

Impacts of Forest Land Allocation and Tourism Development on Forest-based Livelihoods in Rural Central Vietnam

by Johan à Campo



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Impacts of Forest Land Allocation and Tourism Development on Forest-based Livelihoods in Rural Central Vietnam

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Foreword

This Master Thesis is the final product of a research project that was started in the beginning of January 2011. As a student participating in the Master Programme International Development Studies at Utrecht University (UU) it was compulsory to undertake a three months fieldwork research in a developing country. The first week of January it became clear that my research was based in Central Vietnam. During the rest of January I prepared my research proposal, which is concentrated around the central theme of poverty alleviation in Central Vietnam. The fieldwork research has been carried out during the months of February, March and April in 2011. At the end of this period an interim report was written and the main research findings were presented to Master students and lecturers of the Hue University of Agriculture and Forestry (HUAF). HUAF has performed the role of host organization during the field work period. The research results were also provided to the partner organization; Tropenbos International (TBI) Vietnam. Together these three knowledge institutions cooperate in a partnership that is concentrated around the topic of Forest Land Allocation (FLA) in Vietnam. FLA is a development instrument that aims to integrate forest conservation with livelihood improvement. The aim of the partnership is to stimulate institutional strengthening, capacity building and socio-economic livelihood research. It has been a unique and valuable experience to work as a development researcher in poor rural communities in Central Vietnam. I am grateful that I had the opportunity to do this and truly hope that HUAF, TBI Vietnam, UU, as well as other kinds of knowledge and development institutions will profit from the findings presented in this Master Thesis.

Abstract

Many rural livelihoods in Vietnam are still characterized by (extreme) poverty and a low quality of life. Where economic development in Vietnam's big cities has been booming since the early 1990s, rural areas in the hinterland remain largely undeveloped. Poverty incidence in rural areas is extremely high in Vietnam. Especially ethnic minority groups that tend to live in remote and mountainous forested areas experience high poverty levels. Due to dramatic deforestation and the establishment of national parks, forest-based people now face limited livelihood sources. Forest land allocation (FLA) and sustainable tourism development (STD) are two decentralized development instruments that aim to stimulate nature and/or cultural heritage conservation, while at the same time provide local livelihoods with additional income opportunities. This Master Thesis analyzes the impacts of both development instruments on the livelihoods of two rural Vietnamese communities in Central Vietnam. The main conclusion of the research is that the practical implementation of decentralized development instruments might stimulate different and adverse development impacts than theories would assume. The research shows that the local context of a development intervention has the power to enable or constrain desired development outcomes.

Keywords: Sustainable development, decentralization, poverty, forest livelihoods, deforestation, forest land allocation, sustainable tourism development, ecotourism, community-based tourism

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Acronyms

BMNP	Bach Ma National Park
CBT	Community Based Tourism
DFID	Department for International Development (UK)
DONRE	Department of Natural Resources and Environment
FAO	Food and Agriculture Organization of the United Nations
FLA	Forest Land Allocation
FPU	Forest Protection Unit
GDP	Gross Domestic Product
HUAF	Hue University of Agriculture and Forestry
JASS	Japanese Association of Supporting Streetchildren
MARD	Ministry of Agricultural and Rural Development
MONRE	Ministry of Natural Resources and Environment
MDG	Millennium Development Goal
NGO	Non-Governmental Organization
RBC	Red Book Certificate
SFE	State Forest Enterprise
SNV	Stichting Nederlandse Vrijwilligers (Netherlands Development Organization)
TBL	Triple Bottom Line
TBI	Tropenbos International
TIES	The International Ecotourism Society
TTHP	Thua Thien Hue Province
UNCED	United Nations Conference on Environment and Development
UK	United Kingdom
UN	United Nations
UU	Utrecht University
VNAT	The Vietnam National Administration of Tourism
WCED	World Commission on Economic Development (UN)
WTO	World Tourism Organization

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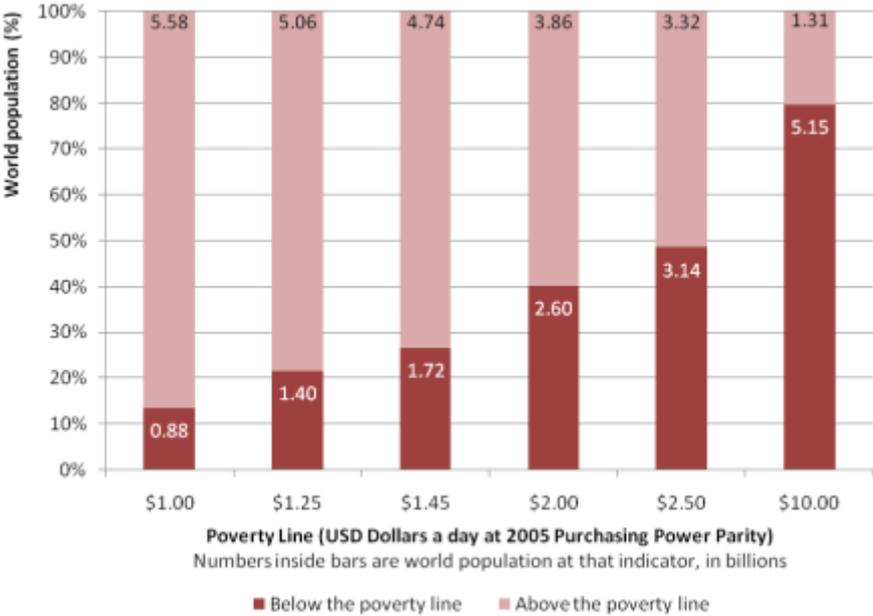
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Introduction

It is clear that development has not been shared equally around the world. Even the first worldwide collective and integrated attempt to improve the lives of the world’s poor, the adoption of the Millennium Development Goals (MDGs) in 2000 by the world leaders, seems to be failing. The MDGs have been adopted by the General Assembly of the United Nations in 2000 at the UN Millennium Summit and are to be achieved by 2015. The eight overarching goals provide a framework to make sure that development reaches everybody, without excluding the poor in developing countries. Although there has been good progress with some of the goals in some parts of the world, overall it has become clear that the majority of the MDGs will not be achieved by 2015 and development remains uneven around the world (Rigg, 2008). Figure 1 provides an inside into the world distribution of poverty. The figure shows that 1.4 billion people of the world’s population live on less than \$1,25 US Dollar a day and that almost half of the world’s population (over 3 billion people) live on less than \$2,50 US Dollar a day. Ravallion, Chen and Sangraula (2007) estimate that about 75% of the people that live on less than \$1 US Dollar a day in developing countries can be found in rural areas. They estimate that in East Asia more than 90% of the poor live in the countryside.

Figure 1 World poverty distribution



(The World Bank, 2008)

This Master Thesis provides an insight into rural development in Vietnam. It focuses on two global development issues: rural livelihood improvement and forest conservation. Vietnam is a country that currently experiences rapid economic growth and poverty alleviation, but is still characterized as a ‘medium human development’ country by the UNDP (2010) or as ‘a lower middle income country’ by The World Bank (2010). Economic growth and poverty alleviation is largely concentrated on urban areas, while rural areas in Vietnam remain characterized by high poverty incidence. Poverty incidence is the highest in the Northern Uplands, in Central Vietnam

(along the border with Lao PDR) and in the Central Highlands (along the borders of Lao PDR and Cambodia (Müller, Epprecht and Sunderlin, 2006). In these areas poverty is more severe and people are living further below the national poverty line.

Vietnam, just as most other countries in the Southeast Asian region, experienced rapid deforestation in the last part of the 20th century. Suntikul, Butler and Airey (2010, p. 204) estimate that “between 1943 and 1994, forested land in Vietnam decreased from 14,325,000 hectares to 8,631,000, representing a reduction in coverage from 43.7% to 26.1% of the total country.” Deforestation and forest degradation is a problem for several reasons. First, it negatively affects the livelihoods of forest-based people, which are characterized by their close social, cultural and economic relations to nearby forests. Forest livelihoods are largely dependent on forest resources. Second, forests play a key role in the world carbon cycle as they sequester carbon dioxide (CO²), meaning that forests capture CO² from the atmosphere and store it. Third, forests have the highest species diversity and endemism of any terrestrial ecosystem in the world. McCarthy and Tacconi (2011) explain that tropical forests are biodiversity hotspots, where half of the world’s animals and plants are living. Deforestation therefore always results in loss of biodiversity. Many aspects of the stability, functioning, and sustainability of global ecosystems depends on the diversity of plant and animal species. In addition, the world’s biodiversity functions as a “genetic library” that supports important human welfare functions such as the improvement of existing crops, introduction of new crops, and the creation of medicines and pharmaceuticals (Sunderlin et al., 2005, p. 1384). Fourth, forests provide important ecological functions to render agricultural systems sustainable, such as regeneration of water flows, prevention of erosion and creation of biomass.

As a result of deforestation, the Vietnamese government is actively stimulating the establishments of national parks. The desire and pressure to establish national parks is often something that is imposed on (developing) countries by western conservation organizations. By giving natural areas the status of ‘national parks’, these areas become increasingly protected, but in most cases this also means that livelihood activities of local people are strictly forbidden. Despite Vietnam’s (recent) forest conservation efforts, the natural environment is still under severe pressure. Rogers (2002) estimates that about 20% of the world’s endangered primate species can still be found in Vietnam, but she also predicts that at least one or more of them will become extinct in the next few decades due to ongoing deforestation and forest degradation.

The research focuses on two decentralized development interventions that have the same twofold objective: rural livelihood improvement and forest conservation. Decentralized forest management as well as local small-scale tourism development have become popular development instruments in Vietnam. Under the right conditions both instruments stimulate sustainable development. Decentralized forest management is in Vietnam implemented by allocating forestland to (groups of) households and local communities. It is acknowledged that management and protection of forests is more effective in local hands. In addition, the allocation of forestland to local people offers them additional livelihood sources. Small-scale sustainable tourism development projects concentrated in natural areas or on a cultural experiences also improve local livelihoods, while simultaneously stimulating nature or cultural conservation. Many international lending and bilateral development agencies, such as the United Nations (UN) and the World Bank, the United Kingdom’s (UK) Department for International Development

(DFID), have focused their attention to sustainable tourism as one of the few options open to poor rural communities to enhance and protect their livelihood and the natural resources on which it depends (Cater, 2008). Both development instruments recognize increased local participation and decision-making power as key factors for successful implementation.

The research consists out of a comparative study between two rural communities in Central Vietnam. It includes a poverty analysis and an analysis of the impacts on livelihoods caused by the implementation of forest land allocation (FLA) and the development of small-scale tourism projects. The selection of the research communities is based on the following criteria:

- ✓ Location had to be in Thua Thien Hué Province (TTHP) and within the buffer zone of Bach Ma National Park (BMNP)
- ✓ Communities must have experienced deforestation
- ✓ Communities must be poor
- ✓ FLA policies had to be implemented
- ✓ There had to be a local tourism development project in place

The main research question is: Do forest-based households experience livelihood improvement through the implementation of Forest Land Allocation policies and the development of tourism in the communities under research? This question provides an answer to whether or not development has taken place in the research communities as a result of the implementation of forest land allocation policies and the development of local tourism projects, and whether or not this can be labeled as ‘sustainable development’.

Chapter 1 Theoretical Framework

1.1 Introduction

Knowledge can be formulated from different perspectives. This theoretical framework provides the theories and concepts that are used as basis for the performed research. A development theory is a set of “apparently logical propositions which purport to explain how development occurred in the past, and/or should occur in the future” (Potter et al., 2008, p. 80). Explanation of development paradigms and the evolution of thinking about development are discussed in paragraph 1.2. After this general introduction into development thinking, the sustainable development approach is explained in paragraph 1.3 This is the central approach on which this research is based on. Paragraph 1.4 presents the concepts of ‘poverty’ and ‘livelihoods’ and explains the difference between the two of them. Paragraph 1.5 explains the relations between forest-based livelihoods and nature conservation. It will become clear that the establishment of national parks and buffer zones has substantially affected this relationship. The importance of decentralization and local participation is stressed in paragraph 1.6. Explanation of these theories is important because they lie at the heart of the sustainable development approach. Paragraph 1.7 provides an insight into community forestry, a decentralized type of forest management. Paragraph 1.8 present Sustainable Tourism Development (STD) as decentralized development instrument. Both, community forestry as well as STD have a focus on livelihood improvement and nature or cultural conservation.

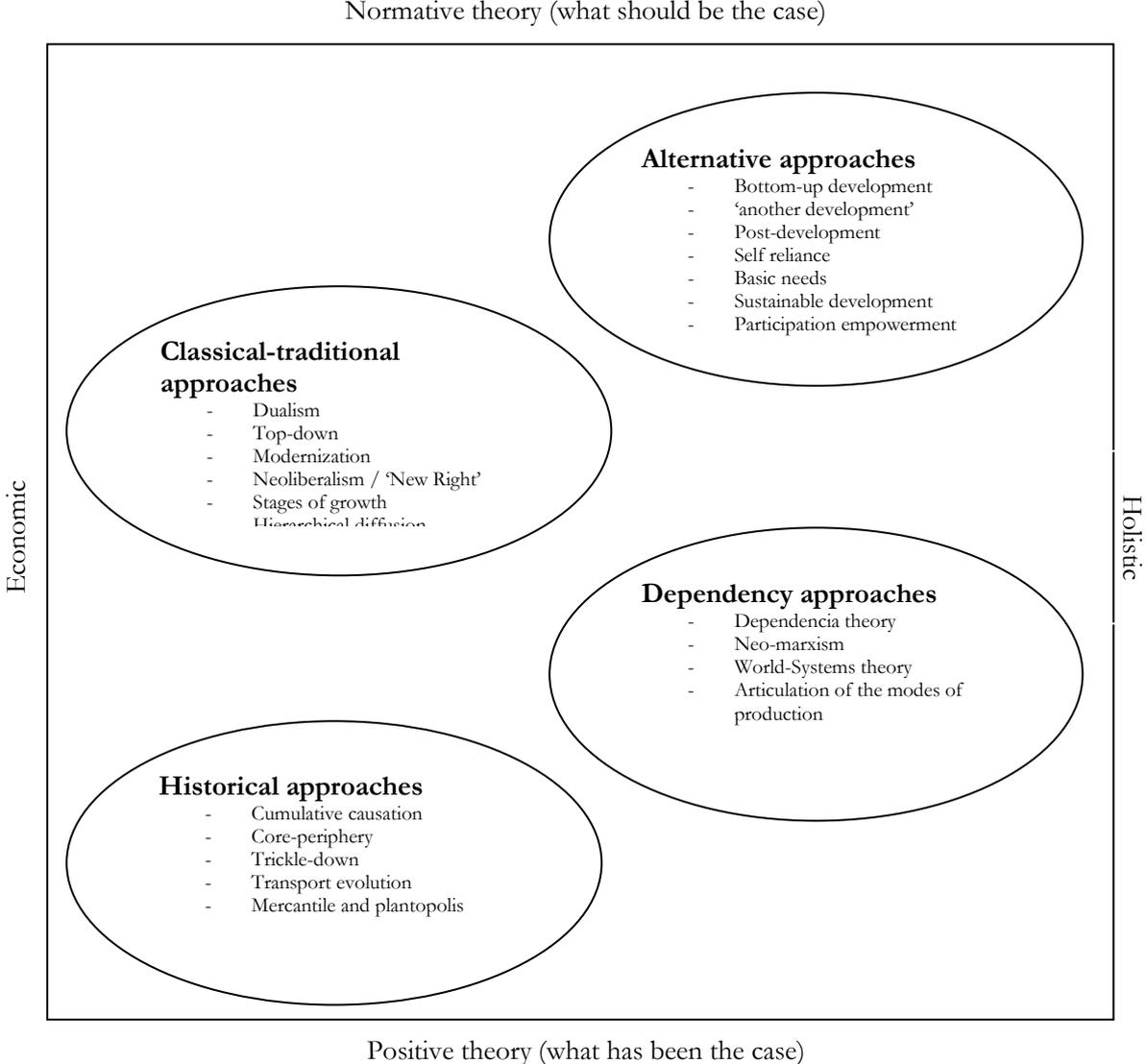
1.2 Evolution of development thinking

What is development? Different people will give different answers to this question. The Food and Agricultural Organization (FAO) of the United Nations identifies development as an “event constituting a new stage in a changing situation” (FAO, 2011, p. 2). In most cases, social scientists will agree that development is often referred to as a (structural) ‘change’ or an ‘intervention aimed at improvement’. On the other hand, some authors also refer to development even in situations that change for the worse (Brookfield, 1975). In this research however, development is only considered as a change for the better; a change that improves people’s (daily) lives, whether that is economic improvement (material wealth), political improvement (democratic and participatory governance), and/or hermeneutic improvement (making life meaningful).

Development thinking is socially constructed. It is based on theories that reflect the way in which development is assumed or perceived. Development thinking has rapidly changed in the twentieth century. This paragraph explains the major paradigms that have evolved and which all try to explain development and underdevelopment. Paradigms are broad sets of ideas about development that come to dominate particular groups of scholars at a certain point in time (Potter et al. 2008). In literature, development thinking is categorized broadly by four major paradigms: historical-empirical approaches, classical-traditional approaches, radical (political-economy) dependency approaches, and alternative and bottom-up approaches (Cypher and Dietz, 2009 and Potter et al., 2008). It is important to realize that all paradigms are embedded in

a particular historical and societal context. Whenever a new paradigm gains momentum other paradigms are not (completely) discarded. All of them offer new insights, but they also create limitations. In this perspective, all the paradigms complement each other in some kind of way. There is not one best practice in analyzing development. Figure 2 provides a framework for considering development paradigms.

Figure 2 Overview of paradigms in development thinking



(Based on: Potter et al., 2008, p. 82: figure 3.2)

1. *Historical approaches*

From the colonial era development thinking emerged as complete explanations of development and underdevelopment, often referred to as 'meta-theories'. These perspectives on (under)development focus on the promotion of economic growth in underdeveloped countries within the colonial and pre-independence framework. The theory of cumulative causation (Myrdal, 1957) and the core-periphery theory (Friedman, 1966) are the most famous development theories within the historical (-empirical) approaches on development. Both theories agree that

state intervention is necessary in order to prevent economic growth to concentrate only on a few core regions, resulting in the drain of the already marginal areas in the periphery. Trickle down effects of economic growth need to be stimulated by active government intervention, as polarization lies at risk (Potter et al., 2008).

2. Classical-traditional approaches

Traditional approaches were mainly in trend during the 1950s and 1960s. Classical-economic theory is based on the writings of Adam Smith (1723-1790) and David Ricardo (1772-1823), who both related economic development with the growth of world trade and law of comparative advantage. Neo-classical approaches came into play after 1945. These theories are linked with classical thinking about development as neo-classical theories are focused on liberating world trade as the most important factor to development. Traditional approaches characterize developing countries as having a dualistic structure, in which the ‘modern’ sector operates next to the ‘traditional’ sector. Development thinking within this paradigm refers to underdevelopment as an initial stage of development. Underdeveloped countries can follow the same development path as (western) developed countries if they introduce capitalism and liberal democracy. Hirschman and Rostow are the most famous development thinkers that fit in within this paradigm. Hirschman (1958) argued that polarization is an inevitable characteristic of the early stages of economic development. Theories that fit in within Hirschman’s ideas are: unequal growth, urban industrialization, geographically uneven development, modernization, natural growth poles, and trickle-down effects. Rostow’s (1960) five-stage model of development assumes that every country has to pass through five development stages. The model assumes that every country has an equal chance to develop. His development model is based on the experiences of Western developed countries. The model stresses the importance of capitalism as the key factor to ‘reach’ the last stage of development (Cypher and Dietz, 2009 and Potter et al., 2008).

3. Radical dependency approaches

This paradigm came into play from the 1960s onwards. It can be seen as a reaction to the (colonial) historical empirical and classical traditional paradigm which focuses on an interdependent world. The origins of the radical dependency approaches can be linked to the Latin American and Caribbean radical ‘structuralists’, like Prebisch, Furtado, and Cardoso. Some refer to the radical dependency approaches as theories that represent the voices of the underdeveloped world. The paradigm is also called the ‘New Left’, as Marxists development ideas revived. Theories from this paradigm concentrate on the struggles of Third World anti-colonial movements (Potter et al., 2008). This paradigm is characterized by writers who contest capitalism as the ‘Holy grail’ to development. Two influential writers of the paradigm are Paul Barran and Andre Gunder Frank (for example, see Barran, 1957 and Frank, 1966). Barran criticizes the role of capitalism, as he explains that economic surplus is diverted into wasteful and ‘unethical’ consumption patterns. Frank contested the capitalist system as he explained that it created a situation in which development and underdevelopment are interlinked. He explains that capitalism is a system in which underdevelopment in one area is the direct result of development in another area. “Frank (1976) maintained that development and underdevelopment are opposite sides of the same coin, and that both are the necessary outcome and manifestation of the

contradictions of the capitalist system of development” (Cypher and Dietz, 2009 and Potter et al., 2008, p. 110).

4. *Alternative (bottom-up) development approaches*

As development seemed to exclude some of the poorest people in developing countries, a new strategy to development was introduced. In the mid 1970s the idea of *another development* came to rise. The term indicates “the need for self-reliance to be seen as central to the development process, and for the emphasis to be placed on endogenous (internal) rather than exogenous (external) forces of change” (Potter et al., 2008, p. 114). Top-down government policies were replaced by bottom-up (participatory) governance as it became apparent that “large-scale, universal, government-driven national programmes of (especially rural) development frequently fail to meet the particular needs and wants of local communities, and are only rarely tailored to local conditions and context” (Parnwell, 2008, p. 113). This ‘development from below’ paradigm has grown rapidly. Writers concentrate on the importance of decentralization and local participation as key factors for rural local development. The basic-needs theory is influential within this paradigm. It stresses the need for basic needs, such as water, food, shelter, and clothing, as the highest priority for marginal (rural) areas in developing countries. Another important approach that fits in within this paradigm is the sustainable development approach. The next paragraph provides background information on this popular approach.

