as well as an opportunity for investment, various forest enterprises have participated in REDD+ development in Vietnam. These stakeholders are most concerned with carbon rights and how they can protect their investment in REDD+. Two enterprises have participated actively in REDD+ and in discussions related to carbon market and carbon rights; they were: Truong Thanh Companies (a Vietnamese private company) and Forest Finance (a German company). At local level, Mang La State-Owned Enterprise was selected as my key informant.

(c) *Civil society (international or local NGOs)*: There are many REDD+ projects carried out by different NGOs with different approaches (non-market/market-based approach) in Vietnam. The

main purpose of these projects is making REDD+ work for the poor. There are some NGOs that I contacted for my research: The Centre for People and Forest (RECOFTC), Forest Trends, CIFOR Vietnam, Fauna and Flora International Vietnam, People and Nature Reconciliation (PanNature) and The Centre of Research and Development in Upland Areas (CERDA). All of these NGOs have chairs in different sub-technical working groups of the Vietnam REDD+ network or have REDD+ projects that are operating on the ground.

(d) *Representatives of local communities (village leaders) and local communities (households)*: As mentioned, local people play a vital role in forest management and protection in Vietnam. Their engagement, as well as their benefits from REDD+, has received a lot of attention. The rights and claims over forest carbon is one of the most important issues that local people should be informed about to get their consent for participation in REDD+ projects. In Hieu commune, the chairman and the older men of 11 villages, as well as households in four selected villages, were my key informants.

To understand the different perspectives or expectations of stakeholders regarding claims over forest carbon, semi-structured in-depth interviews were conducted in this research. A sample of the interview guide for each stakeholder will be attached in [Annex A](#).

3.4.2. Literature review

I conducted a literature review concerning REDD+ carbon rights and forest/land property relations. This included: the relevant Vietnamese laws and policies, as well as documents, articles, minutes from meetings, and so forth. By doing this, I gained a better understanding of the nature of carbon rights in REDD+, the relationship between forest carbon and forest/land property relations the debates surrounding these topics and so on.

The literature review also brought me up-to-date with the current literature on the topic and it helped me to develop ideas for my study. Furthermore, during the analysis and writing the thesis, gathering information from different sources and from similar previous studies helped me to avoid personal bias in analysis and also to support my findings.

3.4.3. Policy analysis

The range of law and policy regulations will be used to determine how the current forest and law property law system apply to the question of carbon property rights. These relevant laws and policies are taken as a starting point for future law-making regarding forest carbon/REDD+. The main laws and policies that I was concerned with in my research, included the Constitution of Vietnam (the latest amended version, as of 2013), the 2003 Land Law, the 2004 Forest Protection and Development Law, the 2005 Civil Code and the 2005 Environmental Protection Law. All the decrees, circulars and decisions under these laws and policies were also reviewed in order to understand them in greater detail.

Additionally, the relevant contents of policy debates at the national level within the Vietnamese REDD+ network were also analysed.

3.4.4. Ethnographic approach

Ethnography is usually applied for describing local patterns, relationships (formal and informal), understandings and meanings in a place (Hammersley & Atkinson, 2007). It is carried out to generate sense of place and make a case in relation to the entire social setting and all social relationships (Parthasarathy, 2008). Thus, at the local level, for investigating the emergence of forest carbon property within the current local context, I used this approach to obtain information

that related to history, local customary rules and norms, the traditional relationship between people and nature, local livelihood patterns, as well as other culture features.

a. Participant observation

Participant observation is a tool used in qualitative data collection. It helps a researcher to connect with the most basic of human experiences, discovering through immersion and participation, in order to understand the how and why of human behaviour in a particular context (Guest et al., 2013). In addition, the point of using participant observation is that a researcher wishes to observe and learn about the things people do in the normal course of their lives. This means the research subjects have to accept you as the researcher and can “be themselves” in front of you (ibid.). The researcher must also remember to obtain the necessary data; (s)he needs to spend enough time with the subjects in order to build rapport and conduct unstructured interviews with them.

I applied this method during the time I stayed in Hieu commune. Luckily, I stayed in a Kinh family's house. The husband in this household is the secretary of the Hieu Communal People's Committee, while his wife has a shop. Treated as “cousin” of this household, it was easier for me to access and talk with local people, who are known to be very wary of outsiders.

b. Informal interviews

Informal interviewing is a typical tool in ethnographic research. The interviews take with people in the field informally, without the use of a structured interview guide of any kind.

I was not able to begin work as soon as I arrived in Hieu commune. It took me the first two days to build rapport with the local officials and the villagers there. The informal interview was the perfect tool in this case. Moreover, I found the informal interviews very effective in gathering highly sensitive data, such as details of the current situation of swidden cultivation, illegal logging or NTFP extraction.

c. The participatory swidden plot counting

This activity was carried out accidentally due to the lack of formal statistical data relating to swidden areas in Hieu commune. I carried out this activity in four selected villages (see 3.4.5). One villager was hired to show me around and we counted each existing swidden plot. This man also helped to estimate the area as well as giving information (such as ownership and status) for each swidden plot.

d. Group discussions

Due to the limitations of time, though I found very interesting stories in Kon Plong and Kon Klung villages, I could not carry out a household survey in these villages. Instead, I used group discussions in these two villages.

I conducted two group discussions in two evenings in each village. With the first group, the topic of discussion focused on forest management and protection in their villages in the past and present. The participants in this group were mostly members of the community-based forest management unit in the village. With the second groups, the topic of discussion focused on livelihoods and impacts of REDD+.

3.4.5. Household survey

A household survey was carried out on my second field trip, from 20th December 2013 to 10th January 2014. There were four villages selected: Vi Chring, Dak Nom, Vi Choong and Vi Glong

(see details in Table 2). I selected these villages based on the general data I had gathered during the first trip in Hieu commune. Each village has its typical characteristics. These include the following:

- Vi Chring: The village is located in the centre of Hieu commune. In Hieu commune, this village is the first and only village that has 808.5 ha community forests with an official land-use certificate (“Red Book”). However, it is considered one of the two poorest villages in Hieu commune.
- Vi Glong: This is the biggest and richest village in this commune. Vi Glong was the first village to practice commercial cassava swidden cultivation in Hieu commune. Thus, the status of forest land conversion to swidden is very problematic in this village.
- Dak Nom is next to Vi Glong. The village only has a small amount of paddy and swidden land compared with other villages. The villagers in this commune participate in illegal logging as one kind of income source.
- Vi Choong is almost the last village of Hieu commune and is also allocated along Road 24. This village is adjacent to another commune (Po E commune). I selected this village to examine if there is leakage due to REDD+.

Table 2 - The number of respondents in selected villages

Name of village/indicators	<i>Vi Chring</i>	<i>Dak Nom</i>	<i>Vi Glong</i>	<i>Vi Choong</i>
<i>Total households</i>	40	56	102	40
<i>Respondents</i>	15	15	20	15

In each village, I asked the chairman of the village to selected three different household groups based on three different levels of household economy. The chairman then helped me to secure interview appointments with the respondents. Unfortunately, the time I carried out this survey was during the preparation for the new cultivation season, so it was very difficult to meet the participants during the day. I usually had appointments with them in the early morning (before they went to work), during lunchtime or in the evening after they came back from work.

3.4.6. Semi-structured in-depth interviews

Semi-structured in-depth interviews are well suited to describing both the program’s process and its outcomes from different perspectives through interviewing different respondents. I applied this method with different key stakeholders to understand how they interpreted the carbon and forest carbon property rights negotiation process at both national and local level. Each interview took 1.5 - 2 hours.

At the national level, seven representatives of governments, NGOs and the private sector were selected. The names of these have already mentioned in 3.4.1. At the local level, the local informants include: three representatives of Hieu CPC, one from Mang La State-Owned Enterprise and one from Thach Nham Protected Forest Management Board. In addition, the representatives of 11 villages (three people per village: chair, older man and chair of community-based forest management unit).

In addition, the interview encompassed a range of questions relating to the objective and research questions, which differ between different stakeholders (see [Annex A](#)).

3.5. Data analysis

In this section, I discuss how I analysed the quantitative and qualitative data which I had obtained from my fieldwork.

3.5.1. Quantitative analysis

The quantitative data I obtained from my fieldwork were general information from household surveys and participatory swidden plot counting. To analyse this data, I used MS Excel program. This entailed, first, coding and entering the data for survey into the data sheet. Once I completed the data sheet, I used simple functions in Excel, such as: information filter and statistical function to analyse these data (mainly descriptive statistics).

3.5.2. Qualitative analysis

In analysing the qualitative data, I relied on my field-notes and the transcriptions from semi-structure in-depth interviews. I tended to write down all details I deemed important to my study. I also tried to identify several questions that related to my study concepts, themes and issues based on the field-notes and the interview transcriptions. I also used codes and coding in order to manage my data better. Moreover, since the beginning, I have prepared some preliminary argumentation and conclusions of my study. During the fieldwork, I gradually verified them in line with an induction, interpretative approach. After completing fieldwork and interviews, I reviewed all data again, write it up and checked if the data were sufficient to answer my research questions substantively, as well as my preliminary argumentations and conclusions. If I still lacked information, I went back to the villages and spent extra days to verify my argumentation and conclusion. It was the reason I divided my fieldwork into 3 different visits, instead of one long visit.

3.6. Limitations of research

Due to the limitations of time, it was difficult for me to have face-to-face meetings with key informants at the national level. Thus, I had to apply other approaches to get their point of view, such as the speeches in the conference/workshop, emails or telephone interviews. Particularly with the representatives of the private sector, because of their limited participation at national REDD+ discussions, I had access to only two companies, who were already participating in carbon market and carbon rights discussions. Thus, the analysis might not be a representative reflection and the interpretation may include some bias.

At the local level, language barriers were one of the biggest challenges for me. Although almost all local people can speak Vietnamese, it was hard for them to understand my questions and also give me answers in Vietnamese. In each village surveyed, I asked the chair of the village to be my translator. In some cases, they discussed with each other in their own language for a long time, but only responded to me in a few sentences. In addition, with some questions related to REDD+ or carbon, through translation, the chairs of the villages could influence the answers of my respondents through translation. To deal with this problem, prior each interview, I asked the translator to “*please translate correctly and do not help respondents answer my questions*”. I then tried to encourage my respondents to speak Vietnamese as much as possible. I also used different approaches to get information and cross-check its reliability.

CHAPTER 4 – THE NEGOTIATION FOR CLARIFYING PROPERTY RIGHTS TO CARBON AT VIETNAM’S NATIONAL LEVEL

In many developing countries adopting REDD+, the creation of forest carbon property rights systems during project implementation has been faced with considerable challenges in the context of unclear and contested forestland property systems and legal pluralism across scales (Wieland, 2013; Dressler et al., 2012; Peskett & Brodnig, 2011; Corbera & Brown, 2010). In Vietnam, the REDD+ mechanism has been piloted since 2009. The concept of forest carbon as a new type of property is consistent with the REDD+ initiative at the national level. Who may have rights, claims and obtain benefits related to this new property, and in what way? How does the existing natural resource pattern affect the emergence of forest carbon and the rights surrounding it? Such questions form the core of likely debates surrounding property rights, claims and benefit-sharing mechanisms over forest carbon under REDD+ arising since 2011 at Vietnam’s national level.

This chapter aims to answer aspects of the first and second research questions regarding how the country’s existing forest and land property systems can clarify forest carbon property rights among multiple relevant actors. It therefore focuses on how forest carbon emerges as new property in the context of forestland property systems (both the State Law and customary system) in Vietnam. The main argument in this chapter is that Vietnam is a particular case where forest carbon is not only poorly understood but also emerges as an addition to the already complex layers of unresolved forest and land property relations. This has led to failure to define and attribute forest carbon property rights and claims legally at the present moment in the country. The five sections below address the main points in favour of this argument. I begin with the brief description of forest carbon commodification under REDD+ in Vietnam (see 4.1). Then, section 4.2 deals with the current status of the negotiation for clarifying property rights and claims over forest carbon among different stakeholders at the national policy level. The next sections explore how such current property systems are likely to shape and attribute forest carbon rights through analysing: (i) the current forest and land property law/policies (the State Law) (see 4.3) and (ii) the customary norms and rules (see 4.4). This chapter sums up the main points of the argument in the conclusion (see 4.5).

4.1. The status of forest carbon commodification under REDD+ in Vietnam

In Vietnam, REDD+ is an emerging forest policy that aims at sustainable forest management and conservation. It also emphasizes the role of poverty alleviation and sustainable development in combating the drivers of deforestation and seeks to promote sustainable livelihoods for forest-dependent communities.

“The overall goal of REDD+ Program is the reduction of greenhouse-gas emissions through efforts to mitigate deforestation and forest degradation, increased greenhouse-gas sequestration by forests, biodiversity conservation, and contribution to the successful implementation of the national strategy on climate change and poverty reduction, and striving toward sustainable development”

Source: Decision No. 799/2012/QĐ-TTg⁶

Since 2008, Vietnam has taken steps to incorporate REDD+ into its forestry sectors as well as to develop the national capacity and infrastructure for this new mechanism. The national REDD+ network has been set up and operated since 2009 with the six associated sub-technical working

⁶ Decision No. 799/QĐ-TTg on Approval of the National Action Program on REDD+, 27 June 2012. Retrieved 3 June 2014 from <http://bit.ly/1nKBbpZ>

groups (STWG) on REDD+. These include: governance, local implementation, private sector engagement, REDD+ financing and benefit-sharing mechanisms, REDD+ measurement, reporting and verification (MRV) and REDD+ safeguards. This network is taking charge of a steering role to coordinate with multi-stakeholders in order to organize and implement activities related to REDD+ in Vietnam⁷. The participants in the REDD+ network include representatives from the State agencies, international and local NGOs, and also State-owned and private forestry enterprises. In 2011, the Vietnam National REDD+ Office was established to coordinate and manage the process for developing tools to implement Vietnam's National REDD+ Action Program. Additionally, in at least six provinces, which are participating in UN-REDD+ Phase II, the contents of REDD+ were also integrated in their new socio-economic development plans and strategies. Moreover, there are various partners and activities rapidly moving the country forward to make REDD+ become a reality in Vietnam.

In line with REDD+, the potential for developing the carbon market and forest carbon commodification in Vietnam has been concerned and discussed in the meeting of STWG on private sector engagement in September 2011. The event was attended by numerous stakeholders. Having attended the meeting, I saw the full participation of multi-stakeholders: representatives from Vietnam Forestry Administration (VNFOREST), which is known as the main focal agency of REDD+ in Vietnam; representatives from local governments and international/local organizations; and representatives from the private sector, such as national wood, rubber and coffee-cocoa associations and some private forestry companies. Each stakeholder might participate in the meeting with their own interests and motivations, but the mutual goal was to look for opportunities to access the forest carbon market, as one stage of the forest carbon commodification process. In the opening speech, the representatives from the State emphasized:

"[...] It is recognized that Vietnam has the potential for carbon market as well as financial incentives from REDD+ in the medium and long term. I know that a large group of the audience attending this workshop is interested in issues related to carbon market and the potential of forest carbon commodification in the future [...]"

Source: Representative from VNFOREST, opening speech in the STWG's meeting, 20 September 2011

Based on this statement of the State's representative, domestic and foreign entities have been exploring opportunities to invest in REDD+ market-based projects. Some of them have tried to work on the ground in the hope of generating carbon credits to sell in the global voluntary market, such as the REDD+ Community Carbon Pools program (see [1.3](#)), for example. At this time, the success of the Payment for Forest Environmental Services (PFES) piloted models and the implementation of PFES policy (Decree No. 99/2010/ND-CP)⁸ produced high expectations for all stakeholders about the potential success of forest carbon commodification in Vietnam.

However, despite the high expectations of the private sector for a clear roadmap to carbon commodification, at the end of meeting the VNFOREST's representative ended up offering the conclusion that,

"[...] we know that investment in carbon commodification is new in Vietnam. Thus, the government needs to study it carefully. [...] A legal framework for determining carbon rights is lacking and this should be carefully studied and established in the future. Pilot cases should be prioritized prior to the scaling-up nationwide [...]"

⁷ Decision No. 2614 /QĐ-BNN-LN on Establishment of the National Network and Working Group for Reducing Emissions from Deforestation and Degradation (REDD), 16 September 2009.

⁸ Decree No. 99/2010/ND-CP of 24 September 2010 on the Policy for Payment for Forest Environmental Services

Source: Representative of VNFOREST, closing speech in the STWG's meeting, 2 December 2011

Consequently, the operation of REDD+ market-based approach activities in Vietnam has been “frozen” for few years. The carbon market has not yet been established, although the PFES policy framework has already been implemented nationwide for four years and REDD+ has already been piloted for six years in Vietnam. Even the expectations and beliefs about the potential for forest carbon commodification in Vietnam have dropped rapidly:

“[...] I agree that REDD+ is unfolding a potential for developing carbon commodification in Vietnam, but this process is in its infancy [...] the process of commoditizing forest carbon contains many risks, which mostly come from the uncertainties of the international carbon market, as well as strict requirements in certifying carbon credits and taking them into market. So, in Vietnam's current context, getting money from forest carbon commodities is still a long way off.”

Source: REDD+ policy expert, personal interview, 12 November 2013

Since November 2013, when Vietnam moved to Phase II-Operationalizing of REDD+ with the overall objective *“to enhance Vietnam's ability to benefit from future results-based payments for REDD+ and undertake transformational changes in the forestry sector”* (UNREDD, 2013, p. 10), there is now a good opportunity to reignite the discussion related to forest carbon commodification in Vietnam. As a representative of FAO in the launch workshop of UNREDD Phase II suggested:

“[...] we expect the REDD+ initiative will come true, although it is still uncertain. Thus, Vietnam should prepare to get ready for REDD+ implementation, even if there are no financial supports from REDD+ funds, as there are currently. To prevent this risk, I think it is time we should look for opportunities from carbon market (compliance and voluntary) to prepare financial sources for REDD+ in the medium and long term.”

Source: Representative of FAO, speech in the UNREDD Phase II workshop, 11 October 2013

Since then, the Vietnamese government has renewed its interest in the development of forest carbon commodification as a potential financial source in the future when the REDD+ mechanism has finished its pilot stages. However, there are big challenges to the process of commoditizing forest carbon in the context of Vietnam. Firstly, the forests in Vietnam are fragmented, with many different types and property holders operating in different systems (see [1.1](#)). Due to these features, it is very difficult for Vietnam to develop a new economic sector involving livelihoods with revenue based on forest carbon. The second challenge is considered the uncertainty of forest status. Forests, even special-use or protection forests can be very easily converted to other purposes (such as commercial agriculture, transport infrastructure, hydropower, etc.) through unplanned decisions of the State and local authorities. Thus, there remain risks for the investment in forest carbon commodification in Vietnam. The last but most important challenge is that Vietnam lacks clarity about property rights, claims and benefit-sharing mechanisms as they relate to forest carbon. This challenge turns investors away during REDD+ implementation. This study emphasizes the third challenge related to property rights, claims and benefit-sharing mechanisms in the next sections.

4.2. Differences in notions of property rights, claims and benefit-sharing mechanisms relating to forest carbon among actors

The first and only discussion of forest carbon rights in Vietnam was proposed by the private sector through the STWG meeting on private sector engagement in December 2011⁹. Those participating in this discussion included representatives from the State, provincial authorities, international/local NGOs and the private sector. This topic had been developed by the high expectation for financial incentives resulting from achieving emissions reductions, as well as potential revenue from forest carbon.

The representatives from the State, VNFOREST, came to the discussion with the understanding that rights to forest carbon are incentives for forest protection efforts, or as a means to “*ensure local people will get benefits from REDD+*” (Vietnam R-PP, 2011, p. 48)¹⁰. The private sector, meaning the representatives of Truong Thanh¹¹ enterprise and Forest Finance¹² at the meeting, perceived forest carbon rights in different way. They paid much more attention to ownership issues; that is, the questions of who holds carbon rights and the way that these rights are clarified were fundamental for their investment decisions. As one participant noted:

“[...] *more clarity about carbon rights means we are assigned the rights to sell, transfer and benefit from carbon clearly; the more our carbon investment is insurable*” or “[...] *our investment in voluntary carbon market is not secured if the rights are not granted to us*”.

Source: Representative from Forest Finance, speech in the STWG’s meeting, 02 December 2011.

The third party, the representatives from civil society, aimed to share information and scientific knowledge related to carbon rights in order to advise the State on REDD+ and/or the carbon rights policy-making process, as well as advising the private sector on their investment decisions.

Subsequently, during the meeting, all stakeholders tried to build a common understanding of what the legal framework would look like for property rights, claims and benefit-sharing mechanisms relation to forest carbon in Vietnam. However, the building process was not easy, especially as the term of “carbon rights” is “*an ambiguous legal definition, as it was governed by various legal standards which are firmly under national sovereignty regimes*” (To et al., 2012).

Several outcomes emerged from this discussion, which fall under the headings of (i) forest carbon rights as private property rights; (ii) forest carbon as “commodity” and a property rights-based approach; and (iii) forest carbon rights as usufruct rights under a landscape approach. The main content of these discussions will be outlined below.

a. Forest carbon rights as private property rights

This perspective was advocated by the representatives of the private sector, Truong Thanh and Forest Finance, in the meeting. They wanted to support the definition of forest carbon rights as private property rights: “*the one who invests to produce forest carbon commodification should have absolute rights over it.*”¹³

It is clear that the ultimate purpose of private investment in REDD+ is to produce carbon credits for market. However, the private sector realized that it is not easy and also not secure for carbon

⁹ Meeting on Carbon Rights and Implications for Benefit-Sharing in Vietnam of STWG on Private Sector Engagement, 2 December 2011

¹⁰ The Vietnam Readiness Preparation Proposal (R-PP) 2011, Retrieved 27 May 2014 from <http://bit.ly/1AIXRAJ>

¹¹ The Vietnamese private forestry enterprise

¹² The German private forestry enterprise

¹³ Source: Representative of Truong Thanh Company, personal interview, 11 February 2014

investment with the current State-owned institutions in Vietnam. The bad experience of Forest Finance reflects this argument:

“[...] we already got investment permission from MARD for implementing this project. We already spent money and time on developing a proposal, fieldworks, and also set up some activities on the ground. But suddenly, we received the decision from Kon Tum’s Provincial People Committee to refuse our project because the area which was assigned to us, now, had to convert from production to army purposes. So, we do not know what we should do now.”

Source: Representative from Forest Finance, speech in the STWG’s meeting, 02 December 2011

These enterprises proposed that one new model for REDD+ forestland, which is similar to the current paddy land, should be considered. This meant that the State would assign specific forest areas for particular individuals, households and also forest private enterprises to invest in forest carbon production. As Truong Thanh suggested, *“the claims over the forestland and carbon products (carbon credits) should be secured by one certificate, an REDD+ land-use certificate, for example, that is approved by the State for long term (50 years). The titleholders should have five rights, rights to exchange, transfer, inherit, mortgage and lease, over the forests and forest carbon products they produce”*¹⁴. This suggestion embraces the notion of private property and requires a commitment from the State to avoid unpredicted forest conversion during the life cycle of forest carbon projects. These two enterprises suggested that the State should identify and specify where the REDD+ forest areas should be. The REDD+ forest area planning, therefore, should be conducted, approved and enforced strictly by all relevant multi-stakeholders.

Besides this, the investment in forest carbon forestry requires huge capital for forest plantations, considerable labour forces in the long term, and high technology and expertise levels to commoditize forest carbon stores into tradable credits. Thus, the opportunities to implement REDD+ as well as obtain direct benefits from forest carbon will be available to someone who is able to mobilize capital as well as implement all these activities (Corbera & Brown, 2010). In the meeting, some commentators argued that, if the process follows the private property regime, the local people may be excluded from REDD+ and forest carbon benefits. In this case, even the local people have rights to forests, but the lack of capital, labour, technology and expertise will influence their implementation of REDD+ as well as the derived benefits from forest carbon.

b. Forest carbon as commodity and property rights-based approach

Initially, the State and some NGOs supported the idea that forest carbon should be considered as a commodity, indicating that existing property rights approaches should be used to define carbon rights and claims. As they set out, forest carbon was by default deemed to be attached to land and forest. The current forest/land property rights systems, therefore, was considered a prerequisite to defining carbon rights in Vietnam. It means the property rights to forestland and forest resources should be a starting point for determining who has ownership, control and access to forest carbon.

Additionally, the State has already applied this approach in the PFES, under which the PFES money was paid only to forest holders or recipients. Those who hold no forest will not receive payment from PFES. The lessons learnt from PFES about the identification of benefit recipients could be an important foundation for REDD+ forest carbon model. This approach, which uses the current legal forest and land property system, therefore, was deemed acceptable. It is also compatible with the suggestion of the State that we should *“enact special legal instruments to*

¹⁴ Source: Representative of Truong Thanh Company, personal interview, 11 February 2014

ensure clarify concerning REDD+ and administration of REDD+ benefits without undertaking broader legal reform” (UNREDD Vietnam, 2010, p. 11).

However, the weakness of this approach was also revealed. As mentioned in [1.1](#), Vietnam has contested property systems over land and forestry in practice. The rights to forestland and forest resources among stakeholders, therefore, are also fuzzy and contested. This has seemed like an unresolvable problem in the country’s forestry sector for many years. Thus, it will become much more difficult and problematic if forest carbon is considered a new type of property. It may add more complexities to an already confused and contested situation. As a result, clarifying property rights to forest carbon has not done for relevant actors, having too many restraints, are unable to transform these forest carbon into benefits.

In order to deal with this problem, it is necessary to analyse to what extent the current legal rights system over forest land applies to the question of forest carbon rights. This work will help to identify relevant laws and policies as a starting point, but also expose the gaps that the Vietnamese government needs to fill for future law-making regarding forest carbon.

c. Forest carbon rights as usufruct rights under a landscape approach

To deal with the complexities of rights relating to forest carbon noted above, one alternative suggested was seeing carbon rights as “usufruct rights”. This approach was proposed by the representative of CIFOR Vietnam. As they argued, this idea ensures that various stakeholders can participate in REDD+ and obtain benefits from carbon without being forest owners. In this case, usufruct rights to forest carbon means that rights holders may have use rights (e.g., access and withdrawal rights) but not necessary ownership of forest carbon. The usufruct rights can be assigned to different stakeholders depending on their efforts to conserve forest carbon sequestration.

Following this idea, the landscape approach would, therefore, become vital. REDD+ interventions on the ground are considered an emission reduction service; once the service is performed on a certain landscape, all contributors in this landscape would be rewarded. In addition, it can eliminate the distinction between direct and indirect REDD+ contributors, then easily determine their rights related to carbon. The scenario of a new REDD+ certificate and contract of forest protection for forest carbon also was suggested, according to this approach.

However, clarifying all relevant stakeholders and their contributions to REDD+, as well as ensuring appropriate rights and effective benefit-sharing among these stakeholders, would take more time compared to the previous approach from the existing forest and land rights system. This may be considered as a medium-term or long-term option to clarify forest carbon rights and claims in Vietnam (UNREDD & MARD, 2012)¹⁵.

In sum, there are differences in notions and approaches to forest carbon rights among multi-stakeholders in Vietnam at the national policy level. Each of these perspectives has its strengths and weaknesses. Thus, after the STWG’s first discussion about carbon rights, no consensual decision or direction was made. No discussion about forest carbon rights at the national level has been carried out to date. Thus, there is no legal regulation that specifically addresses carbon ownership in Vietnam (To, et al., 2012). As addressed in the REDD+ National Action Plan, the legal framework

¹⁵ UNREDD & MARD, 2012. *Consultations in support of the development of a Reducing Emissions from Deforestation and Forest Degradation (REDD+) and Compliant Benefit Distribution System (BDS) for Vietnam*. Retrieved 30 May 2014 from: <http://www.vietnam-redd.org/Web/Default.aspx?tab=download&zoneid=152&subzone=156&child=197&lang=en-US>

on carbon rights will be established and planned for approval in the period 2015-2020. Currently, therefore, the Vietnamese government is still working to find the most suitable approach to this issue.

4.3. Unpacking forest carbon property rights: Interpretations of current forest and land laws and policy in Vietnam¹⁶

According to the consultation report on the REDD+ benefit distribution system for Vietnam (UNREDD & MARD, 2012), all the respondents from the State and other sectors agreed with the suggestion that Vietnam should enact legal instruments to ensure clarity concerning forest carbon rights without undertaking broader legal reform. This means the existing forest and land property rights system should be used as a basic foundation for applying to the question of the legitimacy of forest carbon rights in Vietnam. However, to date, reviews and analyses of these existing laws and policies have not been done.

In this section, I unpack the term “forest carbon property rights” through an interpretation of current forest and land property laws and policies in Vietnam: the Vietnamese Constitution 2014, the 2005 Civil Code (Chapter XI – Properties), the 2004 Forest Protection and Development Law (FPDL), the 2003 Land Law and other related decrees, circulars or decisions under law. I structure my analysis in three sections, addressing: (i) definition of forest carbon property; (ii) owners of forest carbon property; and (iii) rights over forest carbon property. This section draws on supporting ideas from interviews with PanNature, Fauna and Flora International and from the presentation by Mr. Pham Xuan Phuong at the meeting on carbon rights, 2 December 2011.

4.3.1. Definition of forest carbon property

In essence, Vietnam has one particular chapter (Chapter XI – Properties), regulating all property rights over properties, in its 2005 Civil Code. Thus, in this case, if forest carbon is considered a property, it will be regulated by the content of this chapter of law. In this section, I define the term “forest carbon property” according to two simple concepts: *forest carbon stock* and *forest carbon credits*, and then apply the current provisions of the Vietnamese property laws and policies to interpret each object.

a. The interpretation of “forest carbon stock” as property:

Sequestered forest carbon is stored in forests (trees and in soil) and cannot be removed without degradation and/or deforestation. As such, here it can be argued that forest carbon stock is “annexed” to the forestland. Following this, the forest carbon stocks stored in forests can be created into a type of *immovable property*¹⁷ that is already recognized by the 2005 Civil Code. Thus, it is possible to include forest carbon in Vietnam’s existing property regime. Going further, in this sense both the Land Law and the FPDL can also recognize and regulate forest carbon stocks as part of the current forest/land systems.

b. The interpretation of forest carbon credit as property

The forest carbon credits are usually referred to as products of forest carbon production under REDD+ activities. Thus, forest carbon credits can be seen as a “yield”¹⁸ or as “labour or lawful production”¹⁹ in Vietnam.

¹⁷ Article 174, 2005 Civil Code

¹⁸ Article 175, 2005 Civil Code

¹⁹ Article 170, 2005 Civil Code

In the special case of plantation forest, carbon property could be attached to both carbon stock created by planted forests and carbon credits generated by planted forests.

According to the analyses above, it is possible to consider forest carbon (both carbon stock and carbon credits) as one property type within the current legal property system in Vietnam.

4.3.2. Owners of forest carbon property in Vietnam

In principle, if forest carbon is considered as property, the rights over carbon will belong to forest and land owners. In the case that the State receives financial benefits from the international funds for producing carbon credits, it would be logical for it to retain the rights over forest carbon from forests within the country's territory.

In Vietnam, for natural forest, ownership is held by the entire Vietnamese people and the State takes the role of representing this ownership²⁰. Then, on behalf of the people, the State can allocate forest/land to organizations and individuals for stable long-term use²¹. This idea is concretized under the Land Law and the FPD. According to the 2003 Land Law, *“The State will grant land-use rights to land users via the allocation of land, lease of land and recognition of land-use rights for persons currently using the land stably”*²². Meanwhile, under the 2004 FPD, the State manages forest resources and legally entrusts the management and protection of forests to specific groups (forest recipients/users). Currently, eight different groups of forest users are recognized, namely: State-Owned Forestry Enterprises (SFEs), individual households, Management Boards of Protection and Special-use Forests, Communal People's Committees, communities, joint venture enterprises and army units. The same scenario can also be extended to forest carbon. Logically, the State will hold ownership and can then grant partial property rights over forest carbon to different actors.

As mentioned in 4.3.1, forest carbon stock can be considered as “annexed” to forest/land. So this type of property can also be allocated as part of forest/land and regulated under the Land Law and the FPD system. It means that the State retains ownership of forest carbon stock, but the Vietnamese individuals or organizations can be granted the rights to use and benefit from it.

The case of carbon credits is quite different. If carbon credits are considered as “yield” or “labour or lawful production”, the forest/land users are allowed to “enjoy the result of their labour and the results of investment in the land”²³, whether or not they have ownership of forest/land. Following this argument, the ownership of carbon credits, logically, will be held by the forest/land users, who directly participate in forest protection or plantations for producing carbon credits.

4.3.3 Rights over forest carbon property

In this section, I use the definition of “ownership rights” and “property rights” in the 2005 Vietnamese Civil Code to identify the specific rights over forest carbon property. The property rights are rights which can be valued in terms of money and may be transferred in civil transactions²⁴ while “ownership rights” are understood as rights of owners to possess, use and dispose²⁵. In the case of forest carbon, I modified and analysed these rights under four categories that relate directly to different stages of forest carbon production: (i) decisive rights to use the forest

²⁰ Article 53, 2013 Constitution of Vietnam

²¹ Article 54, 2013 Constitution of Vietnam

²² Article 4, 2003 Land Law

²³ Article 105 (2), 2005 Civil Code

²⁴ Article 181, 2005 Civil Code

²⁵ Article 164, 2005 Civil Code

for REDD+ activities; (ii) ownership rights to forest carbon; (iii) rights to get benefits from forest carbon; and (iv) rights to exchange/transfer forest carbon in the market.

a. Rights to use the land (and forest) for REDD+ activities

Essentially, the forest areas to be used for REDD+ activities need to be secured for at least the duration of the REDD+ project. Thus, it is essential here to discuss the decisive rights to the use of forest areas for REDD+ activities or other purposes.

In Vietnam, the State holds ownership rights over forest/land. They grant only use rights (access and withdrawal) to different forest/land users for around 50 years, while still retaining management rights (management, exclusion and alienation rights). This means that, despite the fact that forest/land users have already been allocated a certain forest/land area with a land-use certificate “Red Book”), the State can still make a decision to convert it to another purpose if needed. Thus, in the case of REDD+ and forest carbon, the State will likewise have rights to decide which forest/land areas to allocate for REDD+.

This situation leads to the risk that all forest/land in Vietnam is under a continually uncertain status, so that it may be legally converted to other use purposes unexpectedly. This, therefore, is one of the biggest risks for REDD+ investments by non-State actors. It was one experience of Forest Finance, as mentioned in 4.2. Some studies (To et al., 2012) emphasize that it is safer to invest REDD+ carbon credit production in protection and special-use forests, because these types of forests may rarely be converted to other purposes, as identified by the 2004 FPD. However, these types of forests are usually old forests; this means that, while the growth rate is slower, the amount of carbon credit will be less, and the effectiveness of investment is not high. Besides this, the uncertain cooperation between carbon investors and management boards of these forests can lead to ambiguous benefit-sharing mechanisms (if applicable) subsequently (ibid.).

b. Ownership rights over forest carbon

Ownership rights to the forest carbon stock

The legal definition of forest carbon stock is important when determining the rights that are attached to it. If forest carbon stock is considered to be “immovable” property annexed to forestland, then the forest carbon stock can be allocated as part of the forest and land system.

Thus, similar to the allocation of the forest and land system, the ownership of forest carbon stocks is vested to the State, meaning that the State has rights to possess, use and dispose of forest carbon. The State can also retain the management rights (management, exclusion and alienation rights) while allocating the use rights (access and withdrawal) of the land storing the carbon to forest/land users or recipients.

Ownership rights to the forest carbon credits

Similar to forest carbon stock, the legal definition of forest carbon credit is important when determining the rights that attach to it. If a forest carbon credit is a “yield”, as mentioned, the ownership and transfer rights could apply. It is similar to the ownership rights granted to the forest/land user undertaking afforestation activities, where the forest and land users are allowed to “enjoy the results of their labour and the results of investment in the land”²⁶. This means that the forest and land users will receive absolute ownership rights (possession, use and disposal) over the forest carbon credits that they produce.