1.3 Sustainable development

Since the 1970s, concern about the impact of economic growth on the natural environment grew. Environmental threats (i.e. climate change, desertification, acid rains, the hole in the ozone layer, pollution, species extinction) put the emphasis of development thinking on the link between development and the quality of the environment, as this link influences the quality of life for humans. In the mid 1980s it became clear that previous development thinking had paid too much attention to economic development, leaving environmental and human aspects of development underexposed. The sustainable development approach is a reaction to development thinking that is purely based on economic growth and modernization. Sustainable development does not reject economic growth, but it attempts to link environmental protection to economic growth.

The concept of ‘sustainable development’ originates from the VN Commission Brundtland that used the concept in their influential report “Our Common Future” (WCED, 1987). This report was the first that linked sustainable development to poverty. Sustainable development was defined by the ‘Brundtland Commission’ as: “*Sustainable development is development that satisfies the needs of the present without compromising the needs of the future.*” (WCED, 1987, chap. 2, para. 1). Although the definition is of general nature and can be interpreted in various ways, it includes two key concepts. The concept of ‘needs’ that stresses priority should be given to the essential needs of the world’s poor. The concept of ‘limitations’ to development that is imposed through the state of technology and social organization (Axelrod et al., 2005). The definition, developed by the ‘Brundtland Commission’ (WCED) is still the most adopted working definition of sustainable development (Desai and Potter, 2008).

At the United Nations Conference on Environment and Development (UNCED) in Rio in 1992, also known as the first Earth Summit, sustainable development emerged as one of the pillars of

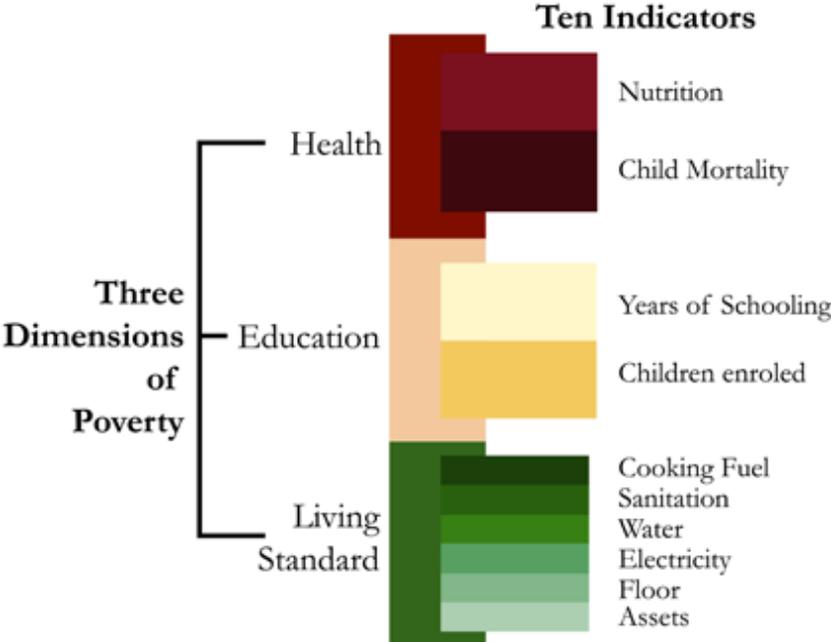
future international development policy. The outcome of UNCED was Agenda 21, an action plan to achieve sustainable development on all possible levels. Agenda 21 acknowledges the basic needs of developing countries as key to a global sustainable development path (Chichilnisky, 1997). At the beginning of the 21st century, democratization and good governance became viewed as necessarily in order to achieve sustainable development.

In 1998, John Elkington introduced the Triple Bottom Line (TBL) framework as a tool to measure (corporate) sustainable development. Whereas conventional development indicators primarily focused on economic growth, the TBL framework integrates economical benefits (*profit*), environmental benefits (*planet*), and benefits for social well-being and equity (*people*). Finding a balance between the interests of people, planet, and profit is necessary in order to create sustainable development.

1.4 Poverty and livelihoods

Poverty is a multi-dimensional concept. It goes beyond just material deprivation. The World Bank (2001, p. 15) has described ‘poverty’ as: “a pronounced deprivation of well-being, related to lack of material income or consumption, low levels of education and health, vulnerability and exposure to risk, no opportunity to be heard and powerlessness.” This definition shows that the concept of poverty is built-up by various dimensions, which in turn or built-up by measureable indicators. Figure 3 provides an insight into three important dimensions of poverty (health, education and living standard) and some of the indicators that built-up these dimensions. Poverty alleviation can be described as “lessening of the deprivation of well-being”(Sunderlin and Ba, 2005, p. 7), by improving one or more poverty dimensions. Two types of poverty alleviation at the household level exist: poverty mitigation and poverty elimination (FAO, 2003, p. 61).

Figure 3 Example of poverty dimensions and indicators

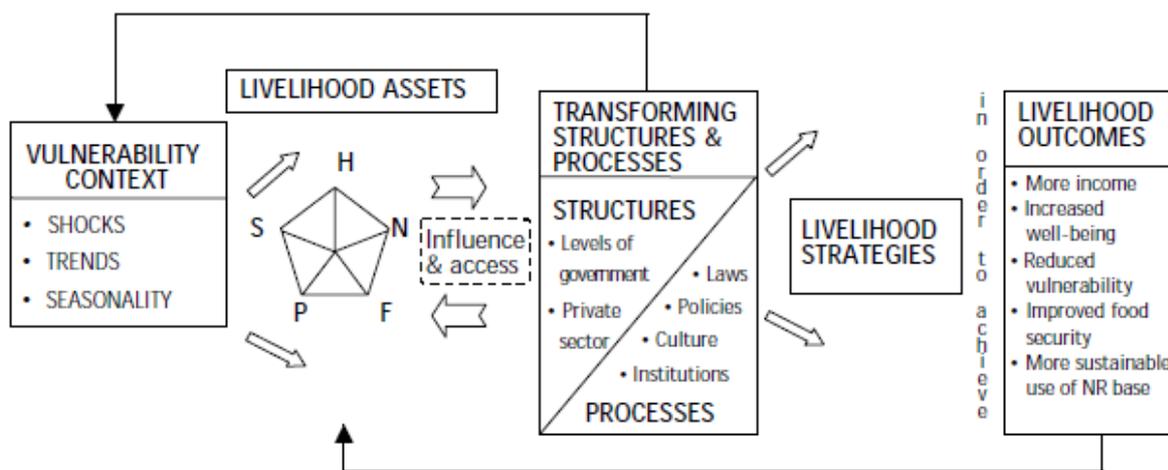


(UNDP, 2010, p. 11)

Before the 1980s traditional poverty measures focused mainly on financial capital increase. With the rise of the sustainable development approach, human and environmental indicators were added to measure poverty. In 1992, the concept of ‘livelihoods’ was first introduced by Robert Chambers and Gordon Conway. Since then many writers have defined the concept. Chambers and Conway defined a livelihood as: “A livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living; a livelihood is sustainable which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long term”. A more recent definition of a livelihood was developed by Ian Scoones, a leading proponent of the Institute for Development Studies (= IDS) in 1998: *A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base* (Krantz, 2001). Another definition of a livelihood is: “... the assets (natural, physical, human, financial, and social capital), the activities, and the access to these (mediated by institutional and social relations) that together determine the living gained by the individual or household” (Ellis, 2000, p. 10). This definition puts more focus to the means, rather than on outcome-based measurements.

The livelihood concept is used as an alternative to conventional definitions and approaches to measure poverty alleviation. Whereas livelihood improvements can be gained through an increase in one of five identified types of capital (natural, physical, human, financial, and social capital), poverty alleviation is usually concentrated purely on economic development (or financial capital increase). The sustainable livelihood approach puts more focus on aspects like vulnerability, social exclusion, and all kinds of processes and factors that either constrain or enhance the ability of poor people to live in an economically, environmentally and social sustainable way. This makes the sustainable livelihood approach more integrated and coherent than conventional approaches to poverty alleviation. The sustainable livelihood framework (Figure 4) presents an overview of the main factors that influence livelihoods and the relationships between them.

Figure 4 Sustainable livelihoods framework



Livelihood assets: H = human capital, N = natural capital, F = financial capital, P = physical capital, S = social capital

(IDS, 2011)

An important aspect of the sustainable livelihood approach is that it puts attention on sustainable use of the natural resources. Therefore, the approach is often used by international conservation agencies, NGOs and so on, working on the integration of poverty alleviation and sustainable use of natural resources. Forest areas in particular are viewed as places where livelihoods of people living in and near the forest depend on the forest resources to sustain their livelihood.

1.5 Links between forest-based livelihoods and conservation

In livelihood research in general, and in sustainable livelihoods in particular, natural capital is an important asset. Forest resources are part of the natural capital of many poor rural communities in developing countries. Usually these people are directly dependent on forest resources for their survival. These people tend to live in or close to the forests their dependent on. Table 1 presents a basic typology of forest-based livelihoods. The boundaries between these livelihood types are often indistinct, as rural households often show characteristics of more than one type of forest use.

Table 1 Forest-based livelihood modes and associated attributes of forest use

Type of livelihood	Associated attributes of forest use			
	Main type of forest use	Density of forests	Mode of forest use	Forest product income as share of total income
A. Hunting and gathering	Food: capture and collection of forest fauna and flora	High	Use value: high Exchange value: low	High
B. Swidden cultivation	Source of agricultural land restored by forest fallows Use and marketing of forest products	Medium	Use value: medium Exchange value: medium	Medium
C. Sedentary agriculture at forest frontier	Source of new agricultural land Marketing of forest products	Low	Use value: low Exchange value: high	Low

(Sunderlin et al., 2005, p. 1387)

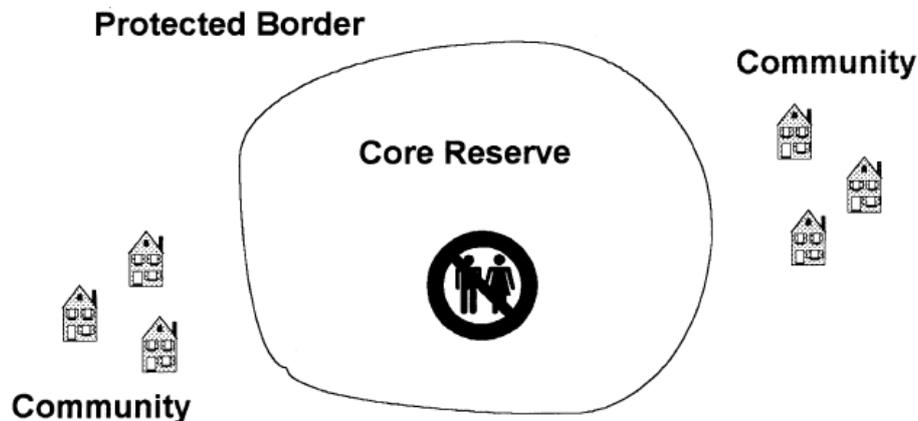
Severe rural poverty and natural forests tend to share the same space in many developing countries. Restricting access to forest resources for poor local communities is problematic because their lives depend on them. National parks are developed as instrument to protect natural areas against degradation and destruction caused by humans. The desire and pressure to protect natural areas often originates from international conservation organizations. The trend of creation of national parks all around the world satisfies the needs of conservationists, tourists and the tourism industry. The (forceful) implementation of ‘Western’ environmental views on natural areas in developing countries is often referred to as ‘eco-imperialism’ or ‘ecological imperialism’ (Driessen, 2010). By giving natural areas the status of ‘national parks’, these areas are protected by law against any undesirable human actions, like for example poaching, logging or agriculture. National parks therefore tend to restrict access to natural resources for local communities living nearby. In many cases, local people still rely on products, services, and land from nearby forests to meet their livelihood needs (Salafsky and Wollenberg, 2000). Many of the world’s poor people

therefore now face limited survival options. These people have to find alternative livelihood sources, as they no longer can use forest resources that usually have been available to the community for generations, but are now labeled as ‘national park’. Salafsky and Wollenberg (2000, pp. 1422-1425) provide us with a framework that links livelihoods to forest conservation. Their framework distinguishes three approaches to link rural livelihoods to forest conservation:

1. *No linkage: Protected Area Strategy*

This approach excludes livelihood activities by the creation of protected areas. The approach assumes that local livelihood activities are in conflict with forest conservation. Protected areas are often strictly bordered, meaning that unauthorized people are not allowed to cross. Commonly, exclusion of local people that traditionally or customarily own and manage these areas has shown to be problematic. Other problems often associated with effective implementation of this strategy are inadequate government resources, weak management capacities, remote sites, and ineffective legal systems. Tourism is often one of the few permitted activities that generates financial benefits to properly manage the protected area. “In theory, ecotourism provides a means of generating tangible economic benefits from protected areas to offset the often substantial costs of protection, without the environmental costs associated with extractive industries such as mining, forestry, and agriculture” (Walpole, Goodwin and Ward, 2001, p. 219). In reality however, the consistently low entrance fees to visit protected areas does not provide substantial enough revenues to offset costs.

Figure 5 Protected Area Strategy



(Salafsky and Wollenberg, 2000, p. 1423)

2. *Indirect Linkage: Economic Substitution Strategy*

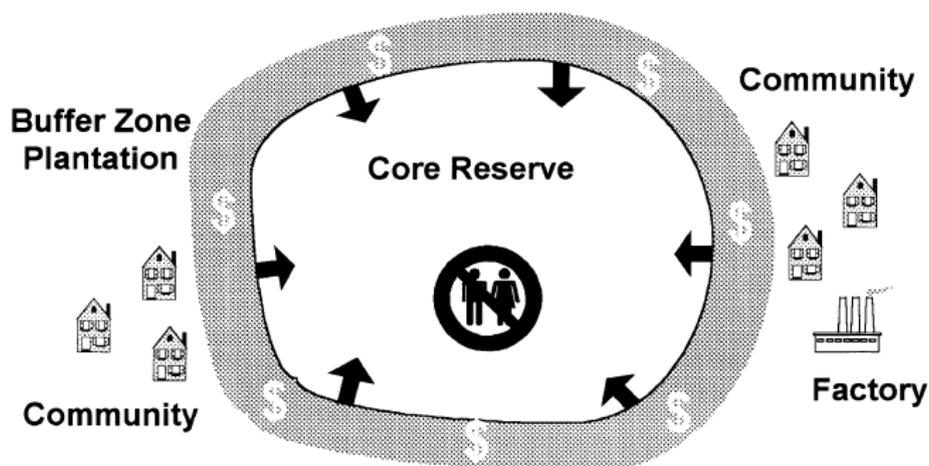
This approach was developed as a response to the shortcomings of the Protected Area Strategy. It allows livelihood activities to take place in one or more buffer zones surrounding the core protection zone. “The ‘core’ zone is less disturbed, and it is the area richest in resources and diversity” (Wickramasinghe, 1994, p. 84). A buffer zone is a defined spatial zone that enables local people to continue to meet their livelihood needs while still protecting biodiversity. The ‘buffer zone’ concept has replaced conventional practices of protection of natural areas, like national parks. There are several reasons why buffer zone development is a good thing:

- ✓ Buffer zones prevent land grabbing
- ✓ Buffer zones mitigate negative edge effects of core protection regions
- ✓ Buffer zones play a vital role in biodiversity conservation and protection
- ✓ Buffer zones deflect pressures on the forest
- ✓ Buffers zones offer opportunities to improve living standards of local communities
- ✓ Buffer zones expand the prospect for integrating biodiversity into areas outside the forests.

(Wickramasinghe, 1994, pp. 85-89)

The approach is based on the assumption that providing substitute economic activities will keep local people from livelihood activities that damage local biodiversity. Just as with the Protected Areas Strategy, effective implementation of the approach turns out to be rather complex. Two of the main problems of this approach are: conservation is not always the primary goal and buffer zones are often expanded into the core protection area.

Figure 6 Economic Substitution Strategy



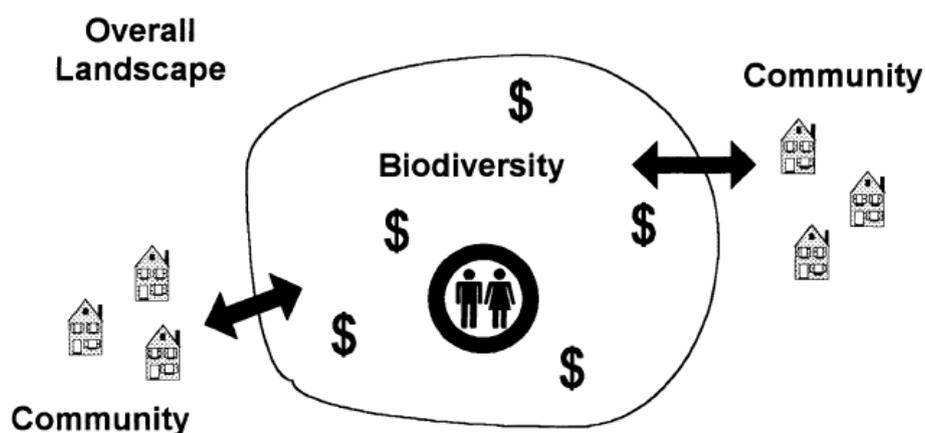
(Salafsky and Wollenberg, 2000, p. 1423)

3. Direct linkage: *Linked Incentives Strategy*

This approach was developed as a reaction to the shortcomings of both approaches, mentioned above. The approach recognizes the role which local communities can play in the protection of biodiversity. The key focus is on the development of dependent relationships between biodiversity and livelihood activities. Local communities are given opportunities to benefit directly from the biodiversity of the core protection area. In this way, livelihood activities are therefore not seen as threats to biodiversity, but as drivers for conservation. The underlying assumption of the approach is that local communities will have an incentive to stop external threats to the biodiversity. One such an incentive could be community based tourism initiatives. Income can then be generated by an entrance fee for tourists, visiting the area especially for its

high level of biodiversity, beautiful natural environment, or to experience the traditional forest culture of the communities living there. Integrated conservation and development programs therefore aim to promote biodiversity conservation while at the same time improving human living standards of the poor communities that are dependent on the forest resources. These areas usually are inhabited by poor local communities that are dependent on forest resources for survival. Conservation of forest resources should start with these local communities as they have been informally engaged in forest management for generations, primarily for survival. (Kremen et al., 1994, and Wickramasinghe, 1994). This recognition has given more attention to the fact, that at the local level, decisions made on sustainability are more realistic than decisions made from higher levels, such as the national. Decentralization, and in particular decentralized management of natural resources has recently been added to the development debate to retain sustainable development as the way forward. The shortcomings of this approach are yet to be discovered, as this is a recently new approach that links livelihoods to conservation.

Figure 7 Linked Incentives Strategy



(Salafsky and Wollenberg, 2000, p. 1423)

1.6 Decentralization and local participation

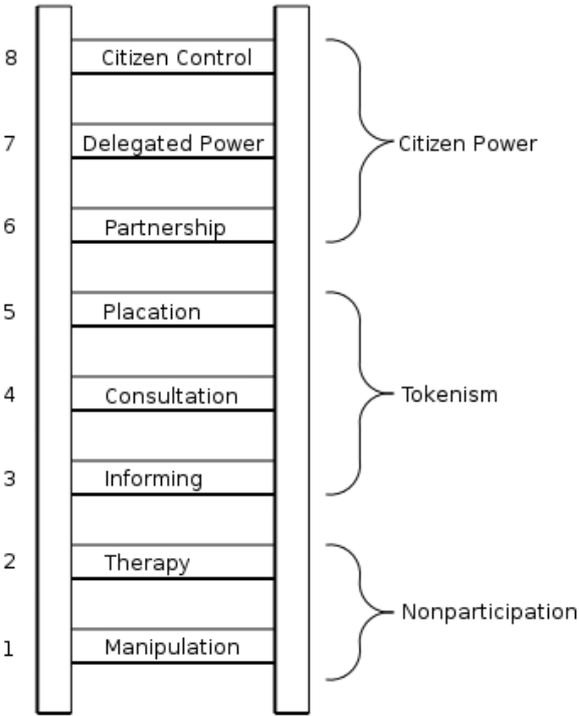
How can nature conservation and human development be integrated? Many scientists believe that decentralization is a key aspect for reaching a state of development that can be labeled as 'sustainable'. Decentralization is the shift in a political system from top-down government management to local, bottom-up governance. It is advocated as a means of improving public participation in decision making and it entails the redistribution of political power to local people. Administrative decentralization can be categorized into three basic types:

1. *Deconcentration*
2. *Delegation*
3. *Devolution*

Deconcentration means that only a limited amount of decision-making power is passed on to local agencies of central administrative units. Delegation means that decision-making power is assigned to elected officials of local agencies. Devolution means that local bodies with legal status are created (Dyer, 2008, p. 439-440). In theory, there is no doubt that decentralization leads to improved decision making power of local people. From an empirical viewpoint however, the

relationship between decentralization and sustainable development remains unclear (Iimi, 2005 and Poteete, 2000). Local participation and decision making power is essential for successful integration between livelihood improvement and nature conservation. Local people should be able to directly influence decisions that affect their lives. Arnstein (1967) identified eight levels of citizen participation.

Figure 8 Participation ladder



(Arnstein, 1967)

She explains that the first two steps are actually forms of ‘non-participation’, contrived by some to substitute for genuine participation. These levels of citizen participation do not really aim for the enablement of local people to participate in planning or conducting programs, but just to inform them about it. Steps four, five and six do involve local people to be heard, but usually these levels of participation lack the power to ensure that their voices are listened to by the ‘powerful’. Real decision making power only exists on the top three levels of participation. In a ‘partnership’, local people can engage and negotiate in trade-offs with traditional power institutions. ‘Delegated power’ and ‘citizen control’ are the highest forms of citizen participation possible. They provide local people with the majority of the decision making power. The higher the level of local participation, the higher the chances for sustainable development. One such local initiative that tries to integrate nature conservation with human development is community forestry.

1.7 Community forestry

Since Hardin in 1968 wrote his influential article ‘The Tragedy of the Commons’, the idea of overexploitation of common resources has been applied in many contexts, like the overharvesting of fish from our oceans. Overharvesting of timber and NTFPs can also be viewed from Hardin’s perspective, in which “the participants in a commons dilemma are trapped in an inexorable process from which they cannot extract themselves” (Ostrom, 1999, pp. 493-494). Many poor rural people living in communities within and around forests in developing countries are dependent on timber and NTFPs to support their livelihood. These resources are a common good to them. Usually out of poverty, these resources are overharvested, especially in times of agricultural setbacks and natural disasters. Overexploitation of forest resources always leads to forest degradation and destruction, which in turn can lead to livelihood insecurity of the forest poor. It is therefore important that there are good institutions in place to manage the use of forest resources. Institutions can be considered as the *rules of the game*. “Institutions are rules, enforcement characteristics of rules, and norms of behavior that structure repeated human interaction” (North, 1989, p. 1321).

In addition to their direct livelihood support, forests also provide important ecosystem services to rural people, i.e. the provision of water and the prevention of erosion. Forests are furthermore important to these rural livelihoods as they play an important role in the socio cultural systems of forest people, because forests have a huge influence on peoples sense of place and identity (Charnley and Poe, 2007). Deforestation can therefore have a devastating effect on forest based people. The previous paragraph explained that decentralization and local participation are of uttermost importance in the goal to reach a state of sustainable development. Decentralized forest management now has become a wide spread phenomenon, especially in developing countries that face the highest levels of deforestation. Community forestry (or community based forest management) is an example of decentralized forest management. Forest management, or forestry can be identified as the manipulation of forests to achieve a desired objective (Brendler and Carey, 1998). Community forestry emerged in developing countries in southeast Asia, Africa and south America from the 1980s as a reaction to alarming deforestation and forest degradation rates. The top down forest management approaches from developing countries in the 1960s and 1970s had failed to protect forests. Many of these developing countries therefore started from that time experimenting with a more decentralized bottom-up forest management approach to protect their forests. Charnley and Poe (2007, p. 314) state that: “What governments decentralize or devolve varies by case and can include right to access to forest products and the benefit stream they generate, the work of forest management such as forest protection and restoration functions, opportunities for a greater role and voice in forest management and planning, administrative functions, decision making power and authority, and in some cases property rights, with forests transferring from government to community ownership.”

Nowadays, there is a wide variety of definitions of the community forestry concept available. Before this concept is defined, it is first needed to explain the concept of a ‘community’. Joppe (1996, p. 475) states that: “For the most part, ‘community’ is self-defining in that it is based on a sense of shared purpose and common goals. It may be geographical in nature or a community of interest, built on heritage and cultural values shared among community members.” In this research the term ‘community’ refers to all households that belong to one village, and not to

municipalities as sometimes is the case (or to communes as could be the case in the Vietnamese context). The concept of ‘community forestry’ was first defined by the FAO in 1978 (p. 1) as: “any situation which intimately involves local people in a forestry activity. It embraces a spectrum of situations ranging from woodlots in areas which are short of wood and other forest products for local needs, through the growing of trees at the farm level to provide cash crops and the processing of forest products at the household, artisan or small industry level to generate income, to the activities of forest dwelling communities”. Martel and White (1992) define the concept as: “Community forestry is a village-level forestry activity, decided on collectively and implemented on communal land, where local populations participate in the planning, establishing, managing and harvesting of forest crops, and so receive a major proportion of the socio-economic and ecological benefits from the forest.” The National Community Forestry Centre (2000, p. 1) uses the concept “to describe efforts by communities – those united by a common interest or by a sense of place – to recognize and take advantage of the economic, social, and environmental opportunities afforded by their local forest resource, whether it is in public or private ownership, or somewhere in between.” Although these definitions (slightly) differ from each other, most writers now acknowledge that community forestry efforts are characterized by three basic features:

- Residents have access to the land and its resources.
- Residents participate in decisions concerning the forest.
- The community begins by protecting and restoring the forest.

(Brendler and Carey, 1998 and Charnley and Poe, 2007)

In theory, community forestry can be seen as a decentralized development instrument that aims to protect forests, while at the same time sustaining livelihoods of forest community. In practice, community forestry does not always work out. One of the reasons for this is that communities are not always a homogeneous group that shares the benefits of the transferred forest equally among their members. Another reason is that in reality many community forestry initiatives are characterized by government authorities that refuse to fully transfer control over forest use and management to local communities, which is one of the main conclusions of Charnley and Poe (2007). Sustainable Tourism Development (STD) is just as community forestry a development initiative that aims to bring benefits to (poor) local communities while stimulating socio-cultural and environmental conservation. The next paragraph provides the theoretical background for STD, which links livelihoods to nature conservation. Salafsky and Wollenberg (2000) identify this direct link as the so-called linked incentives strategy, described on page 24.

1.8 Sustainable tourism development

Tourism is one of the largest and fastest growing industries in the world today (Cater, 1993 and Yujie, 2007). “Recent estimates by the World Travel and Tourism Council indicate that the tourism industry contributes about 10 per cent of global gross domestic product and provides employment for some 215 people worldwide” (United Nations Economic and Social Council, 2005, p. 1). But what is actually meant with the *tourism industry*? At the moment, there is still no widely accepted definition. This is due to the fact that ‘tourism’ is a rather general and widely

applied term. Most definitions acknowledge the link between travel, tourism, recreation and leisure. This is however a vague link, as Mill and Morrison (1998) acknowledge that:

- all tourism involves travel, yet not all travel is tourism;
- all vacation travel involves recreation, yet not all tourism is recreation;
- all tourism occurs during leisure time, but not all leisure time is spent on tourism activities.

The most widely applied definition of tourism is that of the World Tourism Organization (WTO). In 1991, the WTO convened the International Conference on Travel and Tourism Statistics in Ottawa, tourism was there defined as “the activities of a person outside his or her usual environment for less than a specified period of time and whose main purpose of travel is other than exercise of an activity remunerated from the place visited.” (Mill and Morrison, 1998, p. 2). The tourism industry is widely integrated in societies and incorporates a variety of different types of tourism businesses and other organizations, which can be divided into the following sectors:

- Accommodations, food service, and retailing sector
- Association sector
- Attractions and events sector
- Convention and exhibition
- Destination marketing sector
- Miscellaneous sector
- Regulatory and coordinating sector
- Transportation carrier sector
- Travel trade intermediary sector

(Leiper, 1990; Middleton, 1988; Morrison, 1996)

Due to time-space-compression (or globalization) the world has become a smaller and more integrated place in which people can easily travel to destinations on the other side of the world. The rapid increase of international tourist arrivals to developing countries is causing enormous economic, environmental and socio-cultural impacts in these countries. The scale of change in such a short time frame suggests that not all impacts will be beneficial. Although tourism development has the potential to stimulate economic growth through an increase off foreign exchange earnings, income and employment (Mill and Morrison, 1998, p. 203), it also has the potential to create adverse negative environmental and socio-cultural impacts. In many developing countries in the world, tourism activities are now seriously contributing to environmental degradation and socio-cultural conflicts. “Tourism may affect the composition and behavior of floral and faunal species; cause or exacerbate various forms of pollution; precipitate erosion, contribute to depletion of natural resources; and have deleterious visual impact” (Cater, 2008, pp. 331). With respect to socio-cultural impacts, Jovicic (2011, p. 1) states that: “The social and cultural impacts of tourism are the ways in which tourism is contributing to changes in value systems, individual behavior, family structure and relationships, collective lifestyles, safety levels, moral conduct, traditional ceremonies and community organizations”.

Socio-cultural impacts are primarily manifested on the population of receptive areas, as a result of their relationship with tourists. Negative tourism impacts are usually the result of visitor numbers exceeding the carrying capacity of a destination area (Mill and Morrison, 1998). The recognition that tourism can and does cause negative effects, especially in developing countries, has led to a new view on tourism development that has become popular since the late 1980s; sustainable tourism (Cater, 2008). Sustainable tourism is widely recognized as a means of enhancing local development as well as protecting natural and socio-cultural heritage (Castellani and Sala, 2010). It aims to maximize positive tourism impacts and minimize negative tourism impacts for host communities. “The objectives of sustainable tourism are to improve the quality of life of the host community, provide a high quality experience for the visitor, and maintain the quality of the environment on which both the host community and the visitor depend” (Mill and Morrison, 1998, p. 217). The Sustainable Tourism Development (STD) framework applies the principles of sustainable development to tourism development. Although most academic writers define sustainable tourism slightly different, there is the acknowledgement that STD is based on three main principles (Mill and Morrison, 1998, p. 216-217):

- *Ecological sustainability*; ensures that tourism development is compatible with the maintenance of essential ecological processes, biological diversity, and biological resources;
- *Social and cultural sustainability*; ensures that tourism development increases people’s control over their lives, is compatible with the culture and values of people affected by it, and maintains and strengthens community identity;
- *Economic sustainability*; ensures that tourism development is economically efficient and that resources are managed so that they support future generations.

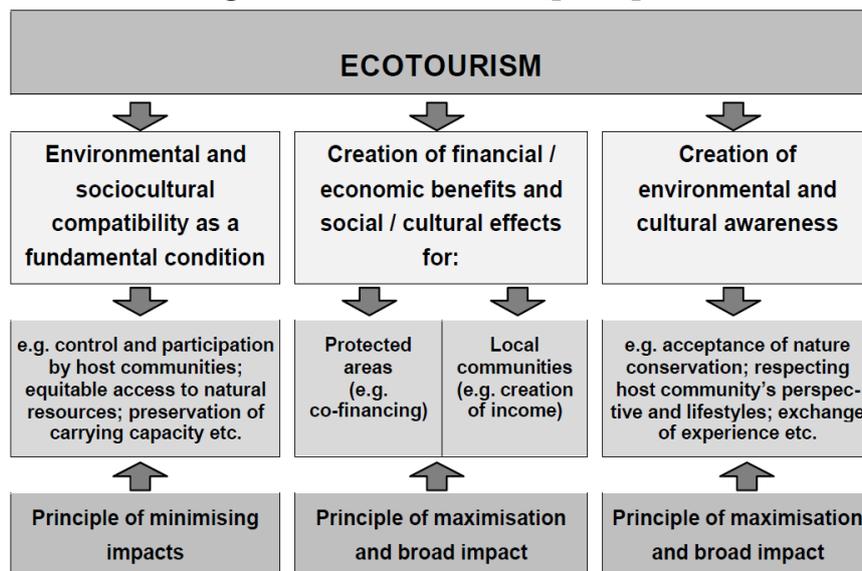
STD can thus directly be linked to the sustainable development theory, as it integrates all aspects of sustainability. According to Steck (1999, p. 2) STD therefore meets “the needs of present tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to management of all resources in such a way that economic, social, and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity, and life support systems.” Since the rise of the STD approach in the late 1980s, the number of specialized ‘sustainable’ tourism typologies has risen fast, such as alternative tourism, green tourism, responsible tourism, cultural tourism, adventure tourism, eco-tourism, nature based tourism, pro-poor tourism and community based tourism (Valentine, 1993). The (sustainable) characteristics of these niche tourism activities are in direct contrast to those of conventional mass tourism. “Activities are likely to be small scale, locally owned with consequently low import leakages and a higher proportion of profits retained locally” (Cater, 1993, p. 85). Many of these tourism activities take place in or nearby natural and protected areas in developing countries. The Mountain Institute (2000, p.2) states that: “Of the estimated \$55 billion in tourism receipts received in the Third World, a significant portion of this in the early 1990s was the result of nature tourism activities. Ecotourism activities especially have exploded in most developing countries since the early 1990s.

1.8.1. Ecotourism

Ecotourism is a distinct type of sustainable tourism that stresses unique ecological values and takes place in natural habitats that show extraordinary flora and/or fauna. Currently there still is a lot of controversy about the exact definition of ecotourism. Although definitions (slightly) differ, the most important aspect remains sustainability. Figure 9 (on the next page) shows the principles that must be in place to label a tourism initiative as ‘ecotourism’, according to Steck (1999). The International Ecotourism Society (TIES, 2010) defines ecotourism as “responsible travel to natural areas that conserves the environment and improves the well-being of local people”. Valentine (1993, p. 108) states that ecotourism is restricted to that kind of tourism which is:

- ✓ based on relatively undisturbed natural areas;
- ✓ non-damaging, non-degrading, ecologically sustainable;
- ✓ a direct contributor to the continued protection and management of the natural resources used;
- ✓ subject to an adequate and appropriate management regime.

Figure 9 Ecotourism principles



(Steck, 1999, p. 3)

1.8.2. Community based tourism

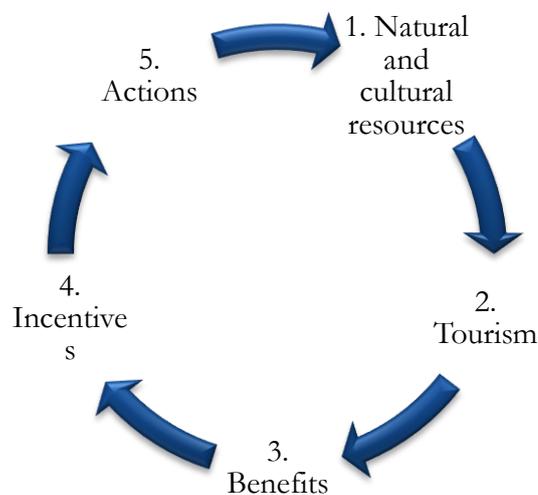
Community based tourism (CBT) is closely related to ecotourism, although not exactly the same. Whereby ecotourism initiatives are characterized by the destination area, which has to be of unique natural quality, CBT initiatives are characterized by participation and decision making power of local communities. The focus of CBT is at the (village) community at local level, while this is certainly not always the case for ecotourism initiatives. Another difference between ecotourism and CBT is that CBT is not always concentrated on natural resource conservation. “Cultural conservation, community and/or gender empowerment, poverty alleviation, income generation are also primary purposes in many cases” (The Mountain Institute, 2000, p. 4). CBT is a relatively new typology of STD and has recently gained popularity. The CBT approach originated as an effort to make tourism more sustainable. It is used to describe a variety of activities that encourage and support a wide range of objectives in economic and social

development and conservation. According to TIES (2006) there are three important characteristics of CBT:

- Local communities have substantial control over, and involvement in development and management of tourism activities.
- A majority of the benefits of tourism stays inside the local community
- It embraces collective responsibility of the community, as well as individual initiatives.

The idea behind the CBT approach is that management by local people accompanied by devolved decision making is more preferable since it can be more accountable and sustainable in the long term. According to the Mountain Institute (2000, p. 5): “The key rationale underlying the approach and objectives of Community-based Tourism for conservation and development is that Community-based Tourism through increased intensities of participation can provide widespread economic and other benefits and decision-making power to communities. These economic benefits act as incentives for participants and the means to conserve the natural and cultural resources on which income generation depends.” This makes clear that the CBT approach is closely related to the linked incentives strategy, described by Salafsky and Wollenberg (2000). Both of them recognize the role that local communities can play in nature (or cultural) conservation. The development of dependent relationships between conservation and livelihood activities is the main focus, as these relationships stimulate efforts of local communities to stop external threats to conservation.

Figure 10 Resources and actions relationship in CBT approach



(Based on: The Mountain Institute, 2000, p. 5)

An important objective of CBT, next to poverty alleviation and natural and/or cultural conservation, is to increase and improve stakeholder participation and local decision making in development issues. Unless the needs of local host populations are considered ecotourism, CBT, or any other type of tourism cannot be sustainable. Joppe (1996, p. 1) warns that in reality “community tourism development clearly shows that tourism continues to be driven by levels of government rather than community interests.

1.9 Conclusion

This chapter has presented the main theories and concepts on which the research is based. The first paragraph has pointed out how thinking about development is socially constructed. It was explained that there are currently four complementary development paradigms that each explain development (and underdevelopment) in their own way. This research fits in with the alternative (bottom-up) paradigm towards development, which gained momentum from the mid 1970s. This paradigm represents the idea of *another development*. Sustainable development is identified as one of the key approaches within this paradigm and within this research. The sustainable development approach was developed as a reaction to conventional development thinking which was commonly concentrated purely on economic growth and modernization. The sustainable development approach however certainly does not reject economic growth, but it puts equal focus on environmental, socio-cultural and economic development. This approach recognizes that top-down government policies frequently failed to meet the needs of local communities. Decentralization and local participation are therefore necessary conditions to reach a state of development that can be labeled as 'sustainable'. The introduction of the sustainable development approach marked a change in poverty research. Conventional poverty analysis focused on economic development indicators while the new introduced livelihood approach offers a more integrated and coherent view on poverty.

In many developing countries severe rural poverty and natural forests tend to share the same place. Forest livelihoods are characterized by their high poverty levels and their dependency on forest resources. Due to deforestation and the establishment of national parks, the availability and access to these forest resources becomes more restricted for many forest-based people in Southeast Asia. Salafsky and Wollenberg (2000) therefore provide us with a framework that distinguishes three approaches to link livelihoods to forest conservation: no linkage, indirect linkage, direct linkage. As a result of dramatic deforestation, many countries in Southeast Asia now implemented decentralized forest management systems. Community forestry is such an example. It is characterized by collective local management (participation and decision-making) on communal forestland. It is assumed that local management of forests is more effective than top-down forest management. Local management also has the power to stimulate livelihoods. Another development instrument that aims to stimulate local livelihoods and nature or cultural conservation is Sustainable Tourism Development (STD). It applies the principles of sustainable development to tourism development; it concentrates on ecological, socio-cultural and economic sustainability. STD initiatives are usually small-scale and locally owned. Two STD types are ecotourism and community based tourism (CBT). Ecotourism is a distinct type of sustainable tourism that stresses unique ecological values and takes place in natural habitats that show extraordinary flora and/or fauna. True ecotourism initiatives stimulate both local livelihood improvement as well as nature conservation. CBT is closely related to ecotourism, but can also include cultural heritage conservation instead of nature conservation. Both labels, ecotourism and CBT, are commonly miss-used in order to attract (international) tourists to destinations.

The next chapter presents the Vietnamese background on the main themes of this research. The themes are discussed on three different scale levels. The lowest scale level introduces the research communities and their main characteristics.

Chapter 2 Regional thematic framework

2.1 Introduction

This chapter presents the relevant background information on the three main themes of the research: poverty, forest management (FLA) and tourism development. These themes are discussed on three different levels. First, paragraph 2.2 presents the national scale level. This paragraph starts with a general introduction of Vietnam and its recent progress in national (economic) development. The sub-paragraphs elaborate on the main themes. Second, paragraph 2.3 presents the relevant background information on Thua Thien Hué Province (TTHP), in which the two research communities are located. Again, the sub paragraphs elaborate on the main themes of the research. Third, paragraph 2.4 introduces the research communities and the communes and districts which they are part of. This paragraph does not yet reveal all data on the main themes, as this is presented in the result chapters of this Master Thesis. The paragraph only presents the main basic characteristics. Finally, paragraph 2.5 presents the main conclusions that can be drawn from the information provided in this chapter.

2.2 Vietnam at a glance

The Socialist Republic of Vietnam is situated in the most eastern part of the Southeast Asian peninsular. The country has an area size of approximately 329,566 square km. and its capital is Hanoi, located in the north at the Red River Delta. Vietnam is ruled by the Communist Party of Vietnam and has four levels of governance: national, provincial, district and commune. In 2003, Vietnam had 61 provinces (including cities) with 565 districts and about 10.000 communes (ICEM, 2003, A). The country’s climate is largely influenced by two monsoons, and varies from cold winters in the northern mountainous regions that border with Laos and China, to a year-round warmth in the Mekong Delta.

Figure 11 Vietnam’s geographic location



(Lonely Planet, 2010)

Vietnam is highly populated; in 2009 it was estimated that there were about 87 million people living in the country. A large amount of the population lives in rural areas. The rural population density in 2009 was estimated at 1,071 people per square km. This makes Vietnam the second highest rural populated country in Asia, after Bangladesh. It is estimated that the Vietnamese population living in rural areas decreased from 80% in 2000 to 74% in 2008. This is however still an extremely high number (Gomiero et al, 2000 and the World Bank, 2010). Vietnam is known as a country where many ethnic minority groups live. A large proportion of these groups can be found in rural areas that are characterized by mountainous terrain, covered with (remaining) areas of natural forest.

After decades of war, which had left the country in devastation, the reunited Vietnamese government started from 1975 onwards to pursue economic progress through a strict centrally planned industrial growth model. From the start of the 1980s it already had become clear that this model had not stimulated national economic growth or poverty reduction, but that it in fact impoverished the Vietnamese population even more. The Vietnamese government reacted in 1986 by announcing that the socialist model would be replaced by an agricultural market model. This marked an important change in Vietnam’s economic development. Sunderlin and Ba (2005, p. 2) state that the following ‘renovation’ policies, or *doi moi* reforms “abolished compulsory grain-purchase quotas and instituted free trade at market prices, ended collectivized agriculture, and distributed farmland to individual households.” In addition, the *doi moi* reforms also included an ‘open door’ policy, meaning that foreign companies were encouraged to invest in Vietnam and trade barriers were further reduced. The *doi moi* reforms soon proved to be effective as Vietnam experienced rapid economic development and significant poverty alleviation from the early 1990s on until now. In the latest edition of the Human Development Report is Vietnam listed on the 113th place of the 169 countries that were evaluated in the Human Development Index (HDI). The country is thereby listed as a ‘medium human development’ country (UNDP, 2010). Table 2 presents some basic development facts of Vietnam.