²⁶ Article 4, 2003 Land Law

However, there are some problems that may occur. Under the FDPL system, the forest management and protection tasks relating to forests in Vietnam are exercised through one of three different sets of institutions promulgated by the State, namely: allocation, contracting and leasing. Each set of institutions determines different rights and duties given for each forest's recipients. This situation has important implications for determining and clarifying rights to carbon credits.

In the case of forest protection contracting²⁷, the households or group of households participate directly in forest protection under REDD+, but the forestland is controlled by other forest users (e.g., Management Board or State Enterprises). Thus, a claim to carbon stock and credits would need to be clarified.

In the case of forest allocation for planting forests, participants have already received land-use rights for the forestland and invested in planting forests. In the context of REDD+, logically, the rights to carbon (both stocks and credits) ownership belongs to these actors.

In the case of a forest lease scheme (usually for 20 - 50 years) for forest afforestation purposes, the forest tenants usually invest in planting forests in the assigned areas. Thus, the rights to carbon credits ownership should belong to them. However, the case of carbon stock is quite complicated. On the one hand, the forest tenants do not have a land-use rights certificate with the five basic rights. Thus, logically, they cannot have ownership rights to carbon stock. But on the other hand, their forest plantation activities contribute to expanding the carbon stock. So, who should the additions of carbon stock belong to? This should be discussed more in the future.

c. Rights to obtain benefits from forest carbon

The clarification of forest carbon ownership rights is very important for the civil transaction in carbon trading, with considerable legal requirements. The rights to obtain benefits from forest carbon are different; they are more flexible and can be decided by the State based on the participation level of different stakeholders in REDD+.

In Vietnam, there are two groups that can be entitled to the benefits from forest carbon. Firstly, the direct group consists of those who are assigned forest/land from the State under the allocation, contracting or lease arrangement. Secondly, the indirect group consists of those not directly involved in forest management and protection activities, but their daily activities (forest-dependent livelihoods, such as swidden cultivation, timber or NTFPs extraction) can lead to forest degradation or deforestation, meaning impact on carbon emissions and carbon sequestration of the forest.

With the direct group, i.e., the participants of REDD+ forest carbon production, the rights to obtain benefits from forest carbon have already been discussed in the above sections (4.3.1 and 4.3.2). Basically, as in the 2003 Land Law and the 2004 FPD, it is recognized in principle that the buyer may purchase forest goods and services (To, et al., 2012). Thus, potentially, the payment for reducing carbon emission will be delivered to those who are responsible for generating these goods and services. This idea has been linked to the decision specifying the way in which participants can be allocated, leased or contracted to manage or protect forest, and the payment they can then receive from these goods and services they produce.

²⁷ In this scheme, the control over forest land still rested with the forest users, while rights granted to contracted households or groups of households were very restricted; only access and withdrawal of timber (for self-consumption) and NTFPs were allowed.

With the indirect group, it is difficult to share profits from carbon with them. There is a suggestion that we can use non-carbon financial sources from REDD+ projects to support their livelihoods and then reduce the pressure on deforestation and forest degradation

d. Transfer rights of forest carbon

In the case of forest carbon, the transfer rights can be understood as the rights to value forest carbon in monetary terms, and possibly transfer carbon credits. The 2005 Law on Environmental Protection states that, “[...] *transfer, buying and selling of greenhouse gases emissions quotas between Vietnam and foreign countries shall be stipulated by the Prime Minister*” (Article 84). Thus, in the other words, even though individuals and organizations may have the rights to ownership of and benefits from carbon emission reduction credits; the transactions with international buyers would need the Prime Minister’s approval. It is implied that at sub-national and local-level implementation, the forest carbon exchange could be legally problematic.

Based on the analyses above, it is possible to use the current forest and land property laws and policies to interpret forest carbon rights legally. Vietnam can perceive forest carbon as property of two types: forest carbon stocks and forest carbon credits. The State will hold the ownership of forest carbon stock and then, depending on the forest and land arrangements (allocation, contracting or lease), the rights over these forest carbon stocks will be granted to different current forestland recipients. The carbon credits are perceived in a different way since they can be understood as a “yield” of forests. The ownership rights over forest carbon credits can be granted absolutely to forest/land recipients who participate directly in producing these commodities under REDD+.

However, if this approach is followed, there will be significant similarities between the new property system of forest carbon and the previous State Law forestland property systems. This system may pay primary attention to individual and exclusive rights over forest, land and forest carbon. It may have clearly defined rights in law, but fail to capture the social dimension in practice. It may exclude the most vulnerable forest-dependent people from the resources and benefits. It may also conflict with the customary system, which emphasizes the communal rights and relatively equal access of villagers to forestland and forest resources in practice. Consequently, the property rights system for forest carbon seems to be mostly a rehashing of previously problematic property systems (McElwee, n.d.). All the problems which have long plagued the forest sector in Vietnam may still remain or even be aggravated in the new context of forest carbon. A new approach for developing the property rights system around forest carbon, which should be rooted in both the State Law and the customary system, is therefore needed in Vietnam.

4.4. The participation of local communities, the customary tenure system and forest carbon

The recognition of local communities’ role and customary norms/rules in REDD+ is a compulsory requirement under UNFCCC²⁸ that all REDD+ programs have to comply with in order to ensure environmental and social safeguards. It is necessary to consider these issues in the negotiations surrounding property rights and claims to forest carbon.

²⁸ UNFCCC Cancun and Durban Agreements (Decision 1/CP.16 and Decision 12/CP.17) about Safeguards:

“*Respect for the knowledge and rights of indigenous peoples and members of local communities, by taking into account relevant international obligations, national circumstances and laws, and noting that the United Nations General Assembly has adopted UNDRIP*” (Principle 3).

“*The full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities*” (Principle 4).

In Vietnam, little attention has been paid to these considerations, despite the fact that many REDD+ pilot areas are in places with ethnic minority communities. Even when the national policy discussions are trying to situate the rights of carbon in the current forest/land property relations (see [4.2](#) and [4.3](#)), the issues relating to indigenous people as well as customary tenure have rarely been touched upon. To explain this situation, the State representative provided some main reasons. Firstly, Vietnam is still in the initial stages of REDD+. It is therefore logical to first consider REDD+ capacity-building and awareness-raising activities, such as Free, Prior and Informed Consent (FPIC), rather than the issues of customary knowledge and rights. Secondly, the terms “indigenous people”, “customary” or even “community” in Vietnam are not clearly defined and understood due to the politically sensitive nature of the terms and local contexts. These terms, therefore, have received less attention in the national policy discussions. The last reason is that the customary rules and norms are not formally recognized and applied in Vietnam. This system cannot be used to attribute forest carbon rights, which are known to be highly legal terms. In this regard, the State has still proposed using the “top-down” approach that runs through the current legal rights system to encompass carbon rights issues (see [4.3](#)).

In contrast, some REDD+ project developers have pointed out the gaps and risks if customary norms and rules are not considered in the negotiations for clarifying property rights and claims to forest carbon. In essence, clarity rights provides a foundation for determining who can take on responsibility for managing resources and who can benefit from them (Springer & Larsen, 2012). However, Vietnam lacks such clarity with regard to the rights over forestland and forest resources among various actors, due to the different property systems (the State Law and customary rights) that have allocated rights in different or even opposing ways. These inconsistencies are referred to as major sources of conflicts that have already undermined sustainable resource management in Vietnam over an extended period (see [1.1](#) and [1.2](#)). Moreover, the recognition of communal rights and the customary tenure system is still absent in the country’s legal framework. Little forest, therefore, has been allocated to communities. The FPD law only recognizes community rights to use forests (i.e., withdrawal of forest products) but does not grant rights of ownership to them. In other words, local communities have long been excluded from formal forestland titles and recognition of their traditional forest use (McElwee, n.d.). Thus, in the context of REDD+ and forest carbon, if all these problems cannot be solved, REDD+ will fail in the same way as previous sustainable resource management programs in Vietnam. It also will likely hinder REDD+ in Vietnam with regard to achieving compulsory requirements of indigenous development and social safeguards.

In order to deal with this problem, while Vietnam still lacks clarity of forest carbon rights, a bottom-up approach has been proposed. In this approach, a carbon rights system will be established on the ground and influenced by a set of factors including both the State Law and customary tenure with regard to forest and land, as well as local livelihoods, social relations and the participation of local actors. The lessons learnt from this approach are expected to contribute to the policy-making process on forest carbon rights the national level. As a representative from FFI emphasized: “[...] *In the absence of a legal framework on forest carbon rights, we use the customary tenure system and communal rights as the basic for demarcating forestlands, distributing forest management tasks, establishing a forest carbon communal tenure system as well as introducing benefit-sharing mechanisms among communities*”; he said that, “*we hope that this approach will work and then can be pursued in order to be formally legalized*”²⁹.

²⁹ Source: The Southeast Asian REDD+ Community Carbon Pools Program manager, personal interview, 13 February 2014.

4.5. Conclusion

Based on a range of theoretical perspective on property (Schlager & Ostrom, 1992; Von Benda-Beckmann et al., 2006), this chapter analysed the forest carbon property making process in Vietnam in the relation to existing forest and land property systems. Following this, the new property rights system surrounding forest carbon can be included in the formal and informal property tenure systems, which in this study are the State Law and customary. These systems are expected to define rights and obligations over forest carbon as well as the distribution of this property in social practice.

In Vietnam, the national policy discussion is centring its focus on situation the rights of carbon in the current forest and land property systems. The State has proposed the “top-down” approach that runs through the current legal forest and land property rights system to capture the issues of forest carbon rights. This approach is considered the easiest and fastest way to clarify rights and claims over forest carbon. Moreover, it is highlighted that the customary tenure system cannot be used to attribute forest carbon rights, which are known to have strong legal requirements in Vietnam currently. The reason is that the communal rights as well as the customary norms and rules are neglected and unrecognized in the legal framework. Additionally, the State has also dodged the issues of indigenous people’s roles and customary tenure in the forest carbon rights discussions at the national policy level.

The interpretations in this chapter reveal that, if the “top-down” approach is followed, the forest carbon property rights system may embrace the clearly defined rights on “paper” only, while it will fail to capture the social complexities in practices. It seems to be mostly a reworking of previously contested and fuzzy forest and land property systems in Vietnam. This finding is supported by the argument of Corbera et al. (2011) that the features of forestland tenures in a certain places have decisive implications for the nature of forest carbon property system due to the influences these systems have on who becomes involved and on how the benefits should be distributed. Thus, the contestation and fuzziness of current forest and land property systems have posed barriers that restrict the clarification of property rights, claims and benefit sharing not only forestland and forest resources, but also forest carbon in Vietnam currently. This finding also reflects the common status of the initial stage of REDD+ implementation in most developing countries (Right and Resources Initiative (RRI), 2014).

In contrast with the top-down approach of the national policy discussion, there is a bottom-up approach attempting to build forest carbon infrastructure from the ground. This takes into account the local systems and tries to bring the lessons learnt into the national policy dialogue surrounding forest carbon rights. Through this practical approach, it is expected that a forest carbon property rights system can be established, which can capture both the legal regulations and customary tenure, as well as other local social factors (such as the participation of local communities and local livelihoods). The analysis and discussion surrounding this approach will be described in the next chapters through the case study of the Hieu commune in the Central Highlands of Vietnam.

CHAPTER 5 – LOCAL SETTING: THE FORESTLAND PROPERTY RELATIONS AND LOCAL LIVELIHOOD BEFORE REDD+ IN HIEU COMMUNE

Hieu commune is located in the isolated valley of the Kon Plong plateau, at an altitude of nearly 1,500 meters above sea level³⁰. This place is the traditional home of the M’Nam, K’Dang, H’Re and Xe Dang (ethnic minority group) people, who account for 96.4 % of all households³¹. Hieu commune is also the place selected for REDD+ Community Carbon Pools Program, in which it has been implemented since 2011.

This chapter aims to provide a brief description of the study site, Hieu commune, which emphasizes local forest and land property relations prior REDD+. It will also present the backdrop for the more detailed analyses surrounding the emergence and embeddedness of forest carbon in local practices in the next chapters. The findings below were mostly obtained through an ethnography approach when listening the villagers’ stories as well as observing them in daily life during the fieldwork.

5.1. The traditional customary tenure, property rights and livelihoods

The local people in Hieu commune have a history of forest access, use and control, as is typical for indigenous communities in the Central Highlands of Vietnam. Traditionally, they use forests surrounding their villages as sources of land and forest resources. The local people live in wooden houses made from timber extracted from forest nearby villages. They also use timber for building barns, making cattle bells and other farm devices. The non-timber forest products (NTFPs), such as honey, rattan and firewood, are used mostly for household consumption. The local people perceive these resources as common property, following their respective community rules.

Hieu commune includes 11 traditional M’Nam villages, namely: Kon Plong, Vi Glong, Dak Nom, Dak Lieu, Vi Chring, Dak Xo, Kon Plinh, Kon Plieng, Tu Can, Vi Choong and Kon Klung. Rather than restricting access to forestland and forest resources to local villagers, the customary boundaries among villages were only used for distinguishing the territories of 11 villages in this commune. Thus, in effect, the areas worked by villagers from the village of Vi Chring (for example) and people from neighbouring villages (such as Dak Xo and Dak Lieu) were interspersed. In addition, the villagers of all 11 villages tended to collect timber and other forest products from the same forest areas. The ownership of and access to resources was established by occupation based on the “first come – first served” principle. This meant that those who found land, timber and other forest products first would have the rights to them (Sikor & Nguyen, 2007). This culture is still maintained today in Hieu commune.

Related to their main livelihood, the local people traditionally practiced wet rice cultivation in paddy fields, which were converted mostly from forestland in valleys, near water sources. The M’Nam people here have derived a large part of their food requirements from these wet rice fields. Thus, the paddy cultivation played the most important role for local livelihoods, as well as maintaining food security in this place. Swidden cultivation, in fact, only functioned as a sub-livelihood in this location; as an elder noted: “*the swidden cultivation at that time was practiced in order to provide additional foods, material for making wine or feed for livestock*”³².

³⁰ Kon Plong District People’s Committee (DPC) (2012). Introduction of Kon Plong District. In *Kon Plong DPC’s website*. Retrieved 25 May, 2014 from <http://konplong.kontum.gov.vn/>

³¹ Source: Hieu Communal People’s Committee Chairman, personal interview, 27 October 2013.

³² Source: Vi Choong village’s elder man, personal interview, 3 January 2014.

The present area of Hieu commune is the traditional home of local villagers. However, in the past, due to the impact of the War, the local people had to leave their homes and live in the forest, only returning in 1975. After national unification, there were many political, social and economic reforms in the area. The forest and land access and control practices in Hieu commune, therefore, have been gradually shaped by a complex set of factors, including traditional customary norms and rules and the State ideologies, as well as other issues, such as the emergence of the market or local livelihood dynamics. The process in which these factors have intersected is portrayed in more detail in the next section.

5.2. Changing land-use, forest/land tenure system and livelihoods over time in Hieu commune

Traditionally, most of the forests in Hieu commune were controlled and used by the M'Nam people under their customary norms and rules. Local forestland property relations in this place have changed gradually after 1975. The forests surrounding Hieu commune first came under the State-control of the Mang La Forestry State-Owned Enterprise (Mang La) and the Kon Tum Plan Seed Project Management Board³³ (Thach Nham). As with other SFEs established throughout Vietnam at this time, Mang La and Thach Nham had a mandate to protect the forest and to exploit timber in the forest to meet log quotas assigned by the State. Local people were totally excluded from the forest management tasks. Traditional claims on forests by local people, therefore, were restricted. Since then, the forest use practices of local people were a source of tensions with these State agencies in Hieu commune.

The forest devolution policy, in the form of the forest land allocation program, started in Hieu commune in 1995. Thach Nham and Mang La assigned part of their forest to individual households with protection contracts. According to the State regulation, each household received certain forest areas, but not more than 30 ha/per household. The participants also received the permission to harvest timber and NTFPs for home consumption. Annually, they received payment for their forest protection of approximately 60,000-100,000 VND/ha/year (3-4 euro/ha/year)³⁴. In return, they were obliged to protect it and prevent the outsiders' intrusion into the forest. The forest protection contract scheme did not change the State control governance relations in Hieu commune by Mang La and Thach Nham. In contrast, this policy did not acknowledge the role in forest governance previously assumed by the entire village (Sikor & Tran, 2007). The allocation instead created the new concept of individual (household) rights, which did not fit with the collective rights in the customary rules and norms of the local people in the past. Therefore, despite previous anticipations, the forest allocation program did not appeal to the participation of local villagers, or address the unresolved tension related to forest/land uses in practice.

In 1996, the Kon Tum provincial authorities constructed the Hieu Communal People's Committee (Hieu CPC) as the lowest level of administration responsible for 11 M'Nam villages. The traditional village heads of 11 villages were also appointed to be "the State village headmen" in the Hieu CPC. Moreover, the construction of Road 24³⁵ encouraged the villagers to relocate their residences to a site next to the road or the commune administrative centre (Vi Chring village). During this time, migrants arrived in Hieu commune individually. The Xe Dang, H'Re and K'Dang migrants settled in Hieu commune as a result of marriages to local M'Nam people. Each village comprised some Kinh (majority ethnic group) households, generally two to three

³³ Previously called Thach Nham Protection Forest Management Board

³⁴ Source: Vice Director of Thach Nham Protection Forest Management Board, personal interview, 4 January 2014

³⁵ The main road connecting Kon Tum province to Quang Ngai province, passing through the Hieu commune

households. Most of the Kinh households carried out small business as their main livelihood activity.