Table 2 Basic facts Vietnam (2009)

	Data
Population growth (annual %)	1,2
Life expectancy at birth, total (years)	75
Mortality rate, infant (per 1,000 live births)	20
Literacy rate, youth female (% ages 15-24)	96,4
GNI (current US\$) (millions)	91.826
GNI per capita, Atlas method (current US\$)	860
Prevalence of HIV, total (% of pop ages 15-49)	0.4

(The World Bank, 2011, A)

2.2.1 Poverty

When the war between North and South Vietnam in 1975 came to an end, the whole country was devastated and hunger was widespread among the population. After the reunification, the government was facing a difficult task. Their initial efforts to create economic growth and poverty alleviation through a forced collectivization system failed. By the mid-1980s Vietnam was still one of the poorest countries in the world. The implementation of the *Doi Moi* policies and its market-orientated economy has stimulated remarkable economic growth and poverty reduction since the early 1990s. “The proportion of the population living below the poverty line declined from over 70% at the end of 1980s to 58% in 1993, 37% in 1998, and 29% in 2002. The proportion of the food-poor fell from 25% in 1993 to 15% in 1998 and 11% in 2002” (Fan, Huong and Long, 2004, p. 6). Poverty reduction among ethnic minorities groups is however still characterized by its slow progress. In 2006, only 10.2% of the ethnic Kinh population were living in poverty, while at that same time 52.2% of the ethnic minority population were living in poverty (The World Bank, 2011, A and Müller, Epprecht and Sunderlin, 2006).

Although Vietnam experiences spectacular economic growth and poverty reduction, especially considering its recent past, the country remains one of the poorest countries in Asia today. Poverty remains widespread among the Vietnamese population. Especially in rural areas, the quality of life is (extremely) low. The Vietnamese government therefore has put poverty alleviation on top of its list of priorities, but much more remains to be done (Sunderlin and Ba, 2005 and The Centre for International Economics, 2002). According to Müller, Epprecht and Sunderlin (2006) is poverty spatially clustered in Vietnam, with high poverty incidence in the Northwest and Northeast uplands (along the borders with China and Lao PDR) and in mountainous Central Vietnam (along the border with Lao PDR and Cambodia), and low poverty incidence in river deltas and along the coastline. Areas with high poverty incidence tend to be less inaccessible and households living there generally experience severe poverty. These mountainous areas with high poverty incidence are also home to most parts of Vietnam’s remaining (high quality) natural forests. Many poor forest-based livelihoods are largely dependent on the availability of forest resources for survival. Forest conservation and access to the natural resources of the forest are therefore important factors that stimulate livelihood survival. The next paragraph presents more information about Vietnam’s forest situation and the way in which forests are managed.

2.2.2. Forest situation and management

Until the mid-twentieth century Vietnam was known for its immense forest cover. Since then, Vietnam experienced rapid deforestation levels that culminated in the late 1980’s. Estimates of changes in forest cover in Vietnam in the second half of the 20th century vary greatly. Müller, Epprecht and Sunderlin (2006, p. 9) state that: “According to an internal government report, the accuracy of forest data ranges from 65 - 95 percent, depending on factors like the method of data collection and compilation, the complexity of topography, and the homogeneity of forests.” In addition to these data inaccuracies, it is also assumed that the forest cover data partly reflects underlying political motivations at different administrative levels. According to Lang (2001) the variety of available data indicates that forest cover data is either used to draw attention to rapid deforestation, or conversely, to show that reforestation programs are successful. Although this wide variety of available data makes it difficult to state final conclusions about the exact figures

on forest cover data in Vietnam, it does make clear that forest cover has significantly decreased in the second half of the 20th century. According to Castella et al. (2006), forest cover decreased from 45% to 28% of the country's total surface area in the period 1943-1991. Sunderlin and Ba (2005, p.3) state that: "The forested area in Vietnam was estimated to be 181,500 km² (55 percent of the total land area of 330,000 km²) in the late 1960s and 56,680 km² (17 percent of total) in the late 1980s." These figures mark Vietnam as the most rapid case of deforestation among the Southeast Asian countries in this period. The causes of the dramatic loss of forest cover in Vietnam during the second half of the 20th century are identified as:

- Over-exploitation of forestland, mainly by large scale logging activities of SFEs.
- Unsustainable forestry and agricultural practices (swidden cultivation and slash-and-burn) of forest-based livelihoods
- 'Agent Orange' (a defoliating chemical that was sprayed by American airplanes during the Vietnam War) and other impacts of war.
- Infrastructural expansions
- The establishment of timber plantations
- Government resettlement programs, migration, and internal colonization in the post war period.

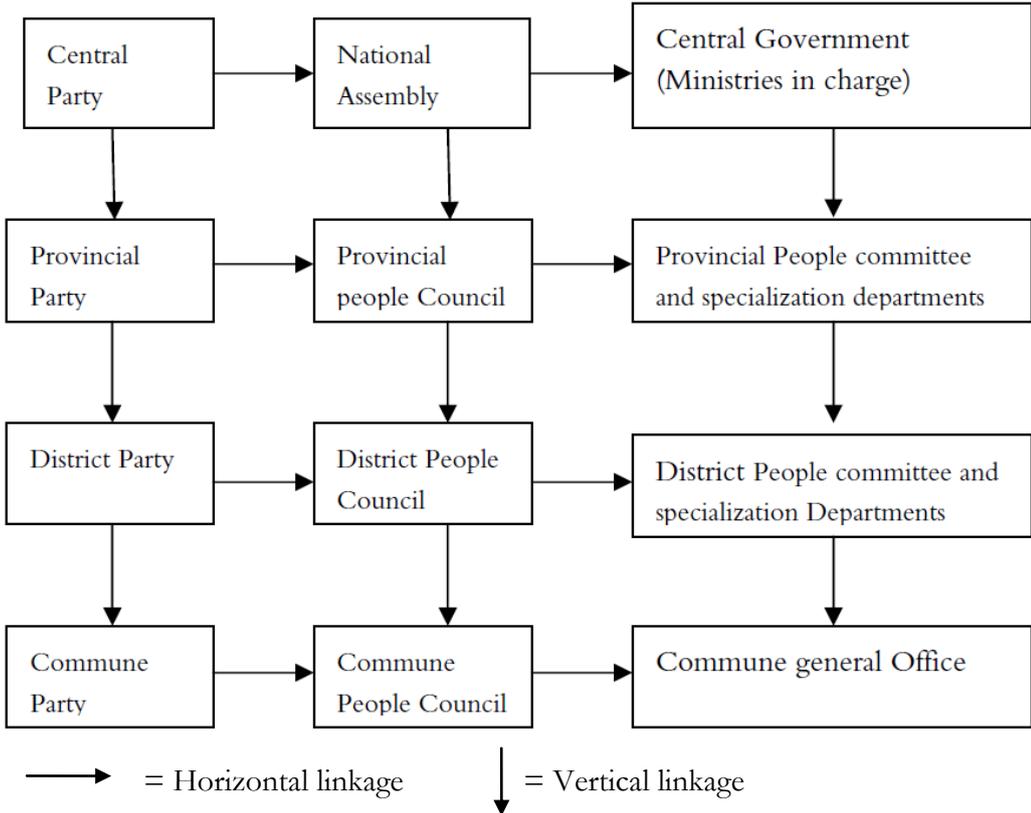
(Meyfroidt and Lambin, 2008, Quang and Noriko, 2008, Sunderlin and Ba, 2005, and Van Kuijk, 2008)

Until the 1990s forests in Vietnam were strictly top-down managed by the central government. Alarming deforestation rates, and resulting environmental problems, like degradation of arable land, soil erosion, destruction of water catchments, diminished groundwater sources, and loss of biodiversity, made the Vietnamese government decide to change their top-down central management approach to local management of forests. Decentralized forest management therefore has become the new approach to forest conservation. The rationale behind this is that forestland can be better managed if it is in the hands of local (forest-dependent) people, than top down from the central government. Decentralized forest management thus can be seen as a reaction to inefficient state control over forest management.

The decentralization process of forest management in Vietnam is characterized as 'devolution' (see paragraph 1.6), meaning that local bodies with legal status and decision-making power are created. At the national level, state forestry is still placed under the responsibility of the Ministry of Agricultural and Rural Development (MARD). They however have limited management options, as their policies must be in line with the policies of higher placed organizations. Thi (2009) drew up an organizational structure of decentralized forest management in Vietnam (see figure 12). The figure clearly shows the horizontal and vertical linkages between all administrative units of the government. The first column represents the organizations that set targets. The second column represents the organizations that develop regulations and laws to reach these targets. The third column represents the organizations that are responsible for the implementation of these regulations and laws. For example, the Central Party decides on desired general policy outcomes, then the National Assembly sets up the regulations and laws which they think are necessarily to reach that outcome, finally the Ministries in charge (MARD and

MONRE) implement these rules in practice. The figure also shows that a commune is the lowest administrative unit in the political system in Vietnam. The lower level government organizations that are part of the commune level are the ones that are in charge of the implementation of forest land allocation (FLA) policies, which is the subject of the next paragraph. The commune authority is also responsible for managing all activities in cooperation with the elected community leaders.

Figure 12 Decentralized forest management structure Vietnam



(Thi, 2009, p. 85)

2.2.3. Forest Land Allocation

There are five important legal decisions that had a significant impact on forest management since the early 1990s: (1) land classification and the rules for forest protection defined in the Law on Forest Protection and Development in 1991 and 2004; (2) the allocation of land-use rights to private organizations and households notably through the 1993 and 2003 Land Law; (3) the recognition of communities as legal recipients for forest and land-use rights in 2004; (4) afforestation programmes and (5) the reform of State Forest Enterprises (SFE’s). FLA is embodied in decisions (2) and (3). The implementation of FLA policies has influenced local institutions by fixing new rules of forest ownership, access and use. It entails the allocation of forestland to individual households, groups of households, local organizations, and communities for use, management, protection and development (Clement and Amezaga, 2009 and Thi, 2009). Implementation of FLA policies has three related objectives, according to Castella et al. (2006, p. 147):

1. the introduction of a sedentary livelihood system for those populations who have traditionally relied on shifting cultivation and regular migration;
2. the development of the village economy through tree plantations; and
3. the protection of forest resources.

Although forestland is officially classified as ‘agricultural land’ by the Vietnamese government (The State President of the Socialist Republic of Vietnam, 2003 and 2004), this research uses a slightly different classification: ‘agricultural land’ refers to land that is solely used for agricultural cultivation of annual crops (including rice) and ‘forestland’ refers to both natural forests as well as forestry land that is used for tree plantations. Forestland in Vietnam is divided into three different classes, based on their major use purposes:

- 1. Protection forests**, which are mainly used to protect water sources and land, prevent erosion and desertification, restrict natural calamities and regulate climate, thus contributing to environmental protection, including:
 - Headwater protection forests;
 - Wind- and sand shielding protections forests;
 - Protection forests for tide shielding and sea encroachment prevention;
 - Protection forests for environmental protection.
- 2. Special-use forests**, which are used mainly for conservation of nature, specimens of the national forest ecosystems and forest biological gene sources; for scientific research; protection of historical and cultural relics as well as landscapes; in service of recreation and tourism in combination with protection, contributing to environmental protection, including:
 - National parks;
 - Nature conservation zones, including nature reserves and species-habitat conservation zones;
 - Landscape protection areas, including forests of historical or cultural relics as well as scenic landscapes;
 - Scientific research and experiment forests.
- 3. Production forests**, which are used mainly for production and trading of timber and non-timber forest products in combination with protection, contributing to environmental protection, including:
 - Natural production forests;
 - Planted production forests;
 - Seeding forests, including the selected and recognized planted forests and natural forests

(The State President of the Socialist Republic of Vietnam, 2003 and 2004)

Allocation of forestland to communities or (groups of) households consists out of two types: natural forest and forestry land. Natural forests are usually allocated to groups of households or communities and can be classified as protection, special-use and production forest. This classification is important as it defines the use purpose of the natural forest to these communities and groups of households. Forestry land is usually allocated to individual households and can

only be classified as production forest, or land that is used for tree plantations. There are three types of production forests: natural production, planted production and seeding. Forestry land that is allocated to individual households is always categorized as planted production forest, as the other two types are not allocated to individual households. Households can apply to the district Department of Natural Resources and Environment (DONRE) to be allocated a plot of forestry land (= planted production forest) for a period of 50 years. Natural production and seeding forest are only managed by SFE's or other specialized national and regional forestry agencies. The main purpose of natural production forests is of economical nature, as they are used for timber logging and trading. Seeding forests are used "in order to select, crossbreed, multiply and import necessary varieties, ensuring the supply of quality varieties for afforestation" (The State President of the Socialist Republic of Vietnam, 2004, p. 30). Table 3 provides an insight into the development of these three classes of forestland. It is obvious that the total size of production forest has seriously decreased in size to the prejudice of both special-use forests as well as protection forests. This means that the total amount of land that is available to individual households for tree plantations is decreasing, while the total amount of land that is available for special-use and protection functions is increasing.

Table 3 Evolution of forestland classification in Vietnam

Type of forestland	Area size 1999 (in million ha.)	Area size 2005 (in million ha.)
Special-use forest	0.9	2.4
Protection forest	5.7	9.5
Production forest	12.4	7.1
Total forestland	19.0	19.0

(Clement and Amezcaga, 2009, p. 465)

One of the reasons causing this decrease in production forests is that the Vietnamese government is actively stimulating the establishment of protected national parks since the introduction of the *Doi Moi* policies. The number of national parks has increased from 3 to 30 since 1986 (Suntikul, Butler and Airey, 2010). National parks are established to protect forests from further degradation and have a strong focus on tourism development that stimulates local livelihoods and economies. Paragraph 1.5 however already explained that national parks also have the tendency to exclude local people from the use of forest resources inside the protected area and thereby limiting their livelihood sources.

The quality of forestland in Vietnam is divided into six classes that have been introduced by the Vietnamese government's Forest Inventory Program 286. These six quality classes of forestland were approved by the Prime Minister on January 1, 2001. The first four classes exhibit actual forest cover, while the first three classes are natural forest categories:

1. Rich
2. Medium
3. Poor
4. Plantation forest
5. Agricultural land
6. Other land cover, including shrub, bare and grass land, water bodies and built-up areas.

(Müller, Epprecht and Sunderlin, 2006, p. 9 and 18).

Appendix 1 provides an insight in the distribution of forestland in Vietnam in 1999, based on quality. It is clear that most rich and medium forests are concentrated along Vietnam's borders with Laos, in the Central Highlands and in Central Vietnam. Concerning the quality of allocated forestland, Sunderlin states (2006) that the quality of allocated forestland to communities and households in many cases is highly degraded and therefore not very suitable for agricultural cultivation. He also remarks that: "some of the best remaining forest resources remain under the control of State Forestry Enterprises (SFEs)" (Sunderlin, 2006, p. 392).

2.2.4 Tourism development

The tourism industry is actively promoted in Vietnam since the introduction of the *Doi Moi* reform policies in 1986 Vietnam. The result of the policies is that the new liberal market economy has stimulated huge investments in the development of tourism activities and destinations. The central government views tourism as a key engine for national (economic) growth. The national focus of tourism development is concentrated on the promotion of nature-based and cultural heritage tourism, as Vietnam has a lot of natural and cultural potential to attract (international) tourists. To indicate the rapid growth of the tourism industry after the introduction of the *Doi Moi* policies, Smith (1998, p. 770) states that: "The Vietnam National Administration of Tourism (VNAT) reports that hotel room supply has expanded from 18,000 in 1988 to almost 50,000 in 1997. It is also reported that international tourist arrivals have increased from 440,000 in 1990 to 1.6 million in 1996." Vietnam's international reputation as a destination for exotic nature and culture based tourism since then has grown even more (Suntikul, Butler and Airey, 2010). In 2010, Vietnam attracted 5,049,855 international arrivals, which represents a growth of 34.8%, compared to the number of international arrival numbers in 2009 (VNAT, 2011).

To control the negative impacts that are inevitable with such rapid tourism development, the Vietnamese government organized its first conference on sustainable tourism development in Hue in 1997. During this conference it was accepted "that sustainable tourism is not in conflict with economic development, but is concerned with long-term resource use, conservation, and economic viability (Smith, 1998, 770). Currently, many tourism businesses in Vietnam label themselves as sustainable tourism initiatives to attract visitors. The majority of these initiatives show however few STD characteristics and often exist in the form of organized mass tourism, which is characterized by substantial adverse environmental, economical and socio-cultural impacts on destination areas and on local communities. "Environmental awareness and ecologically minded practice are still uncommon, with the government as well as among the populace. The ubiquitous litter at tourist sites and the common practice of eating wild meat in natural areas evince a low level of ecological awareness among Vietnamese tourists. Government indifference and corruption, lack of involvement of locals in planning and the fact that most

promoters of tourism tend to be large non-local concerns still serve as barriers to eco-tourism development” (Suntikul, Butler and Airey, 2010, pp. 206).

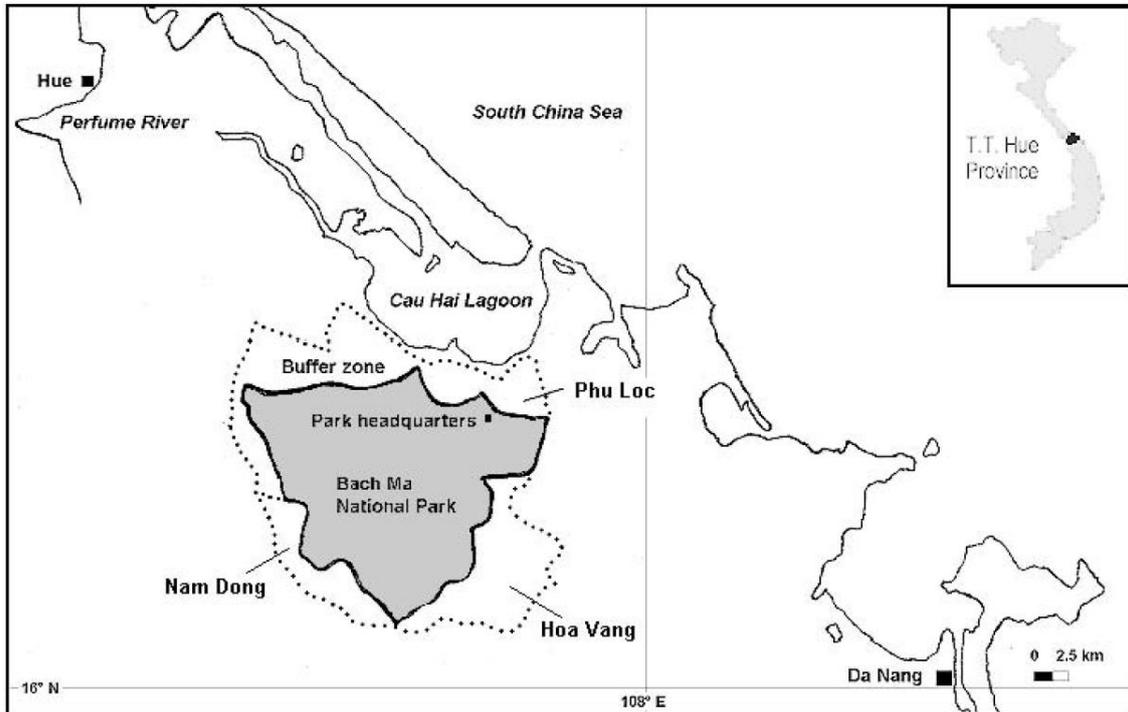
2.3 Thua Thien Hué Province

Thua Thien Hué Province (TTHP) is located in Central Vietnam. It is the most southern province of the North Central Coast region and borders with the South Central Coast region (see appendix 2). TTHP borders in the north with Quang Tri province, in the east with the South Chinese Sea, in the south with Quang Nam province and in the west with the Truong Son Mountain Range (or the Annamite Range), which is located on the border between Vietnam and Lao PDR. TTHP covers an area of 5.053 sq km and is populated by over a million people. Almost 300.000 of them live in and around the capital of the province, Hue. The province is divided into nine administrative units; six districts in the lower lying plains, two districts in the mountainous areas, and the capital city of Hue. Most of the province’s population lives in the low lying coastal plains. The population density in the interior of the province is very low, due to its mountainous and inaccessible terrain. Infrastructure and industry are therefore also located in low lying coastal areas. During the Vietnam War heavy fighting took place in TTHP. There is not one other province in the country where more US soldiers died during the war. Today, the tourism industry is rapidly growing in the province. This is mainly due to the attraction of Hué as cultural destination (ICEM, 2003, B).

In the south part of TTHP is Bach Ma National park (BMNP) located. This protected national park was established in 1991 and is categorized as a ‘special-use forest’, meaning that its function is to ensure natural development and conservation of biodiversity and landscapes. BMNP is structured in three zones: a core protection zone, an ecological restoration zone and an administrative zone. The core protection zone covers the largest part of the national park and was in 2008 extended from 22,000 ha to 37,000 ha. BMNP is ‘owned’ and managed by the General Forestry Department, which is part of the Ministry of Agricultural and Rural Development (MARD). The national park is surrounded by a buffer zone, which is not a part of the park. The core protection zone of BMNP is one of the richest areas in biodiversity in Asia, providing habitat for endangered ‘high profile conservation’ species, like the red-shanked douc langur and giant muntjac (Yen et al., 2005). Figure 13 provides an overview of BMNP and the surrounding buffer zone, which administratively ‘belongs’ to three districts: Phu Loc and Nam Dong in TTHP, and Hoa Vang in Quang Nam province. Yen et al. (2005, pp. 2-3) explain that that the buffer zone districts represent different topographic features and environmental conditions:

“Phu Loc forms the northern and western part of the buffer zone and includes mainly lowlands which are used for agriculture and aquaculture along a narrow strip along the Tam Giang-Cau Hai Lagoon system. There are also some upland areas where limited land for cultivation and poor soil conditions prevail. Nam Dong is a land-locked district and covers the southwestern section of the buffer zone. The district is located in a zone between the ridge of the Central Annamites and the coastal plain, and consists of a range of undulating hills less than 300 m in altitude. The average slope inclination is 15°-25°. There are patches of natural forest, grassland and bare hills, mixed with plantation forest (mainly Acacia and Eucalyptus reforestation plots) administered by State Forest Enterprises. The Hoa Van district forms the south-eastern edge of the buffer zone and this landscape is typically composed of smoothly rounded hills, covered by large areas of natural forest, and separated by narrow valleys.”

Figure 13 Bach Ma National Park and buffer zone



Yen et al. (2005, p. 2).

The three districts that are located inside the buffer zone of BMNP are inhabited by rural forest-based communities. The establishment of the national park has had an impact on the livelihoods of these communities, as their access to forest resources, including NTFPs, has become severely restricted. The two communities under research are also located inside the buffer zone. One community is located in Phu Loc district and the other in Nam Dong district.

2.3.1. Poverty

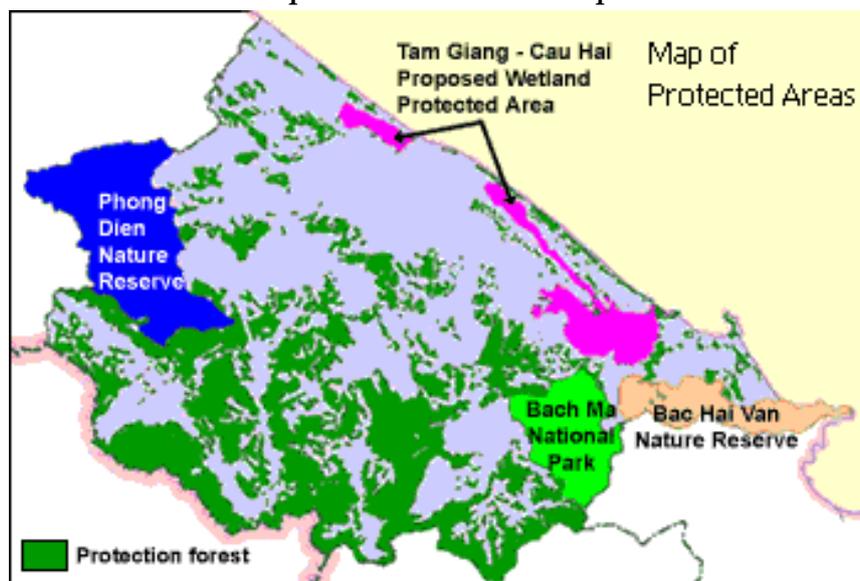
Thi (2009, p. 22) identifies the North Coastal Central Region of Vietnam, of which TTHP is part of, as one of the poorest regions in the country. The province's gross domestic product (GDP) in 2000 was approximately \$240 US Dollar (at current prices in 2000), which was significantly lower than the average of Vietnam as a whole (\$ 370 US Dollar). It can therefore be assumed that economic development and poverty alleviation in TTHP has been slower than in other provinces of Vietnam (ICEM, 2003, B). In 2002 the Centre for International Economics performed a poverty headcount in all provinces of Vietnam. The results of this research show that 47.2% of the total population of TTHP in 2001 lives below the national poverty line, which accounts for about 493.200 people. The national poverty line is the minimum level of expenditure required to satisfy basic nutritional and other needs. The Vietnamese poverty line is based on the equivalent of 2.100 Kcal per person a day. Poverty incidence is much higher in rural areas (57.9%) than in urban areas (18.5%). Highest incidence of poverty is to be found in western mountainous part of the province, which borders with Lao PDR. The Annamite Mountain Range is located directly on the border between the western part of TTHP and Lao PDR. This mountainous area is also the home of many ethnic minority groups.

2.3.2. Forest land allocation

As TTHP was at the heart of the Vietnam war, ‘Agent Orange’ and many bombs have had a destructive impact on the size and quality of forest cover in the province. In addition, over-exploitation of SFE’s and unsustainable agricultural practices (like rotational swidden cultivation and slash-and-burn practices) have further decreased size and quality of forest cover in the second half of the 20th century. The dramatic reduction of forest cover has led to rapid implementation of FLA policies after 1994. After Dak Lak province, TTHP was the second province of the country that experimented with FLA. Where in Dak Lak most forestland is officially allocated (i.e. government-introduced) to communities, in TTHP only parts are officially allocated to communities, because some forest areas have been managed in traditional community management systems long before the implementation of official FLA. In sub paragraph 2.2.3. it is explained that forestland that is allocated to communities or (groups of) households can consist out of two types (natural forests and forestry land). Thi (2009, p.22) explains that there are currently 188.144,4 ha of forestland managed by local communities or (groups of) households in TTHP, which represents 8,01% of the total amount of forestland allocated to communities or (groups of) households in Vietnam. That same paragraph also explained that there are three different classification types of forestland: special-use, protection and production.

In 2003, there were five protected areas in Thua Thien Hue Province, that can be categorized as special-use forest or marine protected area (see figure 14). About 28% of the total surface area of the province was then categorized by law as protection forest (ICEM, 2003-B). Thi (2009, p. 22) furthermore states that: “From 1997 to 2002, 14,229 households were allocated forestry land amounting to 18.085,2 ha and 4.800,2 ha of natural forest were devolved to villages for management.” She also found out that almost all allocation of natural forests and forestry land was done through programme or project funding arrangements, like the global Programme on Forests (PROFOR) and the Project of Netherlands Development Organization (SNV) for Thua Thien Hue province (FORHUE-SNV).

Figure 14 Overview of protected forests and special-use areas in TTHP



(ICEM, 2003, B)

2.3.3. Tourism development

TTHP offers several tourist attractions. The main attraction of the province is Hué city, which has been the capital of Vietnam during the Tay Son and Nguyen dynasties. The partially-restored citadel in the heart of the city is declared as a UNESCO World Heritage Site. This is a high quality label that attracts (international) mass tourism. There are also ancient (emperor) tombs located upriver from Hué on the Perfume River. In addition, to this cultural heritage, TTHP offers a variety of natural attractions, like beaches, wetlands, nature reserves and BMNP. In 2000, TTHP attracted 470.000 visitors, of which 195.000 were international tourists and 275.000 were Vietnamese (ICEM, 2003, B). In 2008, TTHP attracted slightly over 1.1 million visitors, which represents an annual growth of 25.4% compared to 2007. Nearly half of these 1.1 million visitors were international tourists (535.000), which represent an annual growth of 32.5% compared to 2007 (Vietnam News Agency, 2009). According to the vice-director of the national park, BMNP yearly attracts about 15.000 visitors. Currently the park is closed for tourists however (until the end of 2012) as the main road that leads to the top of Bach Ma Mountain is under construction (in-depth interview key informant, 2011).

2.4 Research areas

The research has taken place in two rural communities, in which subsistence agricultural practices dominate, meaning that most households support their livelihood by farming, forestry and livestock. As explained in the theoretical framework, a ‘community’ refers in this research to all the households of a village population. The name of the first research community is *Thuy Dong village*, which is part of Loc Tién commune and Phu Loc District. The name of the second research community is *Doi village*, which is part of Thuong Lo commune and Nam Dong district. Appendix 3 provides an overview of TTHP, which includes the location of both districts and communes.

Both research areas are characterized by a high vulnerability context, as annual extreme weather conditions cause significant threats to livelihoods. The climate of the area is regulated by two monsoon seasons (winter and summer) and by its location that is in between the South Chinese Sea and the two forested mountain ranges of BMNP and the Annamites. The area is therefore the wettest areas of Vietnam. Every year the winter monsoon season (October – March) brings in heavy rain and storms (and sometimes even typhoons). During this season it is not uncommon that floods occur. Figure 15 gives an indication of the impact of floods in TTHP in the period 1990-2000. The flood of 1999 shows that the costs of ineffective flood mitigation can be extremely high, as 373 people were killed and economic damage exceeded \$100 million US Dollar. The summer monsoon season (May – October) brings hot and humid weather which causes occasional droughts. In more recent years, both communities have experienced continued weather-related livelihood threats, such as the devastating typhoon of 2005, which destroyed large parts of agricultural crops, tree plantations and the natural forest.

Figure 15 Death and economic loss as a result of floods



2.4.1. Phu Loc district, Loc Tiên commune and Thuy Duong village

Phu Loc district largely consists out of lowlands that are used for agriculture and aquaculture. The few upland areas in the district are characterized by limited land for cultivation and poor soil conditions (Yen et al., 2005). The total surface area of Phu Loc district is about 72.956 ha. Nearly 50% of this area is classified as forestland (34.779, 50 ha), consisting out of natural forest and forestry land. Loc Tiên commune is located in the Eastern part of Phu Loc district (at the South Chinese Sea) and in the North-east part of the buffer zone of BMNP. Accessibility to the commune is good, as the commune is located along the national highway No.1, about 60 km from Hué. There is no elevation in the commune, which consists out of eight rural villages (Thi, 2009). The total surface area of the commune covers about 5.724 ha. Nearly 60% of this area is classified as forestland (3.404,90 ha). The distribution of forestland in Loc Tiên commune is as following:

- Special-use: 30 ha
- Protection: 675 ha
- Production: 2.699,9 ha of which 1.783 ha is ‘natural production forest’ and 916,9 ha is ‘planted production forest’ (see page 39)

(In-depth interviews with key informants, 2011)

The research community of Thuy Duong village consists out 186 households, which accounts for 567 people. All of them are of Kinh (Vietnamese) ethnicity. Swidden cultivation is something that never happened within this community. Rice cultivation is the main source of livelihood support for most households living in the village. Insights into other sources of livelihood support are presented in chapter 5. The village is categorized by the village and commune leader as a poor village because many households are officially registered as ‘extremely poor’ or ‘poor’ at the local

commune government. Chapter 4 will provide more in-depth information about the poverty level of the community.

Thuy Duong is located inside the buffer zone of BMNP. The location of the village is however rather far away from the park and its strictly protected zone (about 15 km). Due to this distance, the community is not directly dependent on the natural resources of BMNP. The establishment of the national park in 1991 therefore did not significantly influence the livelihoods of the research community.

2.4.2. Nam Dong district, Thuong Lo commune and Doi village

Nam Dong is a land-locked mountainous district that is situated inland compared to Phu Loc district. The total surface area of Nam Dong district is about 65.194 ha. Nearly 90% of this area is classified as forestland (57.352 ha), consisting out of natural forest and forestry land. Thuong Lo commune is located in the eastern part of Nam Dong district and in the North-west part of the buffer zone of BMNP. The commune is located about 55 km from Hué and can only be reached by a treacherous mountain road, of which parts are not more than a dirt road. Thuong Lo commune consists out of four rural villages that are located in a valley, about 150 meters above sea level (Thang, Shivakoti and Inoue, 2010). The total surface area of the commune covers about 10.769 ha. Here again, about 90% of this is forest land (9.377,40 ha). The most recent data (2007) on the distribution of forestland in Thuong Lo commune is as following:

- Special-use: 3.073,0 ha
- Protection: 4.339,7 ha
- Production: 1.964,7 ha

(In-depth interviews with key informants, 2011)

The research community of Doi village consists out of 176 households, of which 133 are registered at the local commune government as ‘able to work’. All of them are of Katu ethnicity (minority). Rotational swidden cultivation is something that was practiced by the Katu population for generations. Nowadays swidden cultivation is not happening anymore. After the Vietnam War, the community gave up its mobile lifestyle and chose for fixed settlement and a sedentary agricultural lifestyle at the edge of the natural forest. Just as in Thuy Duong, rice cultivation is the main source of livelihood support for most households living in the village. The village is categorized by the village and commune leader as ‘extremely poor’, as many households are officially registered as ‘poor’ or ‘extremely poor’. More information about the poverty level of the community is presented in chapter 4, while chapter 5 provides more insight into other livelihood sources that are important to households.

Doi village is also located in the buffer zone of BMNP. The location of this village is however extremely close to the border of BMNP and also to the strictly protected zone of the park. The establishment of the BMNP in 1991 has severely restricted access to forest resources for households in Doi. The protected status of the national park does not allow local people to access these resources. Before the forest area got this protected status, community members made use of the available forest resources for livelihood support

2.5 Conclusion

This chapter has presented the main themes of the research on different scale levels: national, provincial, local. The national level introduced Vietnam as a country. It has become clear that although Vietnam has experienced significant economic growth and poverty alleviation since the introduction of the (*Doi Moi*) economic reform policies in 1986, the country remains one of the poorest countries in Southeast Asia today. Poverty incidence is much higher in rural areas than in urban areas. In 2008, 74% of the total population was living in rural areas, it can therefore be concluded that many million Vietnamese people face (severe) poverty every day. Poverty incidence is the highest in remote and forested mountainous areas, which are commonly inhabited by ethnic minority groups. People living in these areas experience extreme poverty and are living further below the national poverty line. In many cases, livelihood survival of these people is directly dependent on natural (forest) resources. Availability of, and access to these resources is therefore of paramount importance. Due to dramatic deforestation rates in the second half of the 20th century and the increase in numbers of protected national parks (since 1986), forest-based people now face severely restricted use of forest resources for livelihood support in many areas of Vietnam. As a solution to this problem, the Vietnamese government decided to change their top-down central forest management system into a decentralized management approach. Devolution of forest management has created new local authorities which are assumed to be better able to manage forestland than central government authorities. Since 1994, FLA policies are being implemented all over Vietnam, meaning that forestland is allocated to communities and (groups of) households for management (conservation) and use purposes. Forestland that is allocated to local bodies can consist out of natural forest and forestry land (for timber production). Natural forests are usually allocated to communities, while forestry land is usually allocated to individual households or groups of households. Forestland in Vietnam is classified into three types, based on their major use purpose: special-use forests, protection forests and production forests. The introduction of the *Doi Moi* policies also marked a change in tourism development. The result of the new liberal market economy was that the tourism industry experienced rapid growth through huge investments. Vietnam has a focus on nature-based and cultural heritage tourism, as the country offers many high-quality natural and cultural experiences to tourists.

The two research communities are located in Thua Thien Hué Province (TTHP), which is the most southern province of the North Central Coast region. This region is one of the poorest regions of Vietnam. Most of the TTHP's population lives in the low lying coastal plains in the east. The western part of the province is characterized by mountainous terrain, with low population density. Poverty incidence is much higher in this part of TTHP where many ethnic minority groups live. In the south part of TTHP is Bach Ma National Park (BMNP) located. This protected national park was established in 1991 and is classified as 'special-use forest'. This classification is based on the high biodiversity available within the park. The protected status however severely limits access to forest resources for local communities. The province is furthermore characterized by high deforestation rates. FLA policies therefore were soon implemented after 1994. Tourism development in TTHP has been booming in the last two decades. Currently, over 1.1 million visitors annually visit the province for its natural and cultural attractions. BMNP annually attracts about 15.000 visitors.

The research has been carried out in two rural communities that are located in the southern part of TTHP. The community of Thuy Duong is part of the bigger Loc Tien commune and Phu Loc district. The community of Doi is part of the bigger Thuong Lo commune and Nam Dong district. Subsistence sedentary agricultural practices dominate in both communities, while rice cultivation is the main source of livelihood support for most community members of Thuy Duong and Doi. According to Sunderlin's (2005) categorization of forest livelihoods, both communities can be categorized as 'sedentary agriculture at the forest frontier' (see p. 22). Both research communities are characterized by a high vulnerability context. Annual extreme weather conditions commonly destroy (parts of) the agricultural crops that are cultivated, causing a significant threat to livelihoods. In contrast to the similarities between the two research communities, there are also several important differences to keep in mind. Table 4 provides an overview of the main differences.

Table 4 Main differences between the research communities

Characteristic	Thuy Duong	Doi
<i>Ecological zone</i>	Coastal	Mountainous
<i>Accessibility</i>	All year good	Less good, especially in winter monsoon season
<i>Number of villages in the commune</i>	8	4
<i>Number of households in the community</i>	186	176
<i>Average household size</i>	3,4 members	5,2 members
<i>Ethnic group</i>	Kinh (Vietnamese)	Katu
<i>Distance to BMNP and core protection zone</i>	Far away (about 15 km)	Close (within 5 km)

(In-depth interviews with key informants and household interviews, 2011)

To analyze poverty levels and the impacts of FLA and tourism development on livelihoods it was decided to perform a comparative research between the two selected communities. The next chapter explains the methodology that is used for this comparative study.

Chapter 3 Methodology

3.1 Introduction

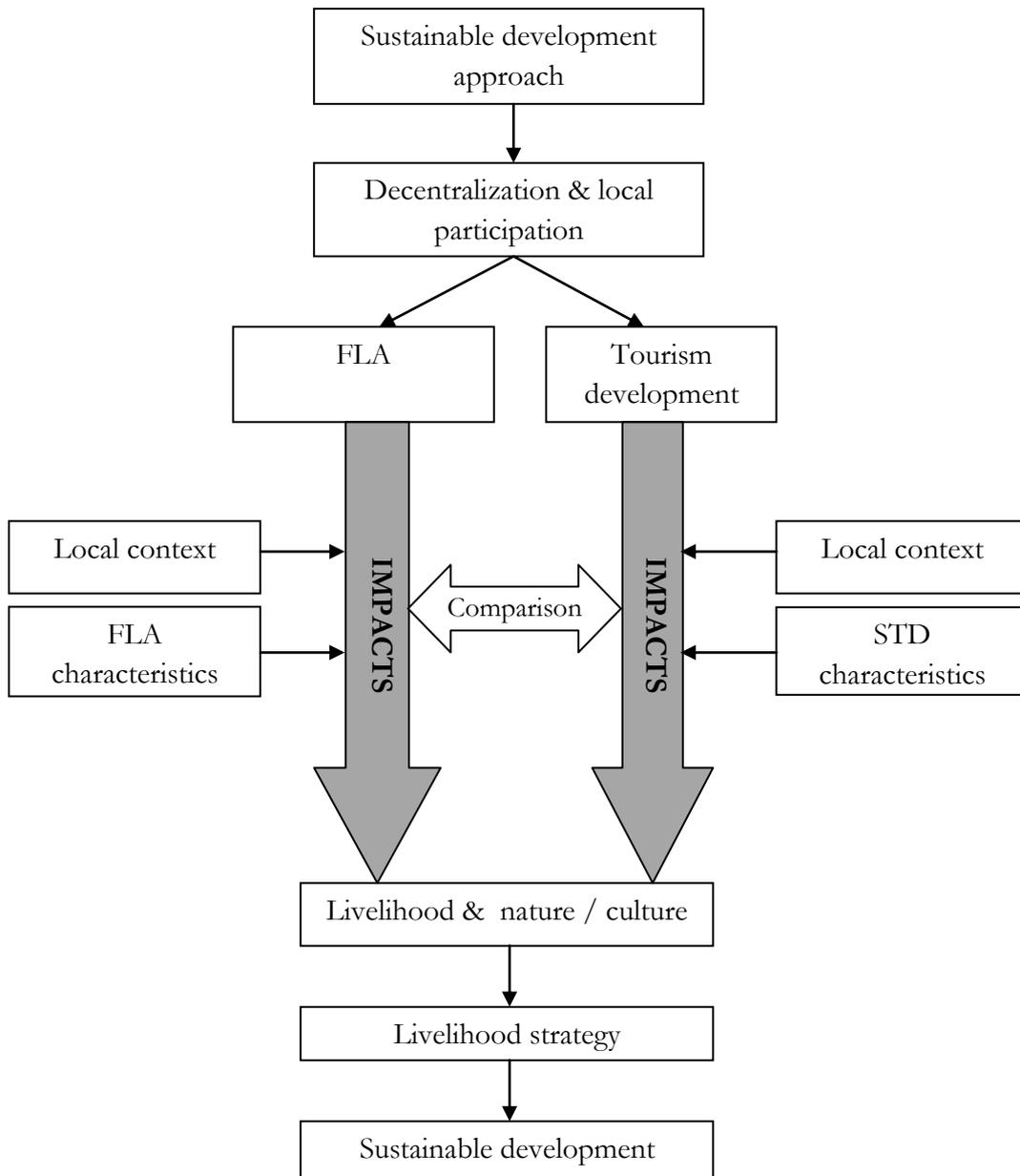
This chapter explains the methods that are used for the research. Paragraph 3.2 present the conceptual model, which stands at the base of the research. Paragraph 3.3 operationalizes the main concepts of the research (poverty and livelihood impacts) into measurable variables. Paragraph 3.4 first presents the research objectives and then the research questions, which are based on the conceptual model. The methods of data collection and sampling are presented in paragraph 3.5, while the limitations and strengths of the research are presented in paragraph 3.6. Finally, paragraph 3.7 lists the main conclusions of this chapter.

3.2 Conceptual model

A conceptual model is a simplification of reality. The model shows the focus of the research, what is being analyzed, and how the main concepts interact with each other. The model also presents information on factors that have the power to influence (development) outcomes. Figure 16 (on the next page) presents the conceptual model of this research.