The “three forest types planning” program in 2007 had classified and re-arranged all the forests in Hieu commune. It also led to radical changes in property relations governing the use of the forest. The forestland areas accounted for 84 % of natural areas in Hieu commune, which are classified into two types of forests: *protection forest* (very small, 1743 ha) and *production forest* (15,270 ha) (Hieu CPC, 2012³⁶). Alongside Mang La and Thach Nham, Hieu CPC became the third State agency participating in forest management in this location. They took charge of managing 2,000 ha of production forests. Three of the State agencies received the mandate to enforce the new State regulations, monitor compliance, sanction small violations and resolve small disputes in forestland within Hieu territory. The new arrangement was also implemented to end the overlapping of State and customary regulations existing in the past. These State agencies allowed villagers to cut timber for home consumption and collect NTFPs for trading, but required them to help protect the forest and eliminate illegal logging by outsiders. One commodity-based forest management model was piloted in Vi Chring village in 2007. The aim of this model was that, through reviving the M’Nam communal customary norms, the forest protection purposes would be achieved. As in the project’s proposal, all the village’s members received a share of the revenues from commercial timber exploitation, converting 5% of forests for cultivation, excluding outsiders, holding collectively a land-use rights certificate as well as passing the allocated forests to the next generations.

However, during this time, the local authorities were confused about the difference between production and protection purposes (To, 2013) in Hieu’s forests. They did not allow villagers to use land for crop production as mandated by the legal system. All swidden cultivation in the forestland was prohibited. Moreover, this confusion also prevented the Vi Chring villagers receiving rights to obtain benefits from their community forest. No commercial timber extraction, as set out in the design proposal, has been carried out since 2008. Conflicts, of course, arose between local people and the State agencies.

Moreover, since 2005, the local people in Hieu commune have been increasingly involved in the commodity market. From the local people’s perspective, while paddy land is important in producing rice for household consumption food requirements, forestland and forest resources have now become the main sources for their capital accumulation (To, 2007a). The demands of local people to convert forestland to agricultural use, as well as to harvest NTFPs for sale, have increased dramatically. Thus, under the drive of market forces, the local livelihood dynamic has been changed, which is reflected in the development of commercial cassava swidden cultivation and NTFPs commercial extraction (see [chapter 7](#)). These two activities have been considered as main causes of deforestation and forest degradation in Hieu commune recently.

5.3. Conclusion

In summary, this chapter introduced the setting of my study site, which focused attention on the property relations around land and forest resources prior REDD+. As I found, the case of Hieu commune reflected the main features of forestland property relations of Vietnam in the post-socialist era. The State control system with legal rights ascribed to forest/land intersects with local customary norms and rules. Moreover, this combination, together with other factors such as market forces, shapes forest/land-use practices in this community (To, 2013). As a result, in every piece of

³⁶ Hieu CPC. 2012. *The annual social – economic report of Hieu commune*. Accessed at 27 October 2013.

forestland of Hieu commune, there is a complex pattern with multi-property holders (formal or informal) and multiple uses of forestland/forest resources under different tenure systems. This makes the property relations around forest and land in this area very contested.

The local context described above is the system that Fauna and Flora International (FFI) tried to re-arrange in order to establish one communal forest carbon tenure system. However, it is assumed that this process is extremely difficult and problematic. The sections that follow will describe in greater detail the process in which forest carbon has emerged and been embedded within the contested local backdrop of property tenure systems, access dynamics and livelihood structures around forest/land in Hieu commune.

CHAPTER 6 - FOREST CARBON, PROPERTY RIGHTS AND BENEFIT-SHARING IN HIEU COMMUNE

The nexus between forest carbon and existing land and forest property relations is considered recursive and mutually constitutive (Mahanty et al., 2012). The more forestland property relations are clarified, the easier the negotiation for clarifying forest carbon property rights becomes. The case study of the REDD+ Community Carbon Pools project in Hieu commune presented in this chapter helps to obtain empirical insights into this nexus in the context of a Vietnamese rural upland area. The findings from this case study are very important, especially in the situation when Vietnam has not yet found a way to define and attribute forest carbon rights and liabilities at national policy level (see [chapter 4](#)).

In this chapter, I focus my attention on how the overlapping forest and land property practices affect the negotiation of carbon rights and benefit-sharing mechanisms. Based on empirical research in Hieu commune, I argue that the negotiations for clarifying property rights, claims and benefit-sharing mechanisms within the contested forest/land property systems are very difficult. The analyses through the three sections below support this argument. I first look into the internal workings of REDD+ in Hieu commune (see [6.1](#)). This section provides the backdrop to the negotiation of property rights and claims to forest carbon, as well as benefit-sharing mechanisms among local actors (see [6.2](#)). Towards the end of this chapter, I sum up and conclude about the findings from this case study (see [6.3](#)).

6.1. Inside REDD+ in Hieu commune: Forest/land property relations reform

Since 2011, Fauna and Flora International (FFI) has worked through the Kon Tum's Provincial People Committee to implement the project call 'REDD+ Community Carbon Pools' (CCP) in Hieu commune. The main objective of this project is to apply the CCP initiative, which brings together "groups of neighbouring community forest areas"³⁷ under a community management system and benefit-sharing mechanism. For three years, FFI set up the initial stages of REDD+. These include: (i) Free, Prior and Informed Consent (FPIC); (ii) establishing community forest carbon pools; and (iii) building the REDD+ Community Governance System. Below, I critically examine these three activities, but in regard to the existing forest/land property relations and forest carbon in Hieu commune. These analyses provides the backdrop to the negotiation of property rights, claims and benefit-sharing in relation to forest carbon in section [6.2](#) and chapter [7](#), in which I go in greater detail about the livelihood outcomes of this initiative.

6.1.1. *Free, Prior and Informed Consent (FPIC) in Hieu commune*

Free, Prior and Informed Consent (FPIC) is rooted in Western participatory democratic ideas. It states "the rights of a person holding legal rights to property to not be alienated from that property without their consent" (Mahanty & McDermott, 2013, p. 407). Under the REDD+ mechanism, FPIC is referred to as one compulsory requirement for all REDD+ intervention on the ground. In the CCP project, FFI designed its own FPIC scheme, which was, they thought, suitable for the case of Hieu commune. The local people in 11 villages of Hieu, who depend heavily on forests, were identified as the main target group of the FPIC.

Since 2012, FFI has implemented FPIC through two steps that work throughout the cycle of the CCP project. Firstly, they provided very "easy to understand and remember" information, such as "protect forest by carbon contracts", "no forest, no carbon" and so on. Alternatively, they put

³⁷ Definition of Community Forest Carbon Pools (source: FFI): community forest carbon pools are defined as the forest carbon storages in community forest areas

visual materials, such as pictures, in village meeting places that the villagers usually visit. Secondly, but very importantly, the local people have been engaged directly in the practical activities under REDD+, such as participatory land-use planning, forest patrolling or carbon accounting. The “learning by doing” approach is the most effective approach FFI has used to train local people about REDD+ and carbon.

The results of FPIC are reflected in the local people’s awareness of REDD+ and forest carbon. A household survey of four selected villages with 65 households was carried out (see [3.4.4](#)), with questions such as: “*what do you know about REDD+ and forest carbon?*” and, “*how do you participate in this?*” The results showed that 59/65 respondent answered by stating that “*REDD+ is to protect forests for selling carbon*”³⁸. They also explained how they participate in REDD+: “*FFI and the local authority allocated one particular forest area for our village, and then every month, we go to patrol this area in order to ensure no deforestation...The better the forest quality, the more forest carbon we can have and then the more money will pay for our village*”³⁹. Thus, data from the survey reveal that local people in Hieu commune understand basic ideas about what REDD+ and carbon are and the relationship between forest protection and carbon, as well as reporting how they participate in REDD+ and produce carbon.

Overall, it seems that FPIC in Hieu commune has achieved its awareness raising objective with the local people. Through FPIC, the primary notions about REDD+ and forest carbon held by local people have been shaped. They have extracted “forest carbon” as a new resource, beside the forestland and forest resources that their current livelihoods depend upon. Participating in forest protection is the way the local people can produce forest carbon and get benefits from it. It is assumed that this notion held by local people will influence their attitude and behaviour towards participation in REDD+, changing their perspective on the traditional function of forests as well as their perspective on rights and claims over forest carbon in the future. Further details about this assumption will be analysed in the sections below (see [6.2](#)).

6.1.2. Establishing community forest carbon pools

The REDD+ Community Carbon Pools (CCP) project has relied on the context of the contested forest/land property relations of Hieu commune. As mentioned (see [chapter 5](#)), apart from Vi Chring village with 808.5 ha of community forest, the villages do not have legal tenure rights to forests nearby. The forestland areas, currently, are managed by the State agencies, including Hieu Communal People’s Committee (CPC), Thach Nham Protection Forest Management Board and Mang La State-Owned Enterprises. However, beside the State Law system of forestland and forest resources, the villagers have managed and accessed all forests in Hieu commune through their customary norms and rules. The interaction between the State Law and the customary system has shaped forest access and control in practice in Hieu commune. This, as a result, makes the property relations around forest and land in this community very contested.

Drawing on this local backdrop, Fauna and Flora International (FFI) suggested a proposal to re-arrange existing forest/land tenure through promoting legal forestland allocation to the community in Hieu. This activity aims to: (i) transfer legal tenure rights to forest/land from the State agencies to local villagers; (ii) recognize customary norms and rules regarding community forest management; and (iii) establish community carbon pools for producing carbon credits in the future. Moreover, unlike the previous forest protection programs, the CCP project has tried to integrate the

³⁸ Source: Local people in Vi Chring, Vi Glong, Dak Nom, Kon Plong and Vi Choong, Household survey, from 20 December 2013 to 10 January 2014

³⁹ Source: The Vi Chring Community Forest Management Board Chairman, personal interview, 1 November 2013

traditional forest uses (such as demand for cultivation lands, timber for house or firewood, NTFPs extraction, etc.) into new forest/land-use planning, rather than only focusing on forest protection duties. As a result, a new forest/land property system under the REDD+ project will be established. Herein, the customary tenure rights and community management institutions can be recognized and incorporated into the legal decision-making process. FFI expect that through the new reform, all the problems regarding the contested forest/land rights of local people will be solved. Thus, the negotiation of property rights and claims over forest carbon will be easier to achieve in future.

In the middle of 2013, FFI carried out participatory land-use planning (PLUP) to re-demarcate the boundaries in Hieu's forests. Approximate 18,700 ha of forests were distributed equally and transparently to 11 villages both on paper and in practice⁴⁰. The customary communal system, norms and rules have been taken into account as the core of the new arrangement. The traditional forest boundaries among villages have been revived. Forests have been allocated to the entire communities and managed under their community governance system with equal participation rights for all villagers. Additionally, in order to safeguard local livelihood to prevent negative impacts on REDD+, the planned areas for future cultivation and areas for harvesting NTFPs, firewood and timber also were identified for each village.

The PLUP map is considered the basic material for legal forest land allocation to local communities henceforth. FFI and Hieu CPC will then send the application to the Kon Plong District's People Committee to formally allocate these forests to villages. FFI expect that by the end of 2014, 11 villages will receive legal tenure rights to forests nearby. This means the legal rights to forest carbon stocks in these community forests may be allocated to local people in the future. To date, despite the absence of legal approval, the new arrangement of forests has been applied by FFI, Hieu CPC and local communities in practice.

6.1.3. The forest carbon governance structure under REDD+

Over three years, the new forest carbon governance structure has been set up under the implementation of REDD+ Community Carbon Pools. Figure 3 below illustrates in more detail the relationship among actors in this new structure. To begin with, the Project Management Unit (PMU) was formally established in May 2012 by the decision of Kon Tum Department of Agriculture and Rural Development (DARD). It involves the representatives of DARD, Kon Plong District People's Committee (DPC), the Forest Protection Department (FPD) and FFI. This PMU takes charge of promoting and coordinating participation of the local authority and local people in the CPC project. In addition, it also helps to deal with legal issues relating to the project's main activities, such as decisions for forest land allocation to local communities, or bring the lessons learnt from Hieu's model up to the national level. At the end of the project, when forest carbon credits will be produced, the PMU is also responsible for taking these products to market.

At the local level, a governance structure was set up involving 11 community-based forest management units (CBFMU) in 11 villages. These units take charge of patrolling forests which they have been assigned in the participatory land-use planning (see [6.1.2](#)). Each CBFM unit includes *one management board*, which is set up by transparent voting among villagers and *members* as village household representatives (one person per household). Each household participating in REDD+ needs to sign an agreement with FFI and Hieu CPC. This document refers to the commitment among stakeholders to participate in forest carbon production under REDD+. The management board includes one chair and two vice-chairs, who coordinate all activities of

⁴⁰ Source: The CCP project coordinator, personal interview, 25 February 2014

CBFMU, and one financial staff member, who has been trained to manage budgets and deal with carbon payments in the future. Besides this, the participation of each household in forest patrolling activities also has been documented. These documents will be used as evidence for distributing carbon payment afterwards. All 11 CBFM units are under the management of Hieu's Communal People's Committee with technical support from local forest rangers.

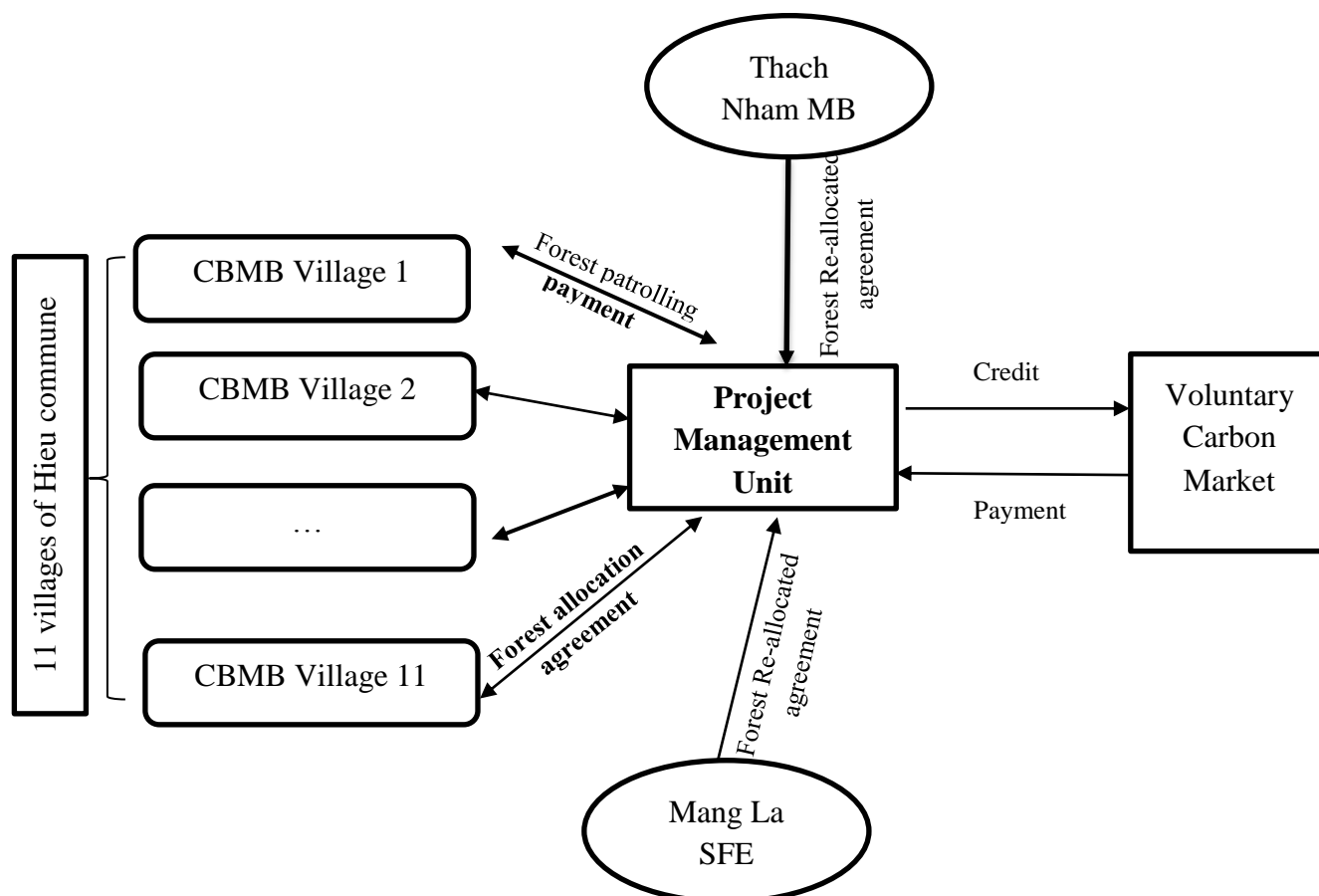


Figure 4 - Relationships among actors surrounding forest carbon in Hieu commune

(Source: Field research 2013/2014)

To date, this forest carbon governance structure has operated on the ground; forest patrolling of 11 CBFMUs is the main activity.

6.1.4. Outcomes: The overlapping forest/land property systems under REDD+ in Hieu commune

The three activities, as described above, have established the initial foundation for REDD+ in Hieu commune. *The people*, meaning the local people, have been trained to participate directly in REDD+. *The place*, where forest carbon pools are located, has been set up through allocating forests to local community. Then, *the governance structure* has also been established in order to maintain community forest carbon pools and produce carbon credits for sale. However, going beyond REDD+, these activities have triggered the reform of forest and land property in Hieu commune.

The new arrangement of forest and land that the CCP project tried to set up is a communal tenure system. Under this system, the forests will be allocated formally to 11 local communities; the communities will then be promoted to legal forest recipients and allowed to hold legal tenure rights over forests. Moreover, the CCP project has subsumed forests into one category that defines various types of forests in Hieu commune, namely “REDD+ forests”. This type of forest is set aside

for the purposes of protection to enrich carbon storage. Obviously, the CCP project intended to combine both the State Law and customary system to form one new, integrated system. This new system is expected to solve all the contestation of rights over forest and land among local actors, which were caused by inconsistencies in property relations prior to REDD+ in Hieu commune. The clarification of forest carbon rights and claims afterwards, therefore, will be easier.

However, in fact, as observed, establishing and exercising such system in the absence of “routinized rule and crystallized practices” (as cited in To, 2013) in Hieu commune is extremely difficult and problematic. First of all, the State system emphasizes individual rights to forests, rather than communal rights of the entire community. Thus, there is still a lack of a legal framework that can support an entire community holding legal tenure rights in certain forest areas. The process of allocating forests to a community, therefore, will be more difficult than allocating to other recipients (such as individual or households). Besides this, for political reasons, the rights over forests granted to the entire local community are more restricted than those of other legal recipients. More specifically, the local community will not receive rights to exchange, transfer, mortgage or lease the forests; it only receives rights to use forests (i.e., rights of access and withdrawal of forest products). Moreover, the local community is also not counted as a legal property holder, and cannot carry out civil transactions as regulated in the Civil Code. This has led to challenges seeking to safeguard the rights of the local community to forest carbon in the future. Secondly, the forests in Hieu commune under REDD+ have been fragmented into 11 different pieces and allocated to 11 villages. It is also inconsistent with the customary system, under which all forests near Hieu commune were accessed and controlled in an integral way by the entire community. Thirdly, almost all forestland areas in Hieu commune are still under the management of the State agencies (Thach Nham, Mang La and Hieu CPC). How can the CCP project negotiate and convince these agencies to transfer their legal tenure rights to local community? This is a difficult question to tackle. Thach Nham’s representative has already presented their conflicting perspective: *“Our forests are protection forests with high values in watershed protection. In principle, they have to be controlled by the State agencies. I do not agree to transfer our forests to communities. It is impossible”*⁴¹. All these issues, therefore, have hindered the establishment and application of this new REDD+ tenure system in the practices of Hieu commune.

However, despite the incomplete status, the CCP project has tried to apply this new communal tenure system in practice, while these two other systems (State and customary) have been not yet been replaced. Each of these systems has its own different classification of forests and rights holders. Consequently, instead of helping to clarify the rights over forest and land, the new tenure system under REDD+ has added one more layer to the already complex forest/land property systems in Hieu commune. All these issues reflect the characteristics of the initial stage in which forest carbon is emerging and being embedded into the existing local context of Hieu commune.

6.2. Situating property rights and claims over forest carbon and benefits-sharing mechanisms in Hieu commune

As part of REDD+ initial stages, all the property rights, claims and benefit-sharing mechanisms of forest carbon are negotiated and clarified (Mahanty et al., 2013). However, the mishmash of property systems around forest and land (see [6.1.4](#)) currently has caused the clarification of forest carbon rights, claims and benefit sharing to be very difficult. Two main reasons have been identified, encompassing the various interpretations under different property systems (see [6.2.1](#))

⁴¹Source: The vice director of Thach Nham Protection Forest Management Board, personal interview, 4 January 2014

and the different notions of forest carbon among local actors (see [6.2.2](#)). In this section, more detailed discussion surrounding these issues is presented.

6.2.1. The interpretations of forest carbon rights and claims under different property systems

The exercise of the control and use rights over forest and land by State agencies and the local people influences the negotiation of property rights, claims and benefit-sharing surrounding forest carbon. As the brief discussion in 6.1.4 indicates, the rights to forests and land currently, in Hieu commune, rest with multiple property systems. These include the State Law, the customary system and the new REDD+ communal tenure system. The conflation and discrepancies of power positions and the rights of local actors under these three systems have led to various ways of clarifying property rights, claims and benefit-sharing around forest carbon.

a. Interpretations of rights and claims to forest carbon under the State Law forest/land property system

In the State systems, there are four legal forest/land tenure rights holders: Thach Nham, Mang La, Hieu CPC and Vi Chring village. Under the current regulations, these rights-holders are given clearly defined, exclusionary-based rights to the forests in Hieu commune. Besides the forest protection obligations, they receive a certain forest area together with the land-use certificate (“Red Book”) certifying their legally claims to these forests. These rights-holders can withdraw timber (non-commercially) and NTFPs from forests and convert 5 % of these forests to agricultural uses. They can also entirely exclude outsiders from exploiting timber or NTFPs, cultivating fields or other forest-damaging activities in the allocated forests. In the context of REDD+, with forest protection activity as the core, these rights-holders may have legal rights to participate in REDD+ as well as control rights to carbon stocks in their assigned forest areas. Moreover, if carbon credits are a yield of the forest protection efforts (see [4.3](#)), these rights-holder can also be granted the rights to receive benefits from carbon credits.

In essence, if this system is followed, the rights to forest carbon of rights-holders can be protected under the State Law. Thus, it can be acceptable in the international forest carbon transaction and can potentially bring carbon credits benefits back to forest protectors. However, the 10 remaining villages do not have legal tenure rights to forests. The villagers are considered outsiders; or even the main actors causing deforestation and forest degradation in Hieu due to their livelihood activities. Thus, they may be excluded from participating in REDD+ as well as from the distribution of REDD+ related benefits.

b. Interpretations of rights and claims to forest carbon under the customary tenure system

The local concepts of property rights to the forest and land in Hieu commune contradict the perspective of the State. Forests are conceived in a much more complex way, embracing socio-economic and cultural factors (To, 2013). “Forest belongs to the village” is the basic notion of forests in the customary tenure system in Hieu commune. Under this system, the local people perceive forestland and forest resources as common property, following their respective community rules.

Forests in the customary system of Hieu have been used for developing local livelihoods, such as swidden cultivation, timber extraction or NTFP collection, rather than forest protection. Thus, it seems to contradict the core principle of REDD+. In order to participate in REDD+, the local people have to regulate their livelihood strategies to make them compatible with the requirements of REDD+. Thus, the decisive right to participate in REDD+ is granted to all local villagers. In addition, due to the “forest belongs to village” notion, the forest carbon stocks and carbon credits

can be perceived as common property. The distribution of rights to forest carbon, therefore, can be made under their respective community rules, as with other forestland and forest resources. Moreover, in the system, the State agencies, such as Thach Nham, Hieu CPC and Mang La, are excluded from all rights to forest carbon.

The biggest challenge in this case is that none of the rights under the customary system are recognized legally. Thus, it cannot be acceptable for carrying out carbon credit trading. It is then impossible to obtain benefits from carbon.

c. Interpretation of rights and claims to forest carbon under the new REDD+ forest tenure system

Under REDD+, the forests in Hieu commune have been re-arranged to form a legal communal tenure system. Under it, all 11 villages in Hieu commune will become legal forest recipients and hold the legal tenure rights as regulated in the State Law system. Moreover, inside each village, the community rules under the customary system can still be enforced. This means all local villagers have rights to participate in REDD+. They will protect the forest collectively. Then, rights to forest carbon stocks and rights to obtain benefits from carbon credits are distributed equally among local villagers.

However, in contrast to the customary system, forests in Hieu commune under new system are fragmented into 11 sections. This has created a new cleavage among villages in Hieu commune. Therefore, under the new system, the villagers can exclude the villagers from neighbouring villages from rights to forests, and thus from forest carbon stocks and carbon credits. Besides this, if following this approach, the CCP project has to face many legal barriers in order to bring carbon benefits back to local people (see [6.1.4](#)), not only because of the absence of a legal framework on carbon rights, but also on the legal rights of communities. Moreover, the legitimacy of the new tenure system also needs to be considered, since it has not yet been approved by the State authority.

In sum, based on the current forest/land property rights systems in Hieu commune, there are different scenarios for the distribution of forest carbon rights, claims and benefits among local actors. Each of these has its strengths and weaknesses. Thus, it is very difficult for FFI to design one forest carbon property system as well as a benefit-sharing mechanism that can capture all the complexities of current forest/land property rights systems.

6.2.2. Differences in notions on forest carbon among local actors

Forest carbon is a new and intangible thing. Prior to REDD+, local actors have no experience of it. Under the CCP project, forest carbon goes through various stages in order to become a “tangible” commodity that can be traded. Over three years, these stages have shaped the meaning of forest carbon among local actors. The data obtained from the fieldwork clearly illustrate that local actors, due to their various positions in different forest/land property systems, their own interests and motivations, have different notions of forest carbon. These notions, therefore, influence their attitude and behaviour towards REDD+ as well as their perspective about rights, claims and benefit-sharing in relation to carbon.

a. Local people’s notion: forest carbon as “products” of “forest protection” cultivation

Traditionally, for local people the forests provide land and forest resources that their livelihoods depend upon. Under REDD+, the local people extract “forest carbon” as a new resource (see [6.1.1](#)). The survey and interview data show that local people assume REDD+ or forest carbon production is similar to agricultural cultivation. The local people understand that the yield of forest carbon depends on the efforts they put into forest protection activities, “forest carbon is products of forest

*protection activity. The better the forest quality, the more forest carbon we can have*⁴². Therefore, whether or not the local people understand what forest carbon and carbon credits look like, they can still assess the yield of forest carbon products through the improvement of forest quantity and quality within their village's territory. Thus, local people expect forest carbon to be a potential source that can bring income to their household. They are interested in economic values resulting from selling carbon. Data from survey reflected this statement. Nearly 90 % of respondents thought that "selling carbon" means they will get money from carbon. It is similar to selling cassava products in swidden cultivation. Thus, if they participate in forest protection, they will get payment in cash from selling carbon.

Besides this, the local people have also realized there are some indirect benefits from forest carbon and REDD+; for example, more water for paddy cultivation, more timber for building houses, more NTFPs for harvesting, and especially the opportunity to receive the "red book" (land-use certificate) for a certain forest area. The local people are most interested in the "red book". From their point of view, the "red book" is also type of property, which can help them attain legal tenure rights to forests and "*have rights to extract timber for sale or convert some forestland for cultivation*"⁴³. In this way, the local people perceive the "red book" as an inspiration to encourage their participation in REDD+, as well as one kind of "payment" for their efforts to protect forests during the transition time when they are waiting for income from carbon products.

Moreover, forest carbon is perceived as a new product from the forest which is produced by the local people's effort to protect forests. The local people, therefore, understand rights to forest carbon as rights to obtain benefit from selling carbon. As they emphasized, "*forest is collectively managed, so all villagers should get benefits from forest and forest carbon*"⁴⁴. Due to the collective management system under REDD+, the local people suggested some ideas about benefit-sharing mechanisms if they received payment from carbon: "*we will count the labour working day of households who participated in forest monitoring activities, and will pay them (150,000 VND/per day). The rest will be divided equally among the people, not by households because some households have more members than other households*".

Keeping this notion about forest carbon in mind, the local people in Hieu commune have played a central role in operating the communal tenure system over forest/land and carbon which has been set up under REDD+. They also performed as "workers" in forest carbon production and waited for the "salary" from selling carbon.

b. Fauna and Flora International (FFI)'s notion: Forest carbon as commodity, but uncertainties about its future

Fauna and Flora International play the role of project developer in the CCP initiative. In the case of Hieu commune, they designed the project in terms of a market-based approach. Thus, they perceive forest carbon as new type of commodity. Over three years, FFI has tried to set up initial stages (see [6.1](#)) in order to make forest carbon become a tradable commodity.

However, in fact, FFI has faced a lot of difficulties in designing and implementing this initiative. The most difficult is in the negotiation with local people in order to encourage them to participate in REDD+ within the context of uncertainty about the future. As the project coordinator of FFI emphasized: "*Local people here usually ask when their benefits from the forest will come and how much [...] we do not know yet ... but the answer we give them will impact on their attitude and*

⁴² Source: The Vi Choong village's leader, personal interview, 3 January 2014

⁴³ Source: The Vi Glong Community Forest Management Board Chairman, personal interview, 4 January 2014

⁴⁴ Source: The Kon Plong Village's leader, personal interview, 6 January 2014

*behaviour towards the project implementation. It is a sensitive issue*⁴⁵. Although FFI have known about the uncertainties surrounding forest carbon, they have done little to inform local people about such difficulties. Furthermore, from FFI's perspective, in order to compensate for the uncertainties of forest carbon income, they have emphasized more strongly the indirect benefits, such as more water for paddy cultivation, more timber for building houses, more NTFPs for harvesting, and especially the receipt of the "red book" (land-use certificate) for a certain forest area: *"in the case where we have not received income from forest carbon credits yet, the "red book" allocated to local people can also be referred to as one kind of carbon benefit, meaning the legal tenure rights to community forest carbon pools*⁴⁶. Due to the sensitivity as well as the uncertainty about forest carbon, FFI has not yet been concerned with property rights and claims to forest carbon, or benefit-sharing mechanisms; as they disclosed, *"we will get back to this topic at the end of this year (2014) after we carry out carbon accounting and credits verification."*

c. The local authority's notion: Forest carbon as tool for forest governance and property alleviation

Hieu CPC is interested in both the economic and environmental protection value of forest carbon. Hieu CPC represents the State at the local level. They are assigned to enforce the forest protection and development law as well as improving social-economic conditions at the local level. Forest carbon is considered the tool that helps them to carry out both the duties. On one side, under REDD+, trees in the forests are still conserved and their quality and quantity can be improved. On the other side, the local authority expects forest carbon to be a potential source of income that can help the villagers improve their living conditions, and may solve the problem of property: *"as you see, Hieu commune is one of the 300 poorest communes in Vietnam. We have 85 % natural areas that are forests, but in fact, it still cannot bring significant benefits for local people nearby. They live in rich forests, but they are poor people. Thus, we expect that REDD+ and carbon credits revenue can bring a new hope here"*⁴⁷. Therefore, Hieu CPC plays a role as FFI's local partner that is responsible for legal or administrative issues within Hieu commune.

Related to rights to forest carbon and benefit-sharing mechanisms, as the Hieu CPC's representative⁴⁸ suggested, the control rights to forests mean that forest carbon stocks should belong to the State agencies. However, local people in Hieu commune can be granted the rights to participate in REDD+ through forest protection contracts. The carbon credit benefits, as a "yield" of their labour, should, therefore, be granted to them. Hieu CPC's representative also suggested that, of the benefits from selling carbon, around 15-20 % should be retained for the forest protection and management fund in Hieu commune, while the rest will be distributed to villagers based on their participation in forest protection. Hieu CPC also respects the traditional culture of the local community when suggesting that the payments to the villagers be distributed by villagers themselves according to their own community rules.

d. Thach Nham and Mang La's notion on forest carbon: Complexity

Thach Nham and Mang La are known as the two biggest legal forest recipients in Hieu commune. They have a complex perspective about forest carbon and REDD+. On the one hand, they expect that REDD+, with the participation of the local community, will help to improve forest quality and then help to fulfil their forest production duties. However, in contrast, transferring legal tenure

⁴⁵ Source: The CCP project coordinator, personal interview, 25 February 2014

⁴⁶ Source: The CCP project coordinator, personal interview, 25 February 2014

⁴⁷ Source: The Hieu CPC's official, personal interview, 4 November 2013

⁴⁸ Source: The Hieu CPC's official, personal interview, 4 November 2013

rights to forests to local community will weaken their control over forests; furthermore, “*we do not trust in the local people[] without State control, we do not know whether or not the local people will convert all forestland to cultivation or cut down trees for sale*”⁴⁹.

Likewise, annually, Thach Nham and Mang La receive a very small budget from the State for administrative operations. Thus, they also see forest carbon as a source of income outside the State’s budget. To date, Thach Nham and Mang La are still considering the cost-benefit of forest carbon and REDD+. They have not yet decided what roles they will play in REDD+ implementation in Hieu commune. They also do not agreed with transferring the legal tenure rights currently belonging to them to the local community. As they said: “*Our forests are protection forests, with very high value and good conditions. It be cannot allocate formally to villagers. We can only make a new forest protection contract with them. [...] The carbon in REDD+ should belong to the State, and here, we are representative. We will put the revenue from carbon in our forest protection budget and can pay the fees to the villagers. How much? It depends on how much we will get from selling carbon*”. In this sense, Thach Nham and Mang La seem like outsiders of REDD+ despite the fact that they are legal rights recipients of over 75 % of forests in Hieu commune.

Overall, the previous paragraphs described the differences in the notions of forest carbon among local actors in Hieu commune. Clearly, the CCP project has provided very common accepted information about REDD+ and carbon to local actors. But other factors, such as the power position and rights in the forest and land systems, and the expectations and interests of local actors to forest and land resources and forest carbon have played a more crucial role in shaping the different notions of forest carbon among local actors in practice. These will influence what actors are able to do with forest carbon, modifying the “rights” to which they may be entitled and the “obligations” to which they can be held in REDD+ practices (see Verdery, 1997). Thus, besides the systematic complexities of forest and land property systems, the differences in notions of forest carbon among local actors are other factor that can hinder the negotiation process around property rights, claims and benefit sharing related to forest carbon.

6.3. Conclusion

This chapter has examined the effects of property relations surrounding forest and land on the clarification of forest carbon property rights and benefit sharing. This chapter gained insights into the situation of forest carbon within the third layer, social practices of forest/land property relations, as proposed by Von Benda-Beckmann et al. (2006). The findings of this chapter also provide empirical evidence for the statement of Mahanty et al. (2012) about the recursive and mutually constitutive nexus between forest carbon and existing land and forest property relations.

The case of Hieu commune reveals that clarifying forest carbon property rights within the complex forest and land property relations is extremely difficult and problematic. The situation is even worse in the transition stage when the “new” concept has just emerged but is incompletely embedded in the existing systems. Under the CCP project, FFI has tried to re-arrange the existing forest and land to form a new communal tenure system. It is expected that, through the new reform, all the problems regarding contested forest and land rights of local actors will be resolved. Thus, the clarification of property rights and claims over forest carbon will be easier to achieve thereafter. However, in contrast with this expectation, the new communal tenure system with its incomplete status has added more complexity to the already complex forest and land property systems in Hieu

⁴⁹ Source: The vice director of Thach Nham Protection Forest Management Board , personal interview, 4January 2014

commune. At present, the pattern of multi-property holders, multiple uses of forestland and forest resources and different property systems (old and new, formal and informal) exists. This complicated situation, therefore, has shaped different notions of forest carbon among local actors as well as different ways to clarify property rights and benefit sharing mechanism over forest carbon. Consequently, it is very difficult for the CCP project to capture all of these local complexities and differences in practice to form a sustainable and acceptable property rights system and benefit sharing mechanism regarding forest carbon in Hieu commune. All these things reflect the characteristics of the emergence and embeddedness of forest carbon property (Hann, 1998) in the certain local context of Vietnam.