The conceptual model starts with the sustainable development approach that arose from the mid-1970s. Since then, the idea of *another development* came to rise and top-down government policies became more and more replaced by local bottom-up governance. Decentralization and local participation are two of the main concepts that characterize sustainable development. These two concepts are brought into practice by the implementation of FLA policies and the development of local tourism initiatives. According to the theoretical framework, both FLA and STD have the potential to stimulate livelihood improvement, while at the same time also stimulating nature or cultural conservation. There are however two important factors that have the power to influence the desired development outcomes: (1) the local context (actors and vulnerability) and (2) characteristics of implemented FLA policies (distribution of access to livelihood capitals) and tourism development (STD indicators). These two factors can enable or constrain livelihood improvement and nature or cultural conservation. A comparison of the impacts of FLA and local tourism development is also part of the research. Impacts of FLA and local tourism development on livelihoods can lead to changing livelihood strategies. Changing livelihood strategies can stimulate sustainable development.

Figure 16 Conceptual model of the research



3.3 Operationalization

Operationalization means that variables are strictly defined into measurable indicators. This paragraph explains how this is done in this research. There are two concepts that are measured in the research: poverty (level) and livelihood impacts. The definitions of both concepts are provided in paragraphs 1.4 of the theoretical framework. All indicators mentioned in this paragraph have been converted into questions that were asked to household respondents. Attachment 4 provides the complete list of interview questions.

3.3.1. Poverty

Poverty is a concept which consists out of several dimensions. In this research three of those dimensions are analyzed: education, living standard and income. The choice to analyze these three dimensions is based on the fact that is assumed that these three dimensions will provide a good ‘all round picture’ of the poverty level of the research communities. Education is important to poverty alleviation as it stimulates individual empowerment of people, which results in the strengthening of nations. It is recognized by the World Bank (2011-B) as one of the most powerful instruments to reduce poverty and inequality. Living standards are inextricably connected to the concept of ‘poverty’, as a households’ living standard provides valuable information about the severity of poverty. Income is an indispensable indicator when poverty is expressed in monetary terms, which has been the conventional way for a long time. The following table presents the indicators of the selected poverty dimensions.

Table 5 **General poverty indicators**

POVERTY DIMENSIONS	INDICATORS
Education	- Educational level (grade)
Living standard	- Access to basic services (electricity, running water and toilet) - Access to food and prevalence of hunger - Perception on household poverty
Income	- Ability to pay for school tuition fees - Ability to pay for healthcare - Savings

3.3.2. Livelihood impacts

The livelihood approach is a relative new method to analyze (rural) household poverty and development. It encompasses more poverty aspects than just the financial (income) which has been the focus of conventional poverty research. A livelihood is largely characterized by its five capitals: human capital, social capital, natural capital, physical capital, and financial capital. People use these capitals to support their (household) livelihood. Analysis of the accessibility and use of the capitals provides an alternative and complementary look at poverty. This research therefore provides a deeper insight into the poverty levels of both research communities as it combines the general poverty indicators with the livelihood impacts. The impacts of both development

instruments (FLA and tourism) on the livelihood capitals is measured by analyzing the changes in the selected indicators, which are provide in table 6.

Table 6 Indicators for livelihood impacts

LIVELIHOOD CAPITALS	INDICATORS
Natural	<ul style="list-style-type: none"> - Natural forest - Forestry land - Agricultural land - Rivers
Financial	<ul style="list-style-type: none"> - Income sources - Savings - Credit opportunities
Physical	<ul style="list-style-type: none"> - Roads - Schools - Health care facilities - Telecommunication networks - (Agricultural) markets
Human	<ul style="list-style-type: none"> - Skills - Knowledge - Ability to work
Social	<ul style="list-style-type: none"> - Social networks

The research concentrates on natural capital and financial capital. The choice to focus on these two capitals is based on the assumption that the impacts of both development instruments are the highest on these two capitals. The choice not to focus on physical capital is based on the fact that three of the conventional indicators of physical capital (water supply system, electricity grid and sanitation facilities) are already included in the general poverty analysis. The choice not to focus on human and social capital is made upon the assumption that it is almost impossible to completely analyze human and social capital in a short fieldwork period. To do this, one should first develop a relationship based on trust with the local community members. Although these three capitals (physical, human and social) are not the focus of the research, all available information on them is included in the result chapters.

It has already been explained that there are two important factors (local context and characteristics) that can influence the desired outcomes of FLA and tourism. The research therefore includes these two factors. Analysis of the local context of this research includes the actors and the vulnerability context. Analysis of the FLA characteristics includes the distribution of access to livelihood capitals, while analysis of the tourism characteristics includes the STD indicators, which are provided in table 7.

Table 7 Sustainable tourism development indicators

SUSTAINABILITY DIMENSIONS	INDICATORS
Environmental sustainability	<ul style="list-style-type: none"> - Changes in the quality of the natural environment (biodiversity richness and availability of NTFPs) - Protection and management of the natural environment
Socio-cultural sustainability	<ul style="list-style-type: none"> - Social relations: bonds and conflicts between community members - Feelings of unity - Cultural heritage conservation (protection and/or re-vitalization)
Economic sustainability	<ul style="list-style-type: none"> - Increased income opportunities - Distribution of economic benefits among community members

3.4 Research objectives and questions

The research knows two objectives:

1. To gain an insight into the household poverty levels of both research communities. This aim can be summarized into the following question: *How poor are households living in Thuy Duong and Doi?*
2. To gain an insight into the livelihood impacts that are caused by the implementation of FLA policies and tourism development in the research communities. This aim can be summarized into the following question: *Do FLA and tourism stimulate livelihood improvement and nature or cultural conservation in Thuy Duong and Doi?*

The following research questions are directly derived from the above mentioned research objectives. The main research question gives an answer to the question, whether or not local development has taken place through the implementation of FLA polices and the development of tourism in the research communities. The main research question is:

Do forest-based households experience livelihood improvement through the implementation of Forest Land Allocation policies and the development of tourism in the communities under research?

To be able to study this, the following sub-research questions were formulated:

1. What are the poverty characteristics of households in the communities under research?
2. What are the environmental, socio-cultural and economic impacts of the implementation of FLA polices on the livelihoods of the research communities?

3. What are the environmental, socio-cultural and economic impacts of tourism development on the livelihoods of the research communities?

3.5 Research methods

This paragraph explains the methods that are used to provide an answer to the research questions. Methods used in development research to collect data can conventionally be divided into quantitative, qualitative and participatory research methods. The traditional divide between these three research methods however has become less clear. Most development research nowadays makes use of an integrated approach. Hulme (2007, pp.2-3) states that: “in development studies there is an emerging consensus that combined approaches and ‘mixed methods’ can create knowledge that is more socially useful and can contribute to more effective policy.” This research therefore has also integrated the three methods. Table 8 presents the research methods that have used to make sound conclusions about the household poverty levels and the influence of FLA and tourism development on livelihoods in the research communities. These communities have already been presented in the previous chapter.

Table 8 **Used research methods**

Qualitative	Quantitative	Participatory
Household interviews (N=48)	Household interview (N=48)	Focus group discussions (N=2)
In-depth interviews with key informants (N=18)		Land mapping (N=2)
		Transect walk (N=1)
		Participatory observation (3 months field research)

3.5.1. Qualitative data collection

Qualitative data collection consisted out of (semi-structured) household interviews and in-depth interviews with key informants. The choice to use semi-structured interviews is based on the fact that this type of interview covers the most important themes, while it also provides respondents with the opportunity to bring up their own ideas and thoughts, and thereby generating additional information to the research (Desai and Potter, 2010).

The household interviews have been conducted among 48 household respondents in total. In Thuy Duong, 25 household have been interviewed, which represents about 13% of the total household population of the community (186 households). In Doi, 23 households have been interviewed, which also represents for about 13% of the total household population of the community (176 households). Households have been randomly selected to participate in the

research. Random selection was used because there was no opportunity to select households from a sample frame (list of all households belonging to the community), and because there were only limited options to interview households. Limited options were caused by the fact that most (elderly) members of households work during the day time on their agricultural or forestry land and because of the extreme weather conditions (and less accessibility) during the fieldwork period. Due to these limited options it has been impossible to interview more households in the short fieldwork period. It is therefore important to keep in mind that the household findings cannot simply be generalized to the bigger community, as the research sample might not be large enough to represent the whole community. The research therefore only makes assumptions about the poverty levels and the livelihood impacts of FLA and tourism in both communities. The household interview is added in appendix 4.

The qualitative part is complemented by in-depth interviews with key informants. Appendix 5 provides an overview of the interviewed key-informants. The choice to conduct in-depth interviews was made because these type of interviews provide additional information on the main themes of the research. This method also provided an opportunity to compare the views and opinions of households with those of government officials. The selection of the key-informants was based on the expected information that these people could provide. For the research it was necessary to obtain basic FLA and tourism development information from the district and commune government. Government officials that are (officially) responsible for the implementation and management of FLA and tourism development have all been interviewed.

3.5.2. Quantitative data collection

A small part of the household interview consists out of (closed) quantitative questions. These questions were used to analyze the poverty levels of the interviewed households, by applying statistical analysis. The choice to use quantitative data collection is based on the fact that one of the goals of the research is focused on the generation of numerical data: *How poor are households living in Thuy Duong and Doi?* Appendix 4 shows that the questions 16 until 24 are used to analyze the general poverty level of the interviewed households.

3.5.3. Participatory data collection

Four different methods of (qualitative) participatory data collection are used in the research: focus group discussions, land mapping, transect walk and participatory observation. The choice to use participatory focus groups discussions was made in order to double-check the general conclusions that were generated from the household interviews. While the household interviews focused on the individual, the focus group discussions provided an insight into the community as unit of analysis. Focus group discussions have provided valuable alternative information that is used to improve the reliability of the main conclusions of the household interviews. In Thuy Duong, 8 community members participated in the focus group discussion, while in Doi, 6 community members participated. It was not allowed to select village members freely. Selection of participants was in both communities done by the community leaders. Although this can have created bias, it has been impossible to organize a focus group discussion without the approval and involvement of the village leader. In addition, after the focus group discussions, the participants of both communities have drawn a map of the village. This map shows the village lay-out, the use of land (agricultural, natural forest, forestry, infrastructure) and all other relevant

features that are considered to be important for livelihoods in the research communities. Appendix 6 presents the participatory maps and the drawers of it. Another research method that has been used to understand community livelihoods is a ‘transect walk’. After a conversation with the village leader of Doi, he voluntarily offered to walk from the village to the natural forest. During this walk he pointed out which areas are used for which purposes within the village. The transect walk provided valuable information about the location, size and quality of agricultural land, forestry land and natural forest. The transect walk also included a visit to the tourism area of the community. Finally, participatory observation has proven to be an essential and indispensable research method. Due to many visits to both communities, an overall idea of household poverty levels and livelihoods sources has emerged.

Figure 17 Focus group discussion in Doi



(Picture taken by Johan à Campo, April, 2011)

3.6 Limitations and strengths

In both research communities there are so called ‘gatekeepers’ (Desai and Potter, 2010, pp. 147-148) present, who’s permission is needed in order to perform research there. Gatekeepers in my research were the community and the commune leaders. Whereby the community leader is directly appointed by the village members, the commune leader is appointed by the district government. The community and commune leaders of both research villages have been cooperative, but only after paying them some regular ‘cooperation fees’. Without these fees cooperation and permission would have been denied, and it would have been impossible to perform the research. Now follow some other limitations and strengths of the research:

Limitations:

- All interviews have been conducted with an interpreter. The use of an interpreter will always result in (partial) loss of information.
- In Doi, many elderly people do not understand the Vietnamese language. These people only understand their traditional Katu language. As my interpreter does not speak Katu, it has been impossible to include these people in the household survey.
- In Doi, the first 10 respondents of the household interviews were selected by the village leader, which can have created (some) bias. The other 13 respondents were randomly selected.
- Cooperation of government officials at commune and district level has only been possible through regularly paying them some small (unofficial) fees. Even with this 'incentive' government staff has been very suspicious towards the research and has very cautiously responded to questions. In some cases, the household interviews and the focus group discussions pointed out that, government officials responded with incorrect and 'politically correct' answers.
- It has been impossible to interview any tourists in both research communities, because of extreme cold and wet weather conditions. Normally these extreme conditions last until the end of January, but this year February and March were also characterized by them. Both communities therefore did not attract any visitors during my fieldwork period.
- It has also been impossible to interview tourists that visit BMNP. Until the end of 2012 the park is closed, due to the construction of a new road that leads from the park entrance to the top of Bach Ma hill.

Strengths:

- Bias was diminished by including both old and young, men and women, and poor and less poor respondents in both research communities. In addition, the research also includes households, which live further away from the main tarmac road.
- The household interviews have been conducted on different times during the day (in between 08.30 a.m. and 16.30 a.m.) in order to include also people that work daily on their land. The main livelihood activities of the population of both communities are located at the edge of the village. Most of people therefore return to their homes around noon to have lunch and to rest. Many respondents were interviewed during this period.
- Only one household has refused to cooperate in the household interviews, all others have been very willingly to participate in the research, no doubt due to the incredible enthusiasm of my interpreter and the kindness of the respondents of both research communities.

3.9 Conclusion

Chapter 3 explains the methodology that is used for the research. The conceptual model in the beginning of this chapter is based on the information presented in the theoretical framework. It shows the main themes and concepts of the research and their relationships. According to the theoretical framework, both FLA and STD have the potential to stimulate livelihood improvement, while at the same time also stimulating nature or cultural conservation. The local context (actors and vulnerability) and the characteristics of FLA implementation (distribution of access to livelihood capitals) and tourism development (STD indicators) are recognized as important factors that have the power to influence these desired development outcomes.

The research aims to measure household poverty levels and livelihood impacts, which are caused by FLA implementation and tourism development. Household poverty is operationalized by three poverty dimensions, which together provide a ‘rich picture’ of the poverty levels of households living in Thuy Duong and Doi. Livelihood impacts are operationalized by the five livelihood capitals. Each livelihood capital is measured by several indicators, but the focus of the research is on natural and financial capital indicators. The local context and the characteristics are also part of the analysis.

The main research question is: Do forest-based households experience livelihood improvement through the implementation of Forest Land Allocation policies and the development of tourism in the communities under research? To answer this question, the research makes use of an integrated approach, meaning that qualitative, quantitative and participatory research methods have been performed. The largest and most time consuming part of the research consisted out of 48 semi-structured household interviews, which have been randomly selected from the two research communities. These interviews included a small quantitative baseline survey and a larger qualitative part, which was partly used to explain the poverty figures. The (qualitative) participatory methods that have been used are: two focus group discussions, two participatory land map activities, one transect walk in Doi and three months of participatory observation.

The previous three chapters have provided the background information on the research. First, chapter one has presented all relevant theories and concepts, related to the research. Second, chapter two has explained the relevant themes of the research, in relation to their scale level. This chapter also presented the two research communities (Thuy Duong and Doi) and their main characteristics. Finally, chapter has presented the research methods that were used to answer the three sub research questions and thereby also the main research question. The now following three chapters will deal with results of the research that has been performed.

Chapter 4 Poverty levels of the households under research

4.1 Introduction

This chapter is the first result chapter of the Master Thesis. The information presented in this chapter is the result of quantitative analysis of the selected poverty indicators. Paragraph 4.2 analyzes the poverty characteristics of the households of both research communities, based on the selected dimensions and indicators. At the end of each subsection the main findings are presented. Paragraph 4.3 summarizes these main findings and thereby provides an answer to the first sub-research question: *What are the poverty characteristics of households in the communities under research?*

4.2 Poverty characteristics

In the methodology it is explained that the concept of ‘poverty’ consists out of several dimensions. This research focuses on three of those dimensions: education, living standard and income. The following sub paragraphs present the main findings of these poverty dimensions for the research communities. The indicators that are used to measure the selected poverty dimensions are converted to questions that have been asked to household respondents in both research communities (see appendix 1).

4.2.1. Education

Although access to education is open for everyone and compulsory for primary age school children in Vietnam, poverty can constrain access to education. Several household respondents in Thuy Duong and Doi indicate that school tuition fees are a significant, and regular returning burden that threatens the livelihoods of community members. Whenever school tuition fees need to be paid these households turn to their social networks (neighbors, family and other community members) for financial support. During the interviews the respondents have been asked until which year and which grade they have attended school. Figure 18 and table 9 (on the next page) present the results of this question. Primary education is followed by children in the age from 6 to 10. Secondary education (1st cycle) is followed by children in the age from 11 to 14 and secondary education (2nd cycle) is followed by children in the age from 15 to 17. Higher education is followed by people over 18. Some interesting conclusions can be drawn from these figures. First, it is clear that in both research communities there are still people that did not follow any education at all. It must be kept in mind that these are elderly people that have experienced hardship during Vietnams struggle for independence. Their access to education was severely limited by violent conflicts (wars), and low development before the *doi moi* reforms. Second, the figures indicate that there is a difference in education level among both communities. In Thuy Duong, 44% of the respondents have followed secondary education (2nd cycle), while in Doi only 17% the respondents followed primary education. Although there is no evidence of this, it can be assumed that the overall educational level of the community members of Thuy Duong is higher

than that of Doi. Third, it is furthermore striking that none of the respondents has followed, are does follow higher education.

Figure 18 Educational level respondents in absolute figures (2011)

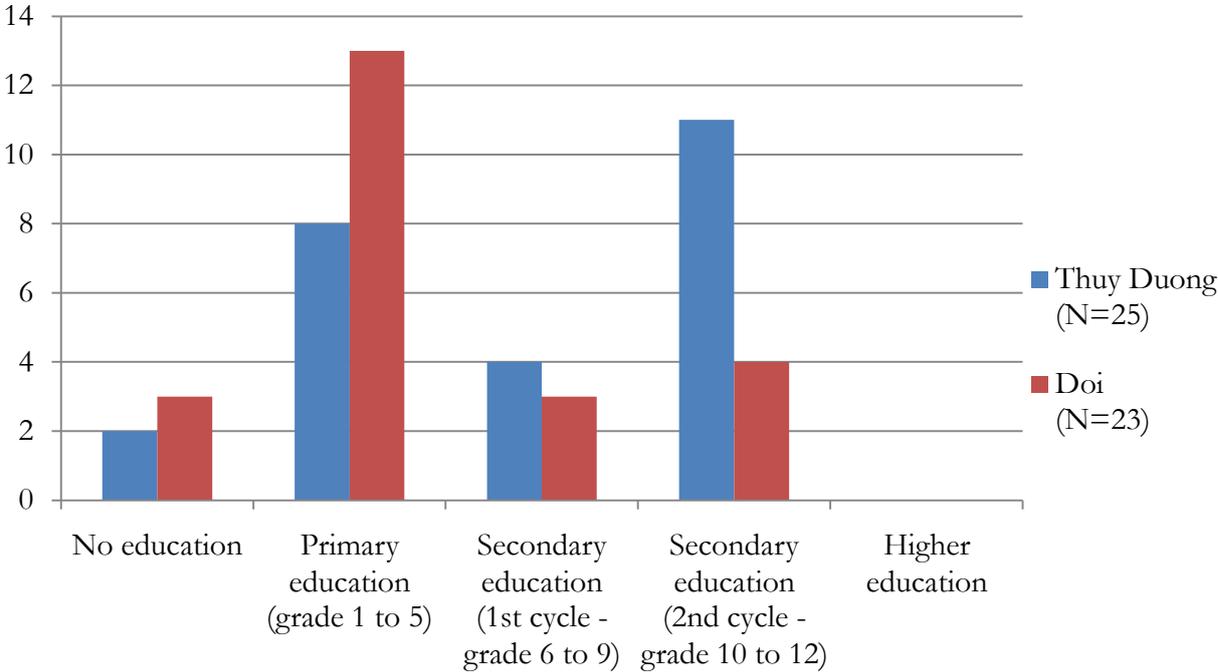


Table 9 Educational level respondents in % (2011)

	Thuy Duong (N=25)	Doi (N=23)	Average total (N = 48)
No education	8%	13%	10%
Primary education	32%	57%	44%
Secondary education (1 st cycle)	16%	13%	15%
Secondary education (2 nd cycle)	44%	17%	31%
Higher education	0%	0%	0%
Total	100%	100%	100%

4.2.2. Living standard

In paragraph 3.3.1. the indicators for living standard, which are used in this research, have been presented: access to basic services, access to food and the prevalence of hunger, poverty perception and official status. This paragraph analyzes these indicators and summarizes the main conclusions that can be drawn from it.

Access to basic services

In both research communities all interviewed household respondents indicate that their household has electricity available to them through an electricity grid. In Thuy Duong, 18 out of 25 households have running water, while in Doi, 19 out of 23 households have running water (83%). The running water system in both communities covers most homes, but some that are located at the edge of the villages are not connected to the system. The last indicator of access to basic services shows the biggest difference between the two communities. In Thuy Duong, 12 out of 25 households have a (simple) toilet (48%). In Doi, only 3 out of 23 households have a (simple) toilet (13%). Figure 19 and table 10 provide an overview of the research results.