Moreover, this chapter shows that in the initial stage of forest carbon production, the property rights “to derive benefits from” (Ribot & Peluso, 2003, p. 153) forest carbon are negotiated. The outcomes of the negotiation can influence on the access that define “the ability to derive benefit from” (ibid., p.153) forest carbon in the future. In the current situation of Hieu commune, the access mechanism to forest carbon benefits is initially tended to define by multiple factors, both under the right-based access mechanism, in which, access is defined by the State law, custom and the REDD+ communal tenure systems; as well as the structural and relational mechanism, which include number of factors, such as: level of participation in forest protection, livelihood dynamics and so on. However, due to the initial setting up stages of the CCP project, there is not enough empirical evidences to investigate the concrete question on how these forest carbon benefits are distributed, not only what benefits can derive from forest carbon but for whom these benefits are generated. This consideration should be saved for the future research.

CHAPTER 7 - LOCAL PRACTICES OF FOREST CARBON: IMPLICATIONS FOR LOCAL LIVELIHOODS IN HIEU COMMUNE

In Hieu commune, most of the local people directly depend on forestland and forest resources to derive their livelihoods, such as in rice or cassava cultivation of forestland, firewood collection, and gathering and commercialization of diverse NTFPs. In 2011, the initial stages of forest carbon production under the REDD+ project were initiated in Hieu commune. At this time, the project was gradually accepted as a potential livelihood option, as the local people re-shaped their forests to support the production of forest carbon as a commodity. This intervention may in future trigger radical changes in the livelihood structure of local people.

This chapter examines the initial local livelihood outcomes caused by the emergence of REDD+ forest carbon production in Hieu commune, as raised in my final research question. Forest carbon production, on the one hand, is generating hope as a possible livelihood activity among local people. But on the other hand, this intervention has impacted upon local peoples' existing access to forests, and then directly influenced their livelihoods. I argue that participation in REDD+ has led local people into a dilemma due to the difficulties in regulating their previous livelihood strategies in a manner compatible with the new arrangements under forest carbon production. The four sections below are presented to support this argument. To begin with, I examine the change (prior to and within the current REDD+) in terms of access to land/forest and practices in the cases of swidden cultivation (see [7.1](#)) and in the extraction of NTFPs (see [7.2](#)). I then discuss the dilemma that local people are facing through analysing various changes in their livelihood strategies (see [7.3](#)). At the end of this chapter, I conclude by summing up some key findings as the initial outcomes of the emergence of forest carbon in the local context (see [7.4](#)).

7.1. Changing access to forestland and outcomes for swidden practices

7.1.1. Access to forestland and swidden practices prior to REDD+

In Hieu commune, traditionally, swidden cultivation played a role as the second food production activity alongside rice paddy cultivation in the local people's lives. The villagers planted crops, such as corn, cassava or other types of vegetable in swidden fields in order to diversify food sources. Recently, due to the development of commodification and the market, the local people have started to use their swidden fields to plant (mainly) commercial cassava, coffee and other softwood tree cultivation, and then sell products to traders to receive income. Annually, this livelihood contributes approximately 30-50 %⁵⁰ of each household's cash income. The swidden cultivation has now developed as one of the main sources for capital accumulation of the local people in Hieu commune.

The customary norms and rules have strongly influenced access to swidden land among local people. Based on the "first come – first served" principle, the claims and rights to each swidden plot belonged to the individual household and were accepted in the customary tenure system. Once the rights and claims are established, other households are not allowed to work in these fields. In order to establish new fields, local people have to look for the areas no one has claimed. Such rights and claims of a household to swidden fields are maintained, not only in the cultivation period but also during the fallow time.

⁵⁰ Source: Data outcomes of the household survey from 20 December 2013 to 10 January 2014, as well as from interview with the representative of Hieu CPC, 27 October and 4 November 2013.

Besides the customary system, the market forces and livelihood dynamics were identified as main factors determining access to swidden land and swidden practices in Hieu commune. In 2005, Vi Glong was the first village to successfully plant commercial cassava in their swidden plots, and this was expanded in all villages of the Hieu commune after two to three years. The attractive income from this activity had led the local people to a dramatic “rush on the forest” (Sikor & Tran, 2007, p. 648) in order to occupy forestland and establish new swidden plots for producing commercial cassava. As a forest ranger in Hieu commune shared, “*after only one week in the 2009 Lunar New Year Holiday, I came back to this commune and saw all the forest along the main road, around 15 km, had already been cleared for practicing swidden*”⁵¹. Data from counting swidden plots in four villages (Vi Chring, Vi Choong, Vi Glong and Dak Nom) reveal this trend, as most swidden fields currently under cultivation in Hieu commune were established from 2007 to 2012 (see appendix C).

Swidden cultivation is considered an action that destroys and harms the forest landscape and the ecosystem. This practice is prohibited by the Vietnamese State Law⁵². However, in practice, this regulation did not work due to the local complexities of forest practices among local actors. From the point of view of local people, although they knew about this prohibition, the need for food and money led them to maintain or even expand their swidden fields as a form of resistance. Similarly, the local people were also faced with the dilemma that obstructed them from solving this problem. On the one hand, if they enforced this regulation strictly, they would afterwards be faced with the problem of poverty in the commune. On the other hand, if they “turned a blind eye” to allowing local people to “slash and burn” forests, they would not fulfil the forest protection duties that are assigned by the State. The implementation of this prohibition showed that, while it emphasized forest protection, it failed to capture the demands for swidden land (meaning, for livelihood) by local people.

Access to swidden land and swidden practices prior to REDD+ in Hieu commune were shaped by a set of customary systems, household livelihood dynamics and market forces, rather than by the State forest protection regulations. The local people perceived swidden as an irreplaceable livelihood, in spite of the fact that this activity is illegal and causes deforestation in Hieu commune. In the new context of REDD+, access to swidden land and swidden practices has changed and is matched with the purpose and requirement of forest carbon production. Such changes will be highlighted in the section below.

7.1.2. Swidden practices under the new arrangement of REDD+

a. Access to swidden land under REDD+

Access to swidden land has changed since the REDD+ project arrived in Hieu commune in 2011. All forest surrounding Hieu commune (18,700 ha forests) have been set aside for REDD+ projects and forest carbon production. As a result, the sources of forestland for swidden become more limited. Moreover, all the activities that threaten forests, such as swidden cultivation in forestland, need to be limited more stringently. Local people who have already signed the agreement to participate in REDD+, therefore, have to obey this new rule.

In the new context, local people are no longer “free” to establish new swidden plots. The access to the swidden land is more restricted now as opposed to prior to the establishment of the REDD+ project. In particular, newly established households after 2011 often experience difficulties in accessing swidden land as the areas are already fully worked on by other households or are not

⁵¹ Source: Hieu commune’s forest ranger, personal interview, 4 January 2014

⁵² Article 12, Prohibited Action, the Forest Protection and Development Law 2005

allowed to be converted under REDD+ rules. Many respondents complained: *“It is difficult to find a suitable land to establish new swidden plots now”*⁵³.

At the same time, the new arrangement of forests under REDD+ has created new cleavage among villages in Hieu commune. Prior to REDD+, the cultivation fields of all households, even those from different villages, were interspersed in forests surrounding Hieu commune. Under REDD+, these forests have been divided into 11 community forests with clear boundaries and exclusionary rules to other neighbour villages. Thus, the villagers in Vi Chring village, for example, can refuse to grant access rights to the forests as well as swidden land to villagers from neighbouring villages.

b. Swidden practices under REDD+

In the context of REDD+, almost all villagers in Hieu commune are faced with the challenges of scarcity of cultivable land. The local people have restricted the opportunity to establish new swidden fields in the forests. Data from the survey reveal the high demands for new swidden plots among local people. Except the Vi Glong village (with an average 0.99 ha swidden land/household), in other villages, such as Vi Chring and Dak Nom, 35 and 50 % of households do not have swidden land, or only very small areas, as in Vi Choong village (see [appendix B](#)). This is the reason why, currently, the most frequent question from local people is, *“Can we establish new swidden plots?”*; or, as one respondent complained:

“I was not against REDD+, because I expect it can bring new income for our villagers... But I think it is better if the project and local authority can plan some areas for practicing swidden... Conserving all forests for producing carbon is not a good idea.” He stated: *“My villagers complained that their old swidden plots cannot be used anymore because the REDD+ project said that during the 5-10 years fallows, the plot has already grown as forest... So they lost their land.”*

Source: The former chairman of Hieu CPC, personal interview, 6 January 2014.

Besides this, the CCP also established a new rule that, *“only the forested areas around 50 m from the springs or the old swidden plots fallow for less than five years are allowed to be used for swidden cultivation”*⁵⁴. As a result, the swidden plots which were opened after 2012 are very small (only 0.1-0.3 ha) and fragmented (see [appendix C](#)). Thus, it is very difficult for local people to plant commercial cassava in these new plots. They have changed to other crops with lower cost, used only for self-consumption.

The stringent control over access to land and swidden practices in forests under REDD+ has triggered changes in land-use practices in Hieu commune. The old swidden fields, which were fallow, are now re-cleared and re-used. The local people have started to fence their swidden plots, strongly emphasizing the notion of household private property and strictly excluding other villagers. They have also utilized these fields thoroughly by reducing the fallow period or diversifying crops. All these developments have reflected a gradual shift from swidden cultivation to a more permanent type of agriculture in Hieu commune.

To date, the amount of swidden areas has been fixed. The local people have stopped establishing new swidden plots in a disorderly manner. As statistical data from Hieu CPC show, there has been no further forest clearance for swidden since the middle of 2013. All the forests surrounding Hieu

⁵³ Source: Data from fieldwork by interviewing key informants and households

⁵⁴ Source: The CCP project coordinator, personal interview, 25 February 2014

are now protected for forest carbon production purposes, despite the fact that this rule has not yet been legalized.

7.2. Changing access to forest resources and outcomes on NTFPs extraction

7.2.1. NTFPs prior to REDD+

Traditionally, NTFP extraction played an essential role in the spiritual and material life of the local people in Hieu commune. It provided food, vegetables, raw material to make work tools, and so on. In this location, the difference between State regulation and practice, again, was observed in the case of NTFPs. The State regulation reserved rights to NTFPs only for legally-recognized forest recipients. But in practice, the local people did not know about this regulation. The NTFPs, so, were collected by all villagers of Hieu commune. In addition, the local people did not object to the gathering of NTFPs by outsiders from other communes. Moreover, access to NTFPs was of little interest to the local authority, as these products were considered of low value as well as having a low impact on deforestation. Thus, the Hieu CPC did not deal with this and allowed local people to continue to collect NTFPs as they needed.

The position of NTFPs extraction changed in 2009. Gathering NTFPs for self-consumption was shifted to a commercial pattern by the emergence of “diamond leaves”⁵⁵ extraction. The income derived from this activity became an important source of household income for local people, as villagers disclosed: *“we can stay for one week in the forests. If we are lucky, we will get 1-2 kg diamond leaves, approximately 1.5-3 million VND (70-140 Euros). This amount of cash is enough for four members in my family to use for around two to three months”*⁵⁶. The high market demands for this plant caused dramatic extraction in Hieu during 2009 to 2012. Children from seven years old to villagers in their late sixties participated actively in collecting this plant. The level of dependence on “diamond leaves” extraction was reflected in the wealth of households in this area. Data from the survey show that households with more female labour, or were disadvantaged or landless, were the most dependent on this activity. Moreover, given the “free” access to NTFPs, outsiders also joined in with “diamond leaves” extraction in Hieu’s territory.

This set of factors, including “free” access to NTFPs, market forces and livelihood dynamics, led to overexploitation of the “diamond leaves” during 2009 to 2012, and even more recently in Hieu commune. In the new context of REDD+, NTFPs extraction is considered as a part of people’s livelihood strategy; but equally, overexploitation of NTFPs can threaten forest degradation and loss of biodiversity, and thus may impact on the “yield” of forest carbon. Some new rules have been established to manage and control NTFPs extraction, as described below.

7.2.2. NTFPs harvesting under REDD+

The REDD+ project has provided a flexible approach in the case of NTFPs extraction. The new rules that have been established under REDD+ reveal that NTFPs might need to be treated differently from forestland in order to utilize their potential in local livelihoods and carbon stock protection.

In general, local people still have rights to access and obtain NTFPs for their daily needs. However, the community forest allocation under REDD+ (see [6.1.2](#) and [6.1.3](#)) has reserved exclusive rights to NTFPs for the villagers. In the new context, villagers can only harvest NTFPs within their village’s assigned forest territory. They can also refuse to grant access rights to villagers from other villages, while outsiders are totally excluded from the forests of Hieu commune. As a result, the access to

⁵⁵ *Anoectochilus setaceus*, a medicinal plant

⁵⁶ Source: Dak Nom villagers, household survey, 5 January 2014

NTFPs and their extraction have changed from disorderly to being more controlled and organized. Moreover, by participating in forest protection activities under REDD+, the local people have now reserved rights to access and use NTFPs legally.

The case of “diamond leaves” extraction is quite different. The access to this plant is more restricted than it was prior to REDD+. As Hieu CPC mentioned, this plant is classified as “at risk of extinction” in Vietnam. Thus, its extraction for commercial purpose needs to be limited⁵⁷. However, due to the important role of “diamond leaves” extraction in households’ incomes, this regulation has been enforced in Hieu commune, but in more sustainable way and is connected with REDD+ activity, as FFI explained: *“if the situation of overexploitation had continued, there would not be any diamond leaves in the future. Local people should participate in REDD+ to protect forest, excluding outsiders as well as reducing the frequency of diamond leaves extraction... Then in the future, we will have more diamond leaves”*.⁵⁸ Thus, to date, the overexploitation of diamond leaves extraction has been reduced. But along with it, the local people have lost the significant income from this activity.

The changes in access to forestland and forest resources described in the previous sections, [7.1](#) and [7.2](#), have perpetuated changes in livelihood practices in Hieu commune. The new arrangement and rules to avoid deforestation and forest degradation are caused by all these changes. In order to respond and adapt to these changes, each local household in Hieu commune has regulated their livelihood strategy. It may differ among households due to the differences of labour force, accumulated capital, land assets or other factors. Section [7.3](#) below will examine this in more detail.

7.3. Facing the dilemma: “Carbon benefit” dreams versus “livelihood” realities

The message “protect forest for selling carbon” that the CCP project delivered to local people in Hieu commune through FPIC (see [6.1.1](#)) has raised their hopes and expectation of gaining benefits and improving their livelihoods. The household survey and interviews conducted showed that the local people in Hieu perceive REDD+ as a new type of livelihood. Herein, they “cultivate” forest carbon by not cutting down trees and participating in forest protection activities, to then get income from selling forest carbon products in the market. In other words, the local people look at REDD+ similarly to the commercial cassava cultivation that they previously undertook in their swidden plots. Based on these hopes and expectations, the local people have accepted the need to stop expanding swidden plots as well as restricting “diamond leaves” extraction as trade-offs in order to get a better income from forest carbon in the future. Some households have even made such comparisons as, *“implementing REDD+ is less tiring than swidden...If the benefits from REDD+ are higher than cassava production, I will shift to REDD+”*.⁵⁹ It is a lucrative picture that the CCP project and FFI have drawn about REDD+ and forest carbon for local people. It is an inspiration that makes the local people in the Hieu commune, to date, still participate in forest protection activities under REDD+ despite the difficulties that REDD+ brings for them.

In reality, the local people in Hieu commune have been trying to deal with these difficulties, which include the scarcity of cultivable land and the loss of income from “diamond leaves” extraction. Data from the survey and interviews reveal that the local people have changed their own household livelihood strategies in order to secure their daily life while waiting for forest carbon benefits.

⁵⁷ Decree 32/2006/ND-CP on Management of Endangered, Precious, and Rare Species of Wild Plants and Animals, approved by the Prime Minister on 30 March 2006

⁵⁸ Record from the Vi Chring community meeting with Fauna and Flora International related to social impacts of REDD+, 01 November 2013

⁵⁹ Source: Vi Chring Community Forest Management Board Chairman, personal interview, 1 November 2013

Different households, with differences in cultivable land sources, capital and labour forces, have adjusted their livelihood strategies in different ways.

The first group includes the households that are classified as “rich” in Hieu commune. They have acceptable cultivable land (at least 1 ha/4 people). With this group, changes under REDD+ seem to not really impact their household livelihoods. These households also do not consider REDD+ as their one main livelihood in the future, and do not expect too much from forest carbon benefits in the future. As one respondent said, *“It is not really important with my family’s income. But if we can get added income, it is good, why would we refuse, especially since participating in REDD+ does not take time, usually one day per month...I consider it an addition for my household’s accumulated capital”*.⁶⁰

The second group is the poor and landless households. Prior to REDD+, the dependence level of these households on swidden cultivation in forests and “diamond leaves” extraction was very high. Thus, in the context of REDD+, they are the most vulnerable group. The way to adapt to the new context varies within this group. With some households, they have made use of their old swidden plots or tried to find some small pieces of land near their paddy fields, or even plant crops in the garden surrounding their houses. Some other households, who do not have cultivable land, cannot open new swidden plots and also cannot wait two to three years for carbon credits, have decided to give up their rights to participate in REDD+. The husbands in these families go to other communes or cities to find new jobs to compensate for the loss income due to participating in REDD+. Many of them still harvest “diamond leaves” but the quantity and frequency has gradually reduced as compared to previous years. Especially, “leakage”⁶¹ has been an on-going issue. As statistics by the local authority show, there has been no more forest clearance since the middle of 2013 in Hieu commune. However, there were some households (5-10 households)⁶² in Vi Choong and Kon Klung village who had decided to travel and clear the forest of Bo E commune⁶³ in order to establish new swidden plots illegally. The attitude towards REDD+ and carbon benefits of these households, therefore, is totally different to that of the first group. They expect that the forest carbon benefits should at least equal or exceed the income they could get from swidden in a scenario of no REDD+, and they hope to receive these benefits as soon as possible: *“I accepted stopping opening new swidden fields because of REDD+. At least, it should pay me equal to my planned income from cassava production of 3-5 million VND (150-200 Eu)/year... But I can only wait for two years, no more.”*⁶⁴

Obviously, it is very difficult for the poor and landless households to adapt to the new context of REDD+, since all their main income sources have been restricted. The CCP project did not provide any alternative livelihood during the time that local people were waiting for forest carbon benefits. This has triggered negative impacts on these poor people, and made them more vulnerable to the risk of poverty than before. Moreover, the survey conducted shows that if these expectations about forest carbon are not met, it may create a tendency of resistance toward REDD+, such as a “rush on the forest” to establish new swidden as well as extract timber for sale, in order to compensate for what they lost during years participating in REDD+. It is a big risk that FFI and Hieu CPC have to consider, especially when the project is coming to an end in the next few months.

⁶⁰ Source: Vi Chring villager, household survey, 31 December 2014

⁶¹ Leakage refers to changes in anthropogenic emission reductions or removals of GHGs outside the accounting system that result from activities that cause changes within the boundary of the accounting system (www.theredddesk.org)

⁶² Source: The leaders of Vi Choong and Kon Plung villages, personal interview, 15 February 2014

⁶³ The adjacent area with Hieu commune, but without a REDD+ project

⁶⁴ Source: The leader of Tu Can Villages, personal interview, 4 November 2013

7.4. Conclusion

This chapter tried to provide empirical evidence about the livelihood outcomes of the REDD+ intervention in the local context of Hieu commune. It has shown that although the implementation of REDD+ may generate hopes and expectation for new livelihood and income sources for local people, it certainly has a significant impact on existing local people's livelihoods. The requirements for avoiding deforestation and forest degradation under REDD+ have led to more restrictions to access to forestland and forest resources for local people. The scarcity of cultivable land and the income loss from NTFPs extraction, therefore, are considered the main consequences of the REDD+ intervention in the case of Hieu commune. Facing these difficulties, the local people, especially the poor and landless people, have fallen into this dilemma. On the one hand, they have to regulate their household's livelihood strategy in order to ensure their daily life but not threaten the requirements of REDD+, while on the other hand, they still have to keep hope even with the uncertainty forest carbon benefits. These findings have reflected the discrepancy between beautiful dreams about forest carbon and local livelihood difficulties in reality. The challenges outlined in this chapter also signal the a potential pitfall of the REDD+ intervention, which should be taken into account in any REDD+ design at local level, as mentioned in similar studies, e.g. Chhatre & Agrawal (2009), Groom & Palmer (2012), etc.

Go beyond, this chapter also revisits Ribot & Peluso's (2003) notion of access to forestland and forest resources. Under the new context, the ability to benefit from forest resources is influenced by not only by the State law, custom or convention (right-based access) or technology, authority, capital, labour forces and so on (structural and relational access mechanism), but also by new factor that related to forest carbon interests and expectation. This finding supports a new direction in research on access to natural resources in the new context of forest carbon commodification.

CHAPTER 8 – REVISITING ISSUES OF PROPERTY IN THE CONTEXT OF FOREST CARBON AND ENVISIONING A WAY FORWARD

This study has examined how the emergence of carbon as a new form of property is unfolding in terms of national and local property rights systems (policy and practices) in the forestland of Vietnam. In other words, the study critically revisits issues of property in the new context of forest carbon in order to demonstrate the situation in which forest carbon property has emerged and become embedded in the existing forest/land property relations of Vietnam.

The issue repeatedly used to characterize the emergence of forest carbon on the ground is the nexus between it and forest/land property relations. Earlier studies have done extremely important work explaining some implications of this nexus across various contexts, countries and communities from a political ecology perspective (Barr & Sayer, 2012; Dressler et al., 2012; Mahanty, et al., 2012; Phelps, Friess, & Webb, 2012). I have taken this approach, but applied it in the case of Vietnam. In doing so, I have examined forest carbon as a new type of commodity that is emerging in the current spatial and temporal context. I have also paid more attention to defining the country's local responses to this emergence, which can certainly be read throughout my study. I use a political ecology approach to analyse forest carbon within the existing forest and land property relations. I have attempted to gain insights into the “property” and “access” concepts of forest carbon to understand the roots of the issue, both at the national policy level and the local level, through a case study in Hieu commune. This framework has given me a wide vantage point through which to understand the emergence and embeddedness of forest carbon as it intersects with the existing forest and land property relations, as well as its initial outcomes on local livelihoods. It has also allowed me to make substantive recommendations to guide existing and new discussions of forest carbon property in Vietnam.

The study challenges the conventional assumption that forest carbon commodification has emerged through REDD+ with the hope of bringing new financial incentives for forest protection and local livelihoods. Instead, in practice, the study reveals that the fuzziness and contestation of forest and land property rights systems, as key features of a post-socialist country like Vietnam, has presented barriers that restrict the negotiation of property rights, claims and benefit sharing of forest carbon and associated forest resources that local people still depend upon. It will, therefore, influence the ability to access the benefits from forest carbon and then reduce the success of REDD+ in practice.

The implications of my findings for forest carbon commodification (8.1), revisiting property and access issues in the case of forest carbon (8.2), will be discussed in the sections below. I also provide some recommendations for future research as well as for policy discussions in Vietnam (8.3), before concluding my study overall (see 8.4).

8.1. The emergence of forest carbon commodification and its outcomes in Vietnam

Forest carbon commodification through REDD+ is new in the present spatial and temporal context of Vietnam. As Nevin and Peluso (2008) have noted, commodification always engenders disturbance that reshapes economic, social, political and geographic relations. Therefore, the forest carbon commodification in Vietnam is not an exception to this rule. To begin with, forest carbon commodification is assumed to be an embodied social and cultural process (Nevin & Peluso, 2008, p. 226). It must be recognized through people's perspectives, social relations and institutions. This means that in order to comprehend the emergence of forest carbon commodification and its outcomes in Vietnam, besides the direct issues of production, trade and consumption, the other issues regarding its embeddedness in the larger social and cultural context needs to be considered.

The larger social and cultural context, in this study, is the forest and land systems of Vietnam. Forest carbon, therefore, is considered one part of this context (Dressler et al., 2012). Moreover, forest carbon commodification also plays a role as one new component in the forestry sector of Vietnam. It is perceived to be the latest solution for preventing deforestation and forest degradation. The benefits from forest carbon commodities are expected to bring financial incentives for the efforts made in forest protection and local livelihoods. In other words, the forest carbon commodification is considered a potential “win-win” scenario that will support forest conservation, poverty alleviation and climate change mitigation.

Similar to other new commodities within the social context, I argued that the progress of emerging and embedding forest carbon in practice has led to the potential to radically change forest and land systems, and especially the relationship between these resources and people. At the national policy level, the emergence of forest carbon is considered a chance for Vietnam to review all its forest and land systems, modifying and making them suitable in the new context of forest carbon. A similar scenario has happened on the ground, but is more complicated. In essence, as To (2013) mentions, the forest and land systems in practice are operated by a complex set of local factors, including the State Law, the customary norms and rules, livelihood dynamics, market forces, labour and so on. All of these factors shape the control of and access to forests and land among local actors. In the new context, these factors have been redefined, reshaped and reworked through the new regime of forest carbon commodification. This means that the pre-existing power positions of local actors, their access to and benefits from forestland and forest resources, as well as their forest-dependent livelihood strategies, have changed in order to make space for the embeddedness of forest carbon. As a result, forest carbon commodification has been setting up new relations between local people and forests, land and carbon, as well as new arrangements of access to and control of these resources among actors.

8.2. Revisiting the issue of natural resource property and access in the case of forest carbon in Vietnam

Forest carbon is perceived as new tradable commodity. Thus, the issues of property rights and claims over forest carbon should be negotiated from the initial stages of forest carbon commodification. As Nevin and Peluso (2008) noted, clarifying and assigning property rights to carbon supposedly defines the basis of its commodity values and exchange values (Dressler et al., 2012). Clear claims and property rights of forest carbon, therefore, are critical to operating forest carbon commodification in practice. Also, as Dressler et al. (2012) state, the stages of clarifying forest carbon property rights and claims will be articulated according to pre-existing policies, tenure regimes and livelihood strategies in a definite context. The findings in this study point in the same direction as these scholars' work.

The Vietnamese Stage followed suit, discussing the clarification of property rights and claims to forest carbon based on the existing legal forest and land property systems. The discussion was held at the national policy level with the participation of multi-stakeholders, including State agencies, NGOs and enterprises. However, no consensus has been reached yet on the contradictory perspectives among actors or the problematic issues in the current forest/land property systems. It is said that the legal forest and land property systems in Vietnam, even when they embrace the notions of clearly defined rights, fail to capture the complexities of forest practices (To, 2013). The inconsistent pattern of forest and land property relations in Vietnam encompasses multi-property holders (State and non-state), multiple uses of resources (forest protection purposes versus traditional forest-depend livelihoods) and different systems (formal and customary). It has led to

difficulties in clarifying access to and benefit from forestland and forest resources among actors on the ground. This is also considered as a main cause of all the unsuccessful forest protection policies in Vietnam during the country's history. If the State continues to use this approach as well as the existing property systems, the case of forest carbon seems to be mostly a reworking of previously unsuccessful pathways. These findings are also supported by the argument of Verdery (2003) that property issues in a post socialist country such as Vietnam is about more than property rights. It is "a cultural system, a set of social relations and an organization of power. They all come together in social process" (as cited in To, 2007b, p.25).

At the practical level, the case study in Hieu commune shows that it is very difficult and problematic to clarify property rights and claims to forest carbon. Prior to REDD+, the property relations around forest and land in Hieu commune were characterized by the complex combination of the State Law and customary tenure systems. It had led to the fuzziness in clarification of rights to access, control and obtain benefits from these resources among local actors. Additionally, the forest use practices in Hieu commune are also influenced by the local dynamics of resource use, with highly forest-dependent livelihoods such as swidden cultivation, timber or NTFPs harvesting. In the new context of REDD+, the terms "REDD+", "forest protection", "carbon credits" or "selling carbon" have arrived, and have gradually shaped new notions of local actors about forest carbon. It is also has resulted in significant changes in property relations around forest and land in Hieu commune in order to appropriately match the requirements under REDD+. In the initial stages of REDD+, there is a transition period when the new "forest carbon" has just emerged and is incompletely embedded, but the "old" system has still not been replaced. This mishmash of old and new has created the much more complicated property relations surrounding forest, land and carbon in Hieu commune. This situation reflects the phenomenon in which new property such as forest carbon is embedded in a socio-economic, political and cultural context, as Hann (1998) described. As a result, the negotiation for clarifying property rights, claims and benefit-sharing mechanisms over carbon does not work in the way the project developer expected. It is difficult and problematic, and it seems impossible to form a property rights system for forest carbon in this contested context at the moment.

Besides, the study also reveals that there are multiple factors that can influence the way in which benefits from forest carbon can be derived for local people as the main targeted group of REDD+. These factors include: the existing power positions and rights in the existing forest and land systems, different perspectives on forest carbon among local actors, local dynamics of resource use, households' capital and labour forces. Initial outcomes show that local people in vulnerable conditions, for example, poverty, lack of capital, labour or land, are being exposed to potentially high risks of receiving the least benefit from forest carbon. These findings support a new perspective on forest carbon commodification by analysing access relations (Corbera & Brown, 2010; Ribot & Peluso, 2003) in order to turn newly acquired rights surrounding forest carbon into material benefits for local people.

In general, the study demonstrates that claims of ownership, control, access and benefits related to forest carbon are ill-defined in Vietnam. This is what Mahanty et al. (2013) find in other REDD+ developing countries in Southeast Asian regions. The lack of clearly defined rights and claims over forest carbon will surely hinder the development of a clear benefit-sharing mechanism. It will lead to an uncertain future for forest carbon commodification when the material benefits from it cannot be derived. The initial outcomes of this problem have been reflected through the case study in Hieu commune. The local people have faced the dilemma between the hopes of forest carbon benefits and their demands for traditional forest uses.

This study does not break new ground by illustrating a case of forest carbon commodification gone wrong. A number of scholars before me have already told similar stories (Mahanty et al., 2013). However, these empirical evidences in Vietnam, again, raise the questions of whether we should continue viewing forest carbon as a new form of commodity, and, if forest carbon is not a commodity, whether we still need to define property rights over it.

8.3. Envisioning a way forward: Future research and implications for Vietnam

The study has only scratched the surface in terms of understanding the relationship between existing property relations and the newly emerged forest carbon commodity, by employing a political ecology approach as well as property and access analytical frameworks. I have conducted an ethnographic analysis within the Vietnamese national policy discussion and a case study of Hieu commune to grapple with questions of the emergence and embeddedness of forest carbon as a commodity in the national and local property system of the forestland of Vietnam. Additional studies using a similar framework and approach are needed in other communities and around other REDD+ projects in Vietnam in order to provide a more comprehensive assessment about these issues. In addition, the case study I undertook was just in the initial design stage. This case should be studied more over a longer period in the future, as social relations within the project are continuously changing, and new results may be constantly being revealed.

As has been explained in the previous paragraphs, the study calls into question whether using the terms of forest carbon commodity and property issues in the case of forest carbon is suitable. If we want to seriously tackle this consideration, we have to look deeper into the foundation of the problem and make changes at the root level. In this case of Vietnam, it is necessary to solve with the problem of contestation and fuzziness in forest and land property relations in practice first, even it requires significant reforms. If still depending on the existing forest and land foundations, REDD+ has the potential to fail in the same way that the previous unsuccessful forest protection solutions did. In addition, the more sustainable and long-lasting solutions require the embeddedness of forest carbon in the social, political and economic context. Thus, a longer pilot period also needs to be applied.

Moreover, attention of multi-stakeholders should be paid not only to the creation of policy but also to the implementation of REDD+ at the local level. The absence of policy guides relating to forest carbon rights and liabilities is likely to lead to failure in reaching the stated objectives of the REDD+ project, or worse, to have adverse impacts on local livelihoods. As the practice of forest carbon production in Hieu commune tends to give advantages to community, increased political equity in decision-making through better participation of local people may help alleviate this problem. Thus, it is important to pay more attention to and integrate the issues of communal rights and customary norms and rules into the legal framework.

In sum, the emergence of forest carbon is real, but the implementation of it is still in its initial stages. Thus, we ultimately have to do the necessary work of imagining different futures for REDD+ and forest carbon commodification, to propose a new paradigm which foregrounds ideas of the REDD+ commons, forest conservation, poverty alleviation and climate change mitigation.

8.4. Conclusion

This study sought to understand how emerging REDD+ carbon property relations are unfolding in terms of national and local property rights systems (policy and practices) in the forestlands of Vietnam. One may assume that the emergence of forest carbon as property has been shaped mainly by the State's regulations. However, as found in this study, from this legal rights-based approach,

Vietnam has failed to define forest carbon in terms of property and to create the legal property rights system for it. This can be explained mostly by the fuzzy and contested nature of property relations around forest carbon existing in practice, within which forest carbon is situated. The same scenario has been arisen in the practices of Hieu commune. Again, the complex set of local factors, including the State Law, customary norms and rules, market forces and household livelihoods strategies, has restricted the negotiation necessary to clarify property rights, claims and benefit sharing over forest carbon and associated forest resources that local people still depend upon. In conclusions, the results of this study demonstrate that this situation has not only caused widespread uncertainty about the future of forest carbon, but may be exacerbating the contestation of existing forest and land property relations in Vietnam as well. Further studies with the same approach examining different local contexts in Vietnam need to be carried out in order to provide comprehensive recommendations for REDD+ forest carbon policy-making in the future.

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LIST OF ANNEXES

Appendix A – Interview guides

1. Interview guides at national level

Target group: Governmental officials, NGOs/CSOs representatives and Private Sector representatives

Main questions:

1. Is REDD+ forest carbon is considered as a commodity? And then can be referred as one kind of property? If yes, how does transaction and trading should look like? How it works in regulated and voluntary carbon market?

3. Can you describe about the basic characteristic of Vietnam's forestland property systems (for example: we have 03 different types of forests as well as 08 different types of forestland holders)? How they change over time? Please highlight them and maybe explain why? Whether or not the existence of the customary/traditional property systems?

In each type, how the rights of stakeholders over forestlands and related resources are defined?

4. Based on each type of property system, are the rights of local people (community and small-holders) able to make them participating in the forest carbon market? What should be the solutions needed to be established in order to minimize risks and maximize benefits for them in the market?

5. About “carbon rights”, have you heard about it? From your point of view, how it should look like? Means how it should be defined? Who should own “forest carbon”, who should be entitled to carbon in Vietnam? And what rights related to forest carbon you think local people can get? Why you think like this?

6. Do you think we need to establish a clear legal framework on which resource users can rely to claim and benefit from carbon rights?

7. Do you think we can ensure “carbon rights” in the absence of REDD+ legislation now? Should we base on the existing forest and land property law and policy to ensure “carbon rights”, or we need to create a new independent system for it?

8. Vietnam has already institutionalized the PES mechanism, including benefit sharing arrangement? How we can learn from it for the case of REDD+ and forest carbon rights?

2. Interview guide for local authorities, village leader and older men in 11 villages

Purpose: The purpose for the consulting local authorities/ village leader/older men is to find out information about:

- The access, use, management and benefit sharing mechanism of natural resources among community members in traditional way (customary regime).
- The changes in use and management of natural resources within community recently as well as the impacts (maybe) of REDD+ projects on these changes, are also key issues should be found out.
- The interviewer will also try to understand some perspectives of village leaders/oldest people about these changes in general and related to REDD+ activities (if any) particular.
- The issues of carbon rights and benefit sharing will also be asked, but do not expected will have more information about that.

Based on that, the content will support for the establishment of a legal framework for forest carbon rights, especially in the community forest carbon pool in the CCP project.

Main questions:

I. General questions:

1. What the name of village? What does it mean in local language?
2. Some important information about the history of the village: How it was established? How long the village stayed in this area? And so on.
3. How many households in the village? How many new households since REDD+ projects started here?
4. How long do you do as village leader?

II. Information related to natural resource use and management

5. In traditional way, how local people/communities use/manage natural resources (land, forest, water)?

- Slash-and-burn agriculture of households
- Timber logging or non-timber products
- How about the boundary related to natural resource among villages?
- Conflicts related to natural resources and how you deal with these problems?
- Others??
- Is there any customary/traditional system related to forest and forest land here among local communities?

6. Until now, are there any changes in using and managing natural resources in the village and among communities?

7. From your point of view, do these changes have any impact on your traditional culture of community? Or impact on natural resources for your future generation? Is your traditional way in using and managing natural resources still active and influence on responsible of community members and benefit sharing mechanism?