Figure 19 Access to basic services in absolute figures (2011)

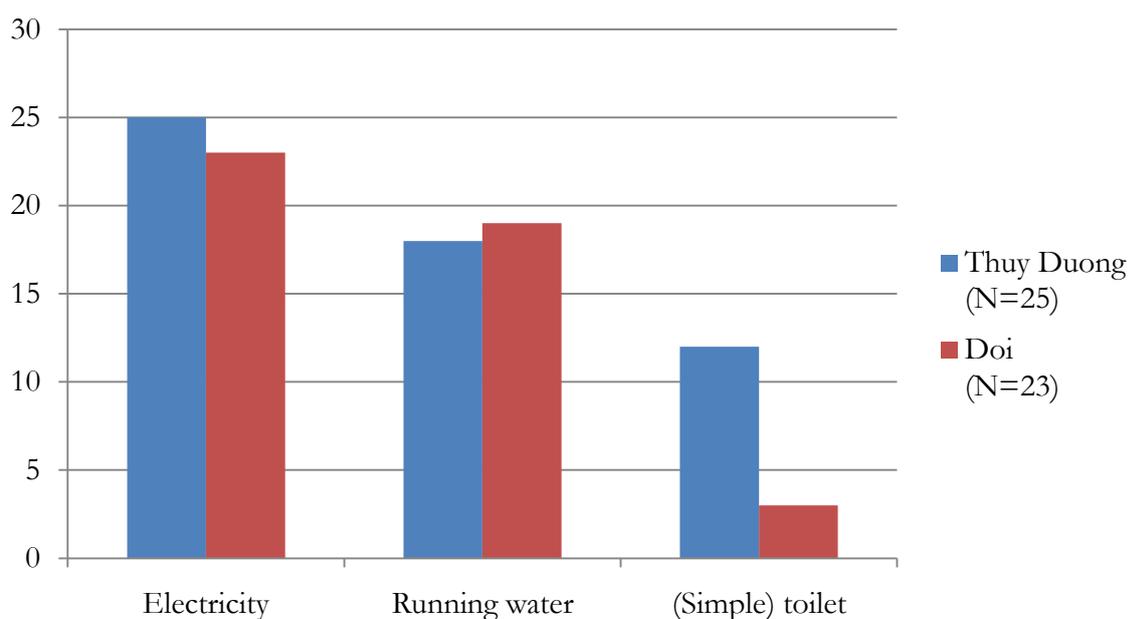


Table 10 Access to basic services in % (2011)

Basic service	Thuy Duong (N=25)	Doi (N=23)	Average total (N=48)
Electricity	100%	100%	100%
Running water	72%	83%	78%
(Simple) toilet	48%	13%	31%

Access to food and prevalence of hunger

To measure this indicator, the households were asked if they have enough food to support the whole household. Food is available to households by agricultural cultivation, by collecting it from natural forests (fruit, nuts, honey, game), or by buying it on the market. In Thuy Duong, 18 out of 25 households (72%) have enough food to support all members of their household. In Doi, only 5 out of 23 households (22%) have enough food to support the whole household. These figures indicate a large difference between both research communities. Due to the large difference, it might be assumed that access to food is more limited in Doi than in Thuy Duong. Prevalence of hunger is therefore also assumed to be a poverty characteristic that is more common to households in Doi than households in Thuy Duong.

Poverty perception and official status

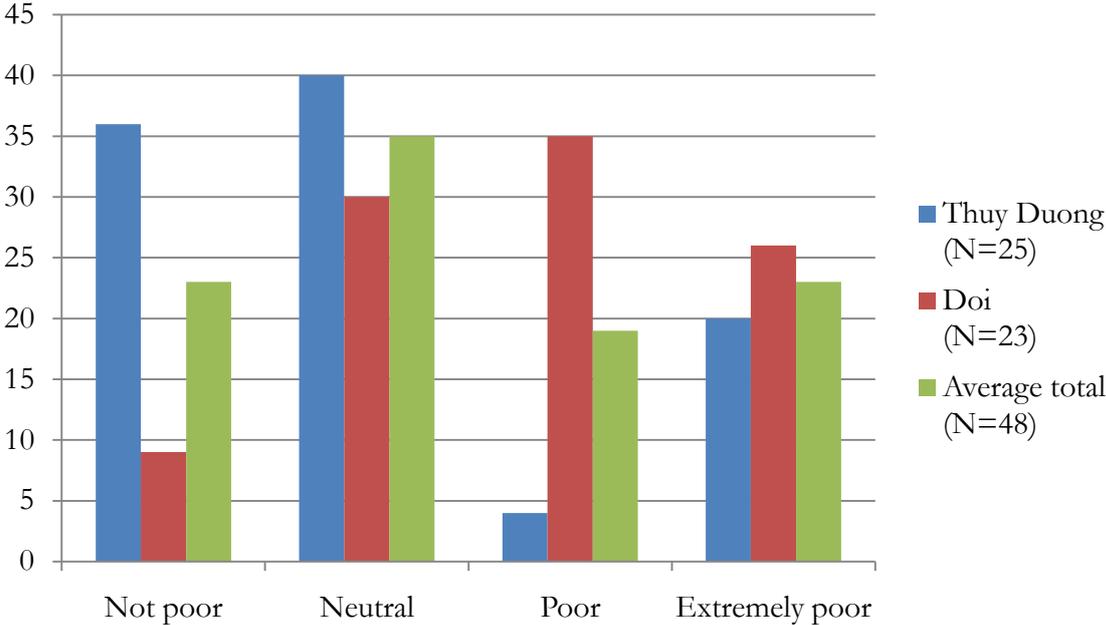
Household respondents have been asked to indicate the poverty status of their household, based on their own perception. Households thereby had the opportunity to choose from the following categories: 'not poor', 'neutral', 'poor' and 'extremely poor'. Table 11 and Figure 20 present the research results of this indicator for the total interview respondents.

Table 11 Household poverty perception (2011)

	Thuy Duong		Doi		Average total	
	<i>Abs.</i>	<i>%</i>	<i>Abs.</i>	<i>%</i>	<i>Abs.</i>	<i>%</i>
Not poor	9	36%	2	9%	11	23%
Neutral	10	40%	7	30%	17	35%
Poor	1	4%	8	35%	9	19%
Extremely poor	5	20%	6	26%	11	23%
Total	25	100%	23	100%	48	100%

According to the interview respondents, the household poverty perception is constructed out of several factors, like access to natural resources, access to income opportunities, social relations and the size of households. The results indicate that households in Doi label themselves moreover as 'poor' or 'extremely poor' than households in Thuy Duong. It is assumed that especially the large Katu household sizes are a dominant factor in poverty perception. Where the average household size of the Kinh respondents in Thuy Duong is calculated at 3.4 people, the average household size of the Katu respondents in Doi is 5.2 people. Although more household members mean more availability of labour, it also means that household income and food is shared among more people. The 'sharing' culture of the Katu community of Doi is an important factor that significantly impacts poverty perceptions, as chapter 5 and 6 will further explain.

Figure 20 Household poverty perception in % (2011)



The household poverty perception in the research communities is somewhat different from the official poverty status registration, which is performed by the local commune government. According to the official figures, poverty levels of both communities are nearly the same. Currently there are 41 households (22%) officially registered as ‘extremely poor’ and 24 households (11%) as ‘poor’ in Thuy Duong. In Doi, 31 households (18%) are registered as ‘extremely poor’ and 25 households (14%) are registered as ‘poor’. The official figures indicate that in both communities about one third of all households regularly deal with poverty. There is however a small distinction between the official poverty registration of households. In Thuy Duong, the classification ‘extremely poor’ is given to households that have a total income of less than 400.000 VND a month and the classification ‘poor’ is given to households that have a total income of less than 500.000 VND. In Doi, the classification ‘extremely poor’ is given to households that have a total income of less than 300.000 VND a month and the classification ‘poor’ is, just as in Thuy Duong, given to households that have a total income of less than 500.000 VND a month. Households that are classified as ‘extremely poor’ in Doi therefore are poorer than households in Thuy Duong that have the exact same classification.

Table 12 Comparison between poverty perception and official registration

	Thuy Duong		Doi	
	<i>Household perception</i>	<i>Official registration</i>	<i>Household perception</i>	<i>Official registration</i>
‘Poor’	4%	11%	35%	14%
‘Extremely poor’	20%	22%	26%	18%
Total	24%	33%	61%	32%

4.2.3. Income

The indicators that are used to measure the income dimension of poverty are: ability to pay for school tuitions fees, ability to pay for healthcare and savings. This paragraph presents the main conclusions that can be drawn from these indicators.

Ability to pay for school tuition fees

In Thuy Duong, 11 out of 25 households have enough money to pay for school tuition of children, belonging to that household. Six households indicate that they do not have enough money to pay for all their children's school tuition fees, while for eight households this poverty indicator is not applicable. This means that there are no school-going children present in the household. In Doi, 7 out of 23 households have enough money to pay for school tuition and 16 households indicate that they do not have enough money to send all their children to school. No households have been interviewed to which this criteria is not applicable.

Table 13 Ability to pay for school tuition fees in % (2011)

	Thuy Duong	Doi	Average total
Able to pay for school tuition fees	44%	30%	37%
Unable to pay for school tuition fees	24%	70%	47%
Indicator not applicable to household	32%	0%	16%
Total	100%	100%	100%

Ability to pay for healthcare

In Thuy Duong, 18 out of 25 households (72%) have enough money to pay for healthcare for all household members. In Doi, only 6 out of 23 households (26%) have enough money to pay for all household members their healthcare.

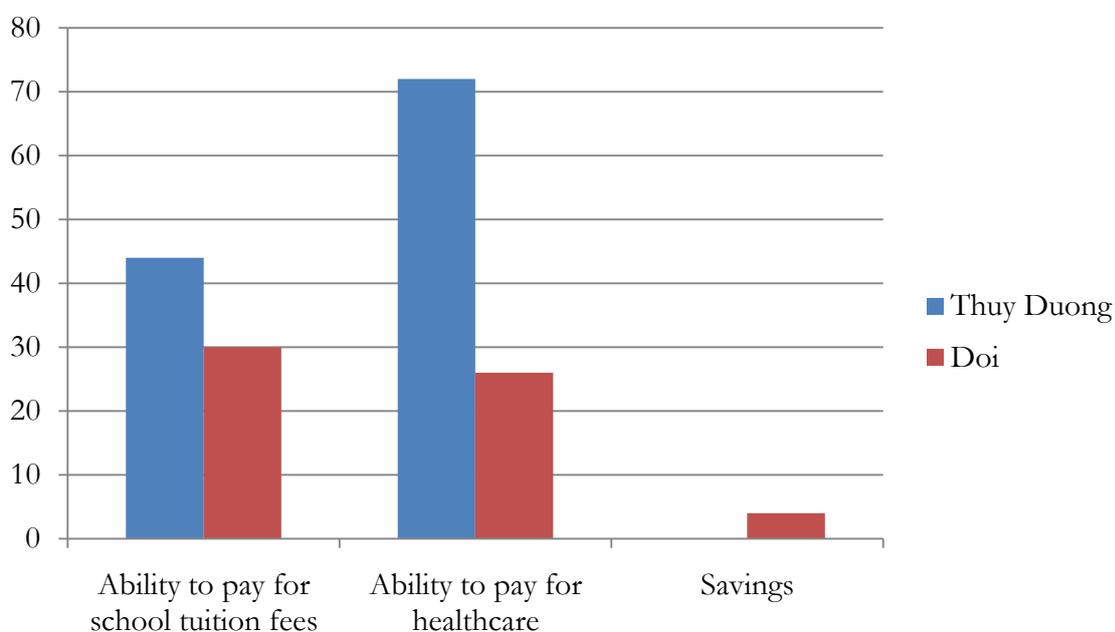
Savings

In Thuy Duong, none of the interviewed households have savings. In Doi, only one household has savings (4%). Although at the moment of research only one of the households has financial savings, some of the respondents (in both communities) indicate that savings are periodically generated through tree plantations on allocated forestry land. Once in a couple of years a substantial sum of money is earned by households from timber production. This money is used by households to sustain their livelihood in periods in between harvests.

Table 14 Indicators of income dimension (2011)

	Thuy Duong		Doi		Average total	
	<i>Abs.</i>	<i>%</i>	<i>Abs.</i>	<i>%</i>	<i>Abs.</i>	<i>%</i>
Able to pay for school tuition fees	11	44%	7	30%	17	35%
Able to pay for healthcare	18	72%	6	26%	24	50%
Savings	0	0%	1	4%	1	2%

Figure 21 Indicators of income dimension in % (2011)



The above presented figures clearly show that households in Doi have less money available to them to pay for school tuition fees and healthcare, than households in Thuy Duong. It can therefore be assumed that household members in Thuy Duong have more chances to get educated and health treatment than household members in Doi. It is striking that the average total of all three of the income indicators is exceptionally low, which confirms the statement of all respondents that the both research communities are characterized by high poverty incidence.

4.3 Conclusion

The information provided in this chapter presents a good insight into three important poverty dimensions: education, living standard and income. The figures clearly show that the interviewed households in Doi experience higher poverty levels than interviewed households in Thuy Duong. First, the education level of respondents in Thuy Duong is much higher than in Doi. Where in Thuy Duong 44% of the respondents had followed secondary education (2nd cycle), in Doi 57% of the respondents only had followed primary education. Second, the living standard of the population of Doi is also lower than that of Thuy Duong. Although the availability of basic services is nearly the same, with the exception of the availability of a (simple) toilet, the other indicators point out that household living standards in Doi are lower than in Thuy Duong. Access to enough food to support the whole household is limited in Doi. It is therefore assumed that the prevalence of hunger is a poverty characteristic that is more common to households in Doi than households in Thuy Duong. Households in Doi also label themselves moreover as 'poor' or 'extremely poor' than households in Thuy Duong. It is interesting that this household perception is different from the official government classification. According to this poverty registration system both communities share the same poverty level. Third, less households in Doi are able to pay for school tuition fees and healthcare (of all household members), than households living in Thuy Duong. The main conclusion of this chapter therefore is that the Doi community is poorer than the Thuy Duong community, based on the selected poverty indicators. This conclusion is confirmed by personal observations and in-depth interviews with local government officials. It also fits in with the conclusions of Müller, Epprecht and Sunderlin (2006, p. 11) that ethnic minorities tend to have made much slower progress in poverty reduction than ethnic Vietnamese people. The next two chapters explain the difference in poverty level between the two research communities.

Chapter 5 Implementation of Forest Land Allocation policies in the research communities

5.1 Introduction

This chapter presents the impacts of FLA on the household livelihoods of the research communities. It has already been explained that FLA policies have been implemented in Vietnam since 1994, as a reaction to alarming deforestation rates. Allocation of forestland can consist out of types: natural forests and forestry land. Forestry land is usually allocated to individual households, while natural forests are usually allocated to communities or groups of households. Where allocated natural forests can be classified as protection, special-use or production forests, allocated forestry land can only be classified as planted production forests, as explained in paragraph 2.2.2. Many (groups of) households and communities now got natural forest and forestry land allocated to them. The rationale behind this is that the protection and development of forestland can be better managed when it is in the hands of local people. FLA implementation also aims to stimulate local livelihood improvement, through the creation of (additional) income opportunities. In theory, allocation of natural forests and forestry land to local people increases livelihood security, as people now have legal rights to access (and use) NTFPs of the natural forest, and have the opportunity to earn income from timber plantations. This chapter presents the main characteristics of FLA implementation in both research areas and describes what impacts this is causing on the livelihoods of the research communities. It thereby provides a general inside into whether or not development is stimulated by FLA implementation. Paragraph 5.2 introduces the FLA characteristics of Thuy Duong, while paragraph 5.3 explains the impacts on the five livelihood capitals. Paragraph 5.4 and 5.5 present the same findings for Doi. Finally, in paragraph 5.6 the main findings of this chapter are presented and the second sub-research question (*What are the environmental, socio-cultural and economic impacts of the implementation of FLA policies on the livelihoods of the research communities?*)

5.2 Forest land allocation in Thuy Duong

The community of Thuy Duong has both natural forest and forestry land allocated to them. Natural forest has been allocated directly from the provincial government to the community in two cycles, as shown in table 15. 'PROFOR' stands for the Program on Forests, which is an international multi-donor partnership that focuses on conservation and management of forests in developing countries.

Table 15 Allocation of natural forest to the community of Thuy Duong

Year	Size	Project name
2001	512 ha	'PROFOR' project
2007	89 ha	'Community Forest'

The allocated natural forest is classified as protection forest, meaning that its use purpose is restricted to local communities, as environmental protection is the main objective of this type of forest. The location of the allocated natural forest is rather far away from the village, approximately ten kilometers. The quality of the natural forest is categorized as ‘poor’ by the district government. The Vietnamese government uses three quality categories for natural forests: ‘poor’, ‘medium’, and ‘rich’ (see p. 40). Forests are categorized mainly on the base off the quality and diversity of trees. Government officials, like the commune leader, the vice-commune leader, the vice-manager of forestry protection (FPU), and forest rangers (FPU) all indicate that biodiversity levels actually are not that important in quality categorization of forests. The most important factor to categorize the quality of natural forests is the money that it will regenerate after it is harvested. The natural forest is allocated to the community for a period of 50 years. If the quality and quantity of the forest in this period has increased, a part of it can be harvested and the community receives the income from that. In reality, it is however clear that forest cover (quality and quantity) has largely decreased in the last two decades. The interviews made clear that a huge amount of rare tree species, large trees, and NTFPs have disappeared due to (illegal) human activities in the community forest.

The responsibility for protection and management of the natural forest (total of 610 hectare) lies directly in the hands of the village community. The community however works closely together with the commune and district government to increase the change of sound management and protection. In reality, this means that forest rangers from the district FPU regularly patrol the forest. Together with the commune police they also daily check vehicles in the area for any illegally cut timber or poached animals. Within the village itself there are twelve (unpaid) volunteer guards. Four times a month these volunteers go on patrol to check the state of the forest (quality) and make sure no illegal activities are taking place.

Figure 22 Allocated natural ‘community forest’ Thuy Duong in 2007



(Picture taken by Johan à Campo, March, 2011)

The formal allocation of forestry land for plantation purposes to individual households started from 1994 onwards. In that year the Phu Loc district government allocated 1783 hectares of forestry land to the total commune of Loc Tién, which consists out of eight rural villages. The purpose of this allocation was that the commune government again allocated the available forestry land among households living in the commune. Exact figures on how much forestry land is available to the population of Thuy Duong village remains unclear as both commune and village leader indicate that these figures are missing because there is no distinct border between the villages of Thuy Duong and Thuy Tu. What is clear though, is that there is no more forestry land available for allocation to households in Thuy Duong, as all available land for this purposes is allocated already. Forestry land allocated to households is all classified as planted production forest, meaning that this type of forestland is used for tree plantations (and some NTFPs: fuel wood, animal forage and thatch for roofs and traditional hats), in combination with environmental protection.

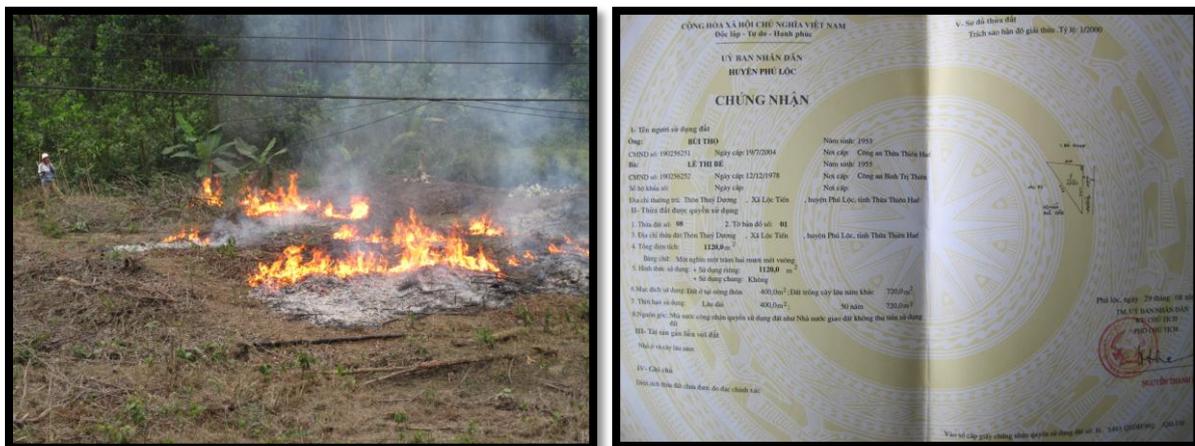
Allocation of forestry land to individual households living in the Thuy Duong community happens through the 'Agriculture Song Thuy Cooperative'. Although commune and district government officials deny that the cooperative is in charge of the allocation of forestry land, the household interviews and in-depth interview with the village leader of Thuy Duong make clear that the cooperation unofficially is in charge of all decision-making power. According to law the commune government should in fact be responsible for the allocation of forestry land. The commune government indeed also should obtain permission from the responsible district government department before allocation to households is allowed. The cooperative was established in 1979 with a primary task to divide agricultural land (rice) among households living in Thuy Duong and neighboring Thuy Tu. In 1979, the cooperative claimed all agricultural land available to the community. Land for growing annual crops (only rice) is from that year equally divided among households. The size of the allocated land is dependent on the household size. Large households therefore possess more land than small households. The 'Agriculture Song Thuy Cooperative' currently consists out of five members: manager, vice-manager, accountant, representative of Thuy Duong and a representative of Thuy Tu. Every five years a different member of the cooperative can become manager. At the end of a five year period the members decide which of them will be the next manager for a period of five years. Community members are not allowed to participate in this election.

The first experimental allocation of forestry land to households happened in 1986 and 1987 through the 'PALM327 Project', whereby the cooperation allocated forestry plots to households that either had to plant eucalyptus or pine trees on it. This community planting project was carried out in cooperation with a foreign non-governmental development organization, which name none of the respondents remembers. Planting of trees was encouraged by giving food (max. 1kg. rice / day) to these households and by promising them that 70% of the profit from the harvest would be for the participating households and 30% would go to the cooperative. In 1997 however, the cooperative logged all the timber, sold it on the market and divided the profit among cooperative staff members, without sharing anything of the profit with the households. This caused a huge conflict in the community, as all the households who had worked hard on their plots of forestry land for years in a row felt that they were betrayed. Because these voiceless people had no power at all and because the commune government backed the cooperative up,

they could do nothing. To lessen the conflict the (previous) manager of the cooperative promised the households that the cooperative would re-plant the whole area and that the profit of the next harvest would be equally shared between the cooperative and them. The villagers however were manipulated once again. While the manager made his promise to the community, he secretly already had promised most parts of the available forestry land to cooperative staff, commune government staff, and other more ‘powerful’ households that could afford to buy plots of forestry land. ‘Powerful’ refers to households that have more financial opportunities than the average household in Thuy Duong and/or households that maintain close and ‘friendly’ relationships with the cooperative or the commune government. Again, the community was powerless to do anything.