8. From your point of view, what the main causes of deforestation and forest degradation in your village?

9. How about the forests and forestland allocation in your area?

Please explain about:

- The current status and plan in the future;
- When the authorities allocate forest and forest land, which criteria has been used (allocate what type of forests, for who, what kinds of rights they have and for how long) and
- How about the role of local authorities and relevant stakeholders in allocation decision-making process
- How about the rights of forests and land holders to the resources after they receive the allocated area?

10. How about the forest protection and management activities in this area? Who participate in these activities? How about the role of local people? And the responsible and benefit they will have if they participate in these activities?

11. I heard about the model of forest community-based management in this area. Can you share some information?

- How it work? Is it still working now? How about the challenges and opportunities?

12. Discuss with local authorities about the rights related to forest and forest lands?

- Is it possible to continue allocated forest and forestland for community or household groups to carry out forest management and protection activities at communal level? How about your view?
- Community or household can be forest and lands owners? If yes, what kind of rights related to forest and land property they can get, including access, withdrawal, management, exclusion and alienation?

13. Discuss around the issues of REDD+ carbon rights under FFI-PanNature REDD+ project:

- How about your understanding about REDD+ project? How it work?
- What the main activities of the project have been and will be implemented with households in your village?
- Do you think this activities and the project can solve the challenges of deforestation and forest degradation in your village or not?
- From your point of view:
 - How REDD+ project impact on traditional perspectives in using and managing forest and land resources?
 - How REDD+ project impact on local livelihood? Do you need to change any plan (for example: changing the plan to expand agriculture land to save forest for REDD+, etc)
 - Is there any change in the relationship among community or among neighbour communities since REDD+ project started?
 - What are opportunities and challenges to implement REDD+ project in your village?

3. Household Survey Questions

Target groups: households in 04 selected villages in Hieu commune

Purpose: The questions are intended to gather information related to livelihood of households, focusing on the relationship between livelihoods and forest/land resources, and changes in livelihood over time. The questions also aim to find out information about the REDD+ activities that are related to household livelihood as well as household's perspective about these activities.

I. General information

Time:

Village:

Name of householder:

Name of respondent:

Gender:

Education level:

Ethnic:

Family members:

What do you do:

Poverty level: ☐ Poor ☐ Near-poor ☐ Non-poor

II. Household's livelihood:

1. What is the main livelihood of household?

☐ Livestock ☐ Crops ☐ Timber logging ☐ NTFPs extraction ☐ Services/ or others

Please, try to estimate incomes of each type of livelihood.

2. Land ownership: Please describe land areas of your household (land for rice, slash-and-burn areas, forestland areas that are allocated, contracted, etc...):

<i>Plot</i>	<i>Area</i>	<i>Use purpose</i>	<i>Which area can make the main income for your household</i>	<i>How about your rights in each area?</i>	<i>Is there any change in your own areas recently? (within 5-10 years)</i>
1					
2					
..					

Do you think you already have enough land for your household cultivation?

If lack/excess, how about your plan to solve this problem?

How about opportunities and challenges for each type of land that your household owned?

3. Related to logging and non-timber products exploitation:

Please list the main activities of your household that are related to forest resources

Describe more detailed, for example: What activities? Who do these and for what purposes? How much you get from this activity? and what opportunities and challenges?

III. Perspective related to REDD+ activities

1. Have you heard about REDD+? If yes, please explain what is this? And we implement it for what?

2. Have your family participated in this projects? What activities have you already joined and for what purpose? And how do you think about these activities?

3. Since REDD+ project has been implemented, what changes in your cultivation activities?

Name of activities	Before REDD+	Now	In Future (at least until July next year when project finish)

4. Are there any change in the way of use and management of natural resources in your community, among households or among communities since REDD+ project has been implemented?

- How the traditional way in using, managing and sharing benefits from natural resources of community?
- How about the relationship among households in your village related to using and managing forest resources? (including the issue of boundary)
- How about the relationship between your village and other villages related to using and managing forest resources? (including the issue of boundary)

Appendix B – Average cassava swidden area per households in the selected villages in Hieu commune

Name of village/indicator	Vi Chring	Dak Lom	Vi Glong	Vi Choong
<i>Total households</i>	40	56	102	40
<i>Households have swidden plots</i>	26	28	102	37
<i>Total area (ha)</i>	8.45	2.81	94.05	8.9
<i>Average area/household (ha/household)</i>	0.21	0.05	0.9	0.22

Appendix C – The swidden area counting in the 04 selected villages: Vi Chring, Vi Glong, Vi Choong and Dak Nom

Name of household	Established time	Area (ha)	Use for
<i>Vi Choong village</i>			
A Dom	2011-2012	0.2	Commercial cassava
Y Trang	2012	0.3	Commercial cassava
A Que	2012	0.2	Commercial cassava
H'Erang	2012	0.2	Commercial cassava
A Doi	2012	0.3	Commercial cassava
A Te	2012	0.15	Commercial cassava
Y Doan	2012	0.1	Commercial cassava
A Met	2012	0.2	Commercial cassava
G Linh 1	2012	0.1	Commercial cassava
G Linh 2	2012	0.03	Traditional cassava
A Met	2012	0.2	Commercial cassava
A G Linh 3	2013	0.1	Not cleaned yet
Y Bot	2012	0.15	Commercial cassava
Y Ghe	2012	0.1	Commercial cassava
A Thi	2012	0.2	Commercial cassava
A Tin	2012	0.15	Commercial cassava
A Am	2012	0.1	Commercial cassava
A Bren	2012	0.5	Commercial cassava
Y Say (Kon Plong village)	2012	0.1	Commercial cassava
A Oan	2012	1	Commercial cassava
A Xia			
A Xac			
A Vung			
A Trai	2005	0.2	Commercial cassava
Tran Van Hung	2012 – 2013	0.3	Coffee
A Brao	2012	0.2	Commercial cassava
A Beu	2012	0.1	Commercial cassava
A Tip	2012	0.1	Commercial cassava
A Ton	2012	0.15	Commercial cassava
A Rut	2000	1	Coffee, softwood and cassava
A Bui	2012	0.2	Not cleaned yet
A Te	2009	0.1	Traditional cassava
A Heang	2008	0.3	Coffee
A Ton	2000	0.1	Softwood
Y Doan 2	2007	0.1	Commercial cassava
A Tin	2009	0.1	Commercial cassava
Dinh Van Tam	2001	0.4	Commercial cassava
A Dung	-	None	-
A Tri	-	None	
A Ken	2008	0.3	Commercial cassava
Dinh Van Rich	2010	1	Commercial cassava +

			self-wood
<i>Dak Nom village</i>			
A Don	2010	0.1	Commercial cassava
Y Truot	2010	0.07	Commercial cassava
A Tai	2010	0.1	Commercial cassava
Le Duy Hung	2010	0.5	Commercial cassava
Y Treo	2010	0.07	Commercial cassava
Y Tren	2010	0.35	Commercial cassava
A Rom	2014	0.1	Commercial cassava
A Von	2010	0.2	Commercial cassava
Y Thuon 1	2010	0.15	Commercial cassava
Y Tren 2	2010	0.15	Commercial cassava
A Tho	2010	0.15	Commercial cassava
A Du	2010	0.1	Commercial cassava
A Lia	2010	0.15	Commercial cassava
Y Tre	2010	0.5	Commercial cassava
Y Min	2010	0.05	Commercial cassava
Y Thuon 2	2010	0.05	Commercial cassava
Y Duing	2010	0.05	Commercial cassava
A The	2010	0.1	Traditional cassava
A Thin	2010	0.12	Traditional cassava
A Trao 2	2011	0.2	Commercial cassava
A Day	2010	0.3	Commercial cassava
Y Thuon 3	2010	0.15	Commercial cassava
Y Tia	2010	0.1	Commercial cassava
A Von 2	2010	0.1	Commercial cassava
A Viec	2010	0.2	Commercial cassava
A Kiem	2010	0,1	Commercial cassava
A Ninh	2010	0.1	Commercial cassava
A Trong	2010	0.2	Commercial cassava
A Oan	2010	0.2	Commercial cassava
A Trong 2	2011	0.15	Commercial cassava
Co Bao	2011	0.5	Commercial cassava
Le Duy Hung 2	2010	0.1	None
A Luong	2010	0.1	Commercial cassava
<i>Vi Chring village</i>			
Đinh Văn Rích	-	0.3	Traditional cassava
A Ché	2012	0.3	Traditional cassava
A Sang	2013	0,1	None
Dinh Van Loi	2013	0.25	None
A Chieng	2010	0.3	Traditional cassava
A Tim	2012	0.2	None
Dinh Xuan Hai		None	-
Y Sim	-	None	-
Y Chen	2010	0.1	Traditional cassava
A Choong	2013	0.1	Traditional cassava
Dinh Xuan Do	2009	1	Commercial cassava + Coffee
A Trieu	2011	0.1	Traditional cassava
Y Giap	2013	0.1	Traditional cassava

Y Tre	2013	0.1	Traditional cassava
Dinh Xuan Dam	2011	0.3	Traditional cassava
A Hong	2012	0.15	Traditional cassava
A Bao	2013	0.15	Traditional cassava
A Trai	2013	0.1	Traditional cassava
A Vo	2012	0.1	Commercial cassava
A Bong	2013	0.07	Traditional cassava
A tem	2013	0.1	Traditional cassava
A Ghe	-	0.05	Traditional cassava
A Ru	-	None	-
Y Cuong	-	-	-
A Quanh	2010	0.5	Fallow
Dinh Xuan Xin	-	-	-
Pham Ngoc Hung	2010	1	-
Dinh Quang Tung	-	-	-
A Quy	- -	-	-
Tran Van Lu	-	-	-
Tran Quang Hai	-	3	-
A Chuynh	-	--	-
Y Ne	-	-	-
A Ham	2012	0.15	Traditional cassava
Y Mua	-		-
A Pho	2011-2013	0.25	Commercial cassava
A Vang	-	--	-
A Mnanh	-	-	-
Le Duc Be	- -	-	-
A Doi	- -	-	-
<i>Vi Glong village</i>			
A Mang 1	2011	0.2	Commercial cassava
A Mang 2	2010	0.2	Softwood
A Bang	2011	1	Commercial cassava
A Su			
A. Lanh			
A Tao	2013	0.4	Commercial cassava
A Lan 1	2011	0.45	Commercial cassava
A Keo	2011	0.2	Commercial cassava
A Lon	-	-	Softwood
A Khui 1	2013	0.1	Commercial cassava
A Khui 2	2013	0.1	Fallow
A Don 1	2013	0.1	Commercial cassava
A Don 2	2011	0.1	Commercial cassava
A Don 3	2011	0.1	Commercial cassava
A Len 1	2009	0.1	Commercial cassava
A Len 2	2012	0.2	Commercial cassava
A Len 3	2013	0.1	Traditional cassava
Y Chanh 1	2009	0.1	Commercial cassava
A Doan 1	2011	0.1	Commercial cassava
A Rich	2011	0.7	Commercial/Traditional cassava
A Doa 2	2011	0.2	Commercial cassava

A Nam	2011	0.4	Commercial cassava
A Oanh	2011	0.4	Commercial cassava
Y Tho	2013	0.2	Commercial cassava
Y Xit	-	0.1	Traditional cassava
Y Chanh 2	2011	0.5	Commercial cassava
A Tham 1	2011	0.6	Commercial cassava
A Ngam 1	2011	0.5	Commercial cassava
A Thua 1	2011	0.5	Commercial cassava
A Don	2012	0.25	Commercial cassava
Dinh Xuna Bach 1	2013	0.2	Commercial cassava
A Thao	2011	0.45	Commercial cassava
Dinh Xuan Bach 2	2011	0.9	Fallow
Y Muoc 1	2011	0.9	Commercial cassava
A Lyng	2010-2011	0.6	Commercial cassava
Dinh Xuan Bach 3	2013	0.8	Commercial cassava
Y Ngat	2011	0.5	Commercial cassava
A Lan 2	2011	0.4	Commercial cassava
A Khu	2011	0.4	Commercial cassava
A Len 4	2011	0.6	Commercial cassava
A Ngam	2011	0.8	Commercial cassava
Y Chanh 3	2011	0.8	Commercial cassava
Y Muoc	2011	0.7	Commercial cassava
Dinh Doc 1	2013	0.3	Traditional cassava
Dinh Doc 2	2011	1	Commercial /Traditional cassava
Y Banh	2011	0.7	Commercial cassava
Y Bai	2011	0.8	Commercial cassava
A De	2011	1	Commercial cassava
A Minh	2000	0.7	Fallow
A Hong	2013	0.2	Fallow
A Tinh	2009	0.8	Commercial cassava
A Van	2009	0.3	Commercial cassava
A Ni	2009	0.4	Commercial cassava
A Re	2009	0.3	Commercial cassava
A Tham 2	2006	0.1	Commercial cassava
A Vic 1	2006	0.2	Commercial cassava
A Dac	2009	0.75	Commercial cassava and coffee
Y Da	2007	0.2	Commercial cassava
A Loc 1	2007	0.6	Commercial cassava
A Loc 2	2007	0.4	Softwood
Dinh Van Vun 1	2008	0.75	Commercial cassava
Dinh Van Vun 2	2009	0.4	Commercial cassava
Nguyen Minh 2	2009	0.1	Commercial cassava
Dinh Pham Tien	2009	0.3	Coffee
Dinh Pham Tien 2	2009	0.9	Coffee
Y Hon	2006	0.1	Commercial cassava
A Ngui	2006-2007	0.1	Commercial cassava and coffee
A Kha	2006	0.2	Commercial cassava

A Tan	206-2007	1	Commercial cassava
A Suong 1	2006	0.8	Commercial cassava
Dinh Quang Vun 3	2005	0.2	Commercial cassava
A Tan	2006	0.2	Commercial cassava and softwood
Dinh Xuan Duong 1	2005	0.3	Softwood
Dinh Xuan Ben	2005	0.3	Coffee
A Thong	2006	0.4	Commercial cassava
Y Nat 1	2005-2006	0.5	Commercial cassava
Y Nat 2	2010	-	Commercial cassava
A Binh	2006	0.3	Commercial cassava
A Tra	2009	0.5	Commercial cassava
A Thao 1	2003	0.1	Commercial cassava
A Thao 2	2007	0.5	Coffee
A Dac	2008	0.3	Commercial cassava
A Vic 2	2007	0.6	Coffee, traditional cassava and softwood
Dinh Hung Vuong 1	2008	0.3	Commercial cassava
A Len	2007	0.6	Coffee, traditional cassava and softwood
A Rich 2	2007	0.3	Commercial cassava
Y Ro	2005	0.5	Commercial cassava
A Binh	2006	0.6	Commercial cassava
Dinh Xuan Cu 1	2007	0.2	Commercial cassava
A Khoi	2009	0.6	Commercial cassava
Y Trai 1	2006-2007	0.7	Commercial cassava
A Tinh	2006-2007	0.9	Commercial cassava and coffee
A Nhu	2008	0.4	Commercial cassava
A Anh	2007-2008	0.8	Commercial cassava and coffee
A Ngam 2	2007	0.65	Fallow
A Truan	2011	0.4	Commercial cassava and coffee
Y Trai 2	2010	0.2	Commercial cassava
A The	2008	0.9	Commercial cassava
A Nghe	2008	0.8	Commercial cassava
A Sai	2007	0.1	Coffee
A Thong 1	1996-1997	0.3	Coffee
A Loc 2	1995	0.3	Coffee
A Tang 1	2006	0.6	Coffee
A Gia	2004	0.8	Commercial cassava
A Loc 3	2008	0.3	Commercial cassava
Dinh Van Lai	2005-2009	0.55	Commercial cassava
A Tang 2	2005-2006	0.5	Commercial cassava
Y Nga	2007	0.5	Commercial cassava
A Nghe	2007	0.1	Commercial cassava
A Mang 1	2007	0.8	Commercial cassava and coffee
Dinh Ua 1	2005-2008	1	Commercial cassava

			and coffee
Dinh Van Thua 1	2009	0.8	Commercial cassava
A Thai 1	2009	0.15	Commercial cassava
Dinh Ua 2	2001	0.6	Commercial cassava and softwood
A Nu	2001	0.4	Commercial cassava
A Nhua	2000	0.6	Fallow
A Mang	2010	0.8	Commercial cassava and softwood
A Thai 2	2001	1	Commercial cassava
A Ben	2010-2012	1	Commercial cassava
A Sai	2010	0.1	Commercial cassava
A Mang 2	2005	0.1	Softwood
A Su	2010	0.7	Commercial cassava
Y Trai	2010	0.6	Commercial cassava
A Chuon	2006-2007	0.9	Commercial cassava
Y Da	2010	0.2	Commercial cassava
A Nui	2005	0.3	Commercial cassava
Dinh Hung Vuong 2	2012	0.6	Commercial cassava
A Cha	2011	0.4	Commercial cassava
Y Ngat	2003	0.6	Commercial cassava
Y Be	2003	0.5	Commercial cassava and traditional cassava
A Khoi	2003	0.1	Commercial cassava
A Len	2010	0.7	Commercial cassava
A Sai	2009	0.5	Commercial cassava
A Toi	2011	0.5	Commercial cassava
Dinh Xuan Cu 2	2013	0.6	Commercial and traditional cassava
Dinh Xuan Ben 2	2009	2	Commercial cassava and softwood
Dinh Xuan Phan	2009	0.8	Commercial cassava
A Nhien	2009	0.2	Commercial cassava
Dinh Xuan Uong 2	2009	0.9	Commercial cassava
A Suong 2	2007	0.1	Commercial cassava
A Truong 1	2011	0.2	Commercial cassava
A Truong 2	2009	0.3	Commercial cassava
A Truong 3	2008	0.2	Commercial cassava
A Kha	2010	0.4	Commercial cassava
Y Heng	2010	0.6	Commercial cassava
A Truong 4	2003	0.2	Fallow
A Van	2003	0.1	Fallow
Dinh Van Thua	2012	0.3	Fallow
A Hoc	2003	0.3	Commercial cassava
Dinh Van Bien	2012	0.2	Commercial cassava
A Thong 3	2011	0.5	Commercial cassava
A Ngue	2010	10	Commercial cassava