From the 25 households that have been interviewed, only 4 households are in the possession of forestry land (16%). The average plot seize of the four plantations is 1.6 hectare. All four households that are in the possession of forestry land use it for the cultivation of acacia trees. The choice for acacia trees is made, because the quality of the soil of the allocated land is poor, due to the presence of many rocks and weeds. This corresponds to Sunderlin’s conclusion (2006, p. 392) that allocated forestland to communities in Vietnam in most cases will be degraded. Acacia is a fast growing cash crop that takes about four to five years to grow. Through slash-and-burn the timber is harvested and the soil is re-fertilized. After the first rain new tree seedlings can be planted and the whole cycle repeats itself. Timber from acacia trees is in Vietnam mainly used for paper and furniture production.

Figure 23 Slash-and-burn and a RBC in Thuy Duong



(Pictures taken by Johan à Campo, March 2011)

Paragraph 2.6 explains that decentralization must be characterized by local participation in order to create sustainable development. The implementation process of FLA policies (both natural forest as well as forestry land) in Thuy Duong is definitely not characterized by local participation. The household interviews clearly show that the voices of the poor majority have completely been ignored. With regards to allocation of forestry land since 1997, only a small amount of ‘powerful’ people have been able to obtain forestry land through official allocation. Almost all household respondents therefore have an extremely negative attitude towards the

allocation of forestry land. In most cases, the topic of forestry land allocation invoked emotions of anger and disappointment, as the now following quotes from interview respondents indicate:

“No one in the village has plantation land. In the beginning everybody had it, but the cooperative miss-used their power and kicked everybody out. Then they sold the land to rich people. This is one of the reasons why everybody in the village is angry at the cooperative.”

(Household interview, 11-03-2011)

“There is no plantation land available for poor households, because the cooperative divided it all among their staff and some other rich and powerful people. They were the only ones who could afford to buy plantation land. Every time the community has a meeting with the commune government, they refuse to resolve this problem because staff members of the commune government are the ones who now own a lot of plantation land in our village.”

(Household interview, 30-03-2011)

“Only people who work for the cooperative or the commune government can get plantation land in this village”

(Household interview, 01-04-2011)

5.3 Impacts of forest land allocation on livelihoods

This paragraph presents the impacts of FLA on the livelihoods of the population of Thuy Duong. The impact on livelihoods is measured through analysis of the five livelihood capitals: natural, financial, physical, human and social. The influence of the local context on livelihoods is also included, as these factors, together with the impacts on livelihood capitals present a ‘rich picture’ on whether or not livelihoods have improved. It also indicates how sustainable livelihoods in Thuy Duong really are.

5.3.1. Natural capital

Natural capital is by far the most important livelihood capital of the population of Thuy Duong, which is characterized as a subsistence farmer community. Natural capital consists out of natural resources. Access to and (legal) use of these resources is therefore a necessary condition to stimulate livelihood improvement in Thuy Duong. Indicators of natural capital that are used in this research are: natural forest, forestry land, agricultural land and rivers. The indicators are discussed in this same sequence below.

All community members have access to the (allocated) natural forest, but they are only allowed to make use of the NTFPs available in there. Due to its distance to the village and its low quality, almost no one in the village still goes to the allocated natural forest to collect NTFPs. Only one of the 25 household (4%) respondents indicates that her husband still collects rattan and honey in the community forest. Most households state that illegal activities still happened in the natural forest but on a (very) small scale as most of the animals and rare tree species with (economic) value have gone extinct already. Fuel wood, which is extremely important to the people of Thuy Duong for cooking, is collected from allocated forestry land that surrounds large parts of the village. Community members are allowed to collect fuel wood from these plantations whenever the harvest is done. Only the usable and valuable parts of the trees are harvested, leaving considerable amounts of fuel wood behind on the land. Allocation of natural forest also

stimulates development in that sense that households can use a small amount of timber to build a house or cages for livestock. To do this households do need a permission from the district FPU. Most households indicate that they have been allowed to use a very small amount of wood for this purpose.

It is already explained in paragraph 5.2 that in Thuy Duong only a small amount of ‘powerful’ households had an opportunity to obtain forestry land. These households were able to buy as much forestry land as they could afford, for as long as it was available. At present time there is no more forestry land available to allocate to households. The household interviews indicate that only four of them have access to forestry land (16%), while leaving 84% of the community deprived of this important source. According to the law however, the allocation of forestry land should be a (free) initiative that improves the financial capital of the community as whole, while at the same time stimulating sound management and protection of forests. This is however not the case in Thuy Duong. The allocation of forestry land to households from 1997 onwards has created a situation in which poverty levels within the community significantly differ. Poor households without forestry land obtain no benefit from the allocation of forestry land. They are still daily confronted with poverty and have to struggle to survive.

In sharp contrast to the allocation of forestry land, stands the allocation of agricultural land (rice): 80% of household respondents indicate that they are in the possession of this type of land. Allocation of rice land is done by the cooperative as well and happens on the basis of household size. The more people in a household, the bigger size of the allocated plot. There is no formal allocation of other agricultural land, as the area is relatively unsuitable for most annual growing crops. Only 12% of the interviewed households have access to this type of land, which households have to clear themselves. Due to the fact that most households do not have access to forestry land and/or agricultural land (other than rice) access to and legal use of rice land is still the most important livelihood source for poor community members. Livelihood sustainability is therefore at the moment more dependent on access to rice land than on access to forestry land.

Figure 24 Rice cultivation in Thuy Duong



(Pictures taken by Johan à Campo, April, 2011)

The household interviews furthermore indicate that the allocation of forestry land also caused some negative impacts on the available natural capital of the community. Due to the low soil

quality of the allocated forestry land, farmers use a lot of fertilizer to increase their harvest income. Many of the chemical substances leach into the groundwater and eventually end up in the river. This river is directly linked to the running water system of the villagers, without any treatment. Every household in the village uses this water for cooking (and washing). It is therefore assumed that the use of this water has a negative health impact on humans (and other living species) that daily uses it for their subsistence. Another negative impact on the quality of the environment is that allocation of forestry land has stimulated monoculture tree plantations. Biodiversity numbers are extremely low in forests that only consist out of one single tree species. Keep in mind however that although biodiversity numbers are low, the land is still better used than if it would have been barren land. A third negative impact on the quality of the natural capital of the community that is indicated by household respondents, is that they are convinced that the allocation of forestry land has stimulated the occurrence and intensity of floods in the area. All farmers use slash-and-burn practices to harvest their timber and re-fertilize their land, which creates large clear cut spaces in the landscape. These open areas have less capacity to absorb the huge amounts of rainfall during the winter monsoon season, which leads to an increase of water run-off and increased chances of flooding (and soil erosion). Natural forests with high biodiversity numbers are much more able to absorb and contain water.

5.3.2. Financial capital

Indicators for financial livelihood impact in this research are: income sources, credit opportunities and savings. FLA has stimulated income sources, although only through the allocation of forestry land and only for a relative small size of the village population (16%). Households in Thuy Duong that do have forestry land receive large financial benefits from it. Every four or five years the acacia trees are harvested. Income from one harvest is, depending on the plot size and soil quality, about 30.000.000 VND (= about 1020 Euro¹) to 50.000.000 VND (= about 1700 Euro). Although none of interviewed households currently has financial savings (see chapter 4), the ones with forestry land indicate that a sum of this money that is earned from the harvest is saved and used in the following years to support all kinds of livelihood activities.

Only two of the four households that do have forestry land are in the possession of RBC for their plot, meaning that the other two households actually do not have legal rights to use the land (yet). The RBC is available for all types of land that can be allocated to households (agricultural, rice, forestry and house). The RBC is important to households as this is an opportunity to get access to credit. Households can give their RBC to the 'Agribank' and receive in return a money loan. This capital is important to subsistence farmers as this is an opportunity to make investments in their land and thereby generate more income from agricultural crops and tree plantations. The impact on the financial capital of the community as a whole is however (extremely) small, as only two out of 25 households (8%) indicate that they have forestry land *and* possess a RBC for it. A RBC provides household with increased access to credit. This credit opportunity can however also become a 'poverty trap'. Due to annual extreme weather conditions that cause crop failure, households are sometimes incapable of repaying the loan (and a small amount of interest) within the agreed time period. The 'Agribank' than has the legal right

¹ The exchange rate that is used throughout this Master Thesis is: 1.000.000 VND equals 33,6993 Euro, which was the exchange rate on 23-07-2011 (Exchange-rates.org., 2011).

to claim the RBC and sell the land. The bank is then allowed to take the amount of money that the household still owes them, while the rest of the money must be returned to the household.

Livestock can also be seen as a saving, because it can be sold or eaten in desperate times of extreme poverty and hunger. Livestock is therefore a very important livelihood source for most community members: 84% of the interviewed households (21 out of 25) keep livestock as saving. Livestock that is most used as saving in Thuy Duong is: chickens, ducks, pigs, cows and buffalo's. The importance of livestock has increased due to poor implementation of FLA policies. Due to the unequal allocation of forestry land and the bad quality of and far distance to the allocated natural forest, especially poor households are now more than ever dependent on their livestock for survival.

5.3.3. Physical, human and social capital

Indicators for physical capital that are used in this research are: roads, schools, health care facilities, telecommunication networks and (agricultural) markets. It can be assumed that the local market at Kung Trien (about 2 km from Thuy Duong) has experienced growth due to an increased local trade in timber. There is however no concluding evidence for this assumption, as there is also no evidence that implementation of FLA policies has stimulated any of the other physical capital indicators. Skills, knowledge and ability to work are the indicators for human capital. Just as with the indicators for physical capital, the research has not produced any evidence of impacts of FLA on the human capital of the community. It is therefore assumed that the human capital of the community is not stimulated. Social capital can be measured through an analysis of the social networks that are present within a community. Although such a network analysis has not been performed, the qualitative nature of the interviews has provided enough information to state that the social capital of the community has significantly decreased, through mainly the allocation of forestry land. The household interviews indicate that the number of conflicts (over forestry land) have sharply risen since the cooperative provided forestry land to more 'powerful' households. Most respondents argue that there were almost no conflicts in the village before the implementation of FLA.

5.4 Forest land allocation in Doi

Natural forest is allocated to six groups of households in Doi. In 1994, the provincial Forest Protection Unit (FPU) officially allocated an area of 1756 hectares of natural forest to these six groups. The six groups of households are legally responsible for the protection of the allocated areas against any illegal activities, like cutting and poaching. Each group protects a different area:

- Group 1: 666 hectares
- Group 2: 250 hectares
- Group 3: 270 hectares
- Group 4: 220 hectares
- Group 5: 180 hectares
- Group 6: 170 hectares

Each of these groups consists out of six to fifteen people. Allocation of natural forest to groups of households can be problematic as the households that are not included in these groups still face restricted opportunities to make use of NTFPs. The decision to allocate the natural forest in

this way was made by the FPU, in consultation with the Doi community. Together they decided which households should take part in the forest management and protection groups. Allocation of natural forest to households in Doi has however not turned out to be problematic, as Katu societies are characterized by strong social bonds and a 'sharing culture'. Although the six household groups are legally responsible for management and protection, every community member is allowed to make use of the available NTFPs of the natural forest. Currently there are 37 volunteers (also people that are not included in one of the groups) who regularly patrol the natural forests, in order to prevent any illegal action to take place. In spring and summer they go on patrol every week and in autumn and winter they go every other week for an inspection. Each of the groups has a leader and there is one overall leader, the community forest protection leader. All of them meet on a regular basis, in which they discuss the state of the forest and (possible) illegal activities. In Nam Dong district, just as in Phu Loc district, the FPU and commune police perform regular checks to prevent illegal activities.

In sharp contrast to the situation in Thuy Duong, the location of the allocated natural forest of Doi is adjacent to the village. The allocated forest is just as in Thuy Duong classified as 'protection forest'. The quality of the forest is officially categorized as 'neutral' by the district government. The vice-commune leader explains that the forest used to be categorized as 'rich', but in the last decade many illegal activities have caused severe forest degradation and deforestation. Most of the household respondents categorize the quality of the natural forest as 'poor', as they indicate that many rare tree species, big trees, and NTFPs have disappeared due to human activities. Although the allocated forest is now much better protected than before 1994, illegal activities still happen. The reason for this is that the research community is so poor that many households daily depend on natural resources from the allocated forest to survive. Where most households are very reticent to admit that they are personally involved in any illegal activity, almost no one is hesitant to reply that these activities still happen by community members today.

Since 1995, the commune government is in charge of allocation of forestry land to individual households in Doi. In total, 300 hectare of forestry land is available to households living in Doi. Nowadays, all available forestry land is allocated to households, so no other household can apply for a plot of forestry land. Young people that get married can get land to build their house on allocated to them, but agricultural and forestry land is not available to them. These new households therefore can only obtain forestry land through heritage of their parents. Due to the relative large size of households in Doi, usually the eldest children obtain their parents forestry land, while younger brothers and sisters are left behind without. Especially women face restricted opportunities to forestry land as parents prefer to give their forestry land to their sons, as the daughters are expected to marry someone who can support them.

The allocation process is characterized by close cooperation between the commune government, the community members and even the district government. The level of citizen participation is much higher compared to Thuy Duong. Due to the opportunity to speak up and due to the 'sharing culture' of the Katu community, the allocation of forestry land did however happen in an equal way. Here again, the size of the household depends the size of the plot allocated. Although corruption is also a problem in Nam Dong district and Thuong Lo commune, the population of Doi always acts united as one and tries to share both benefits as well as disadvantages among their members. The distribution of forestry land reflects this sharing spirit. From the 23

households that were interviewed, 18 households had access to and made use of forestry land (78%). In Thuy Duong, only 16% of the households that were interviewed have forestry allocated to them. That ethnicity and the socio-cultural organization of a community plays an important role in the equal allocation of forestry land is indicated by these figures.

The average size of a plot of allocated forestry land in Doi is 2.1 hectares, which is a little bit bigger than the average size in Thuy Duong (1.6 hectare). This is probably due to the fact that households are considerably larger in Doi than in Thuy Duong. The size of the household determines the size of allocated forestry land. Larger households therefore possess larger plots of land, which causes the average size to increase. All of the 18 households plant acacia trees on their plots, however 11 households *only* plant acacia trees (61%), while seven households planted both acacia *and* rubber trees on their plots (39%). The average size of an acacia plantation in Doi is 1.8 hectare (31.6 hectare/18 households), while the average size of a rubber plantation is 0.9 hectare (6.3 hectare/7 households). Rubber cannot be grown on degraded land or mountain slopes, but only on flat land with a certain soil quality. As the village is surrounded by steep hills with a poor soil quality (extremely hard and consisting out of many rocks, stones and weeds), most households are only left with the option to plant acacia trees. Although the first harvest period of rubber trees is about three years longer (7/8 years in total) than any harvest period for acacia trees (4/5 years in total), the biggest benefit of rubber plantations is that farmers do not need to buy new tree seedlings. After their initial growth phase they continuously stay productive and provide income. So there is no need for slash-and-burn practices that invoke soil erosion. Many of the household respondents indicate that a huge part of their income of acacia trees is spend on buying new tree seedlings, leaving them only a small amount of financial savings.

Figure 25 **Allocated forestry land on steep slopes in Doi**



(Pictures taken by Johan à Campo, March 2011)

5.5 Impacts of forest land allocation on livelihoods

This paragraph presents the impacts of FLA on the livelihoods of the population of Doi, in the same manner as is done for Thuy Duong. The impact of FLA on the five livelihood capitals is analyzed through the identified indicators. Here again, the influence of the local context is included in the analysis.

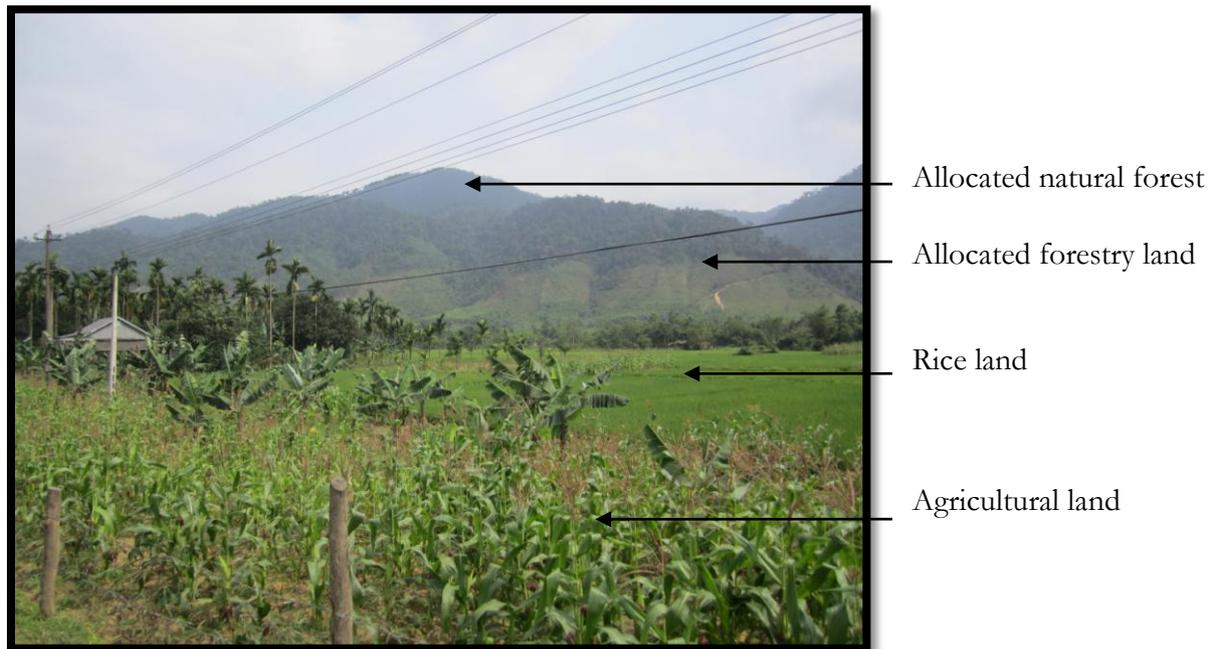
5.5.1. *Natural capital*

Just as in Thuy Duong, access to natural resources is extremely important to livelihoods in Doi. All community members of Doi have access to and are able to use the NTFPs of the allocated natural forest. Due to its close proximity and its quality that is categorized as ‘neutral’, most households in Doi regularly make use of NTFPs by collecting them in the natural forest. Where the household interviews in Thuy Duong indicate that only one household out of 25 households uses NTFP’s (4%), in Doi 16 households out of 23 households state that they use these resources (70%). Therefore, NTFPs are much more important to livelihoods in Doi, compared to livelihoods in Thuy Duong. Most used NTFP’s are: fuel wood, rattan, fruits, honey, medicinal plants, forage and thatch. Allocation of the natural community forest does also stimulate development in that sense that a small amount of the timber from the forest can be used for individual (housing) and community purposes. Many respondents indicate that their household has been allowed to cut a small amount of wood to build their house or a cage to keep livestock in. In the next chapter, an example is provided how timber from the natural forest is used to serve community purposes in Doi, thereby stimulating socio-cultural heritage conservation.

Equal allocation of forestry land among community members has created a situation in which most households now have access to forestry land. The household interviews indicate that 18 out of 23 households (78%) are in the possession of allocated forestry land. Access to forestry land therefore is much higher in Doi than in Thuy Duong (16%).

Allocation of agricultural land also happened in a fair and equal manner in Doi: 21 out of 23 households have access to rice land (91%). Rice cultivation is for almost all interviewed households in Doi the main source of livelihood support. All interviewed respondents are subsistence farmers, meaning that rice cultivation is (mainly) used for feeding the household members, instead of selling (parts of) the crop for additional income. In addition to the allocation of forestry and rice land, households also can get agricultural land (other than rice) allocated to them. The household interviews indicated that 17 out of 23 households (74%) have access to this type of land. Crops that are mostly grown are: cassava, corn, taro, and some (green) tea. Allocation of rice land and other agricultural land is formally done by the commune government, which does need the approval of the district government. Livelihoods in Doi experience more security than in Thuy Duong, because access to natural capital is equally shared and more natural resources are available to them. This however does not mean that poverty levels are lower in Doi, because equally sharing among all community members means that there is less individual household profit to gain.

Figure 26 Natural capital in Doi



(Picture taken by Johan à Campo, April, 2011)

Just as in the case of Thuy Duong, the household respondents indicate that the allocation of forestry land stimulates some adverse impacts on the quality of the natural capital of the village population. Here again, farmers that have the financial opportunity to buy fertilizer indicate that they have to use a lot of this on their allocated land, due to the poor soil quality. Toxic chemicals thus have the opportunity to leach into the ground and eventually end up in the river and the (untreated) running water system of the villagers. The allocation of forestry land also stimulates monoculture tree production in the area surrounding the village. It is already explained that monoculture forests are characterized by low biodiversity numbers. Although Doi is located in the buffer zone of BMNP, its location is very close to the core protection zone of the national park. Paragraph 1.5 of the theoretical framework explains that buffer zones *should* enable local people to continue their livelihood needs, but that buffer zones also should stimulate biodiversity conservation and protection (Wickramasinghe, 1994, p. 84). According to the respondents this is not the case and they indicate that negative edge effects already have stimulated biodiversity loss in the core protection zone. Another negative impact on the natural capital is that the allocation of forestry land, just as in Thuy Duong, has created large clear-cut spaces in the landscape, due to slash-and-burn practices. Doi is located in a valley that is surrounded by mountainous terrain. Most of the allocated forestry land is situated on steep, mountainous slopes. During the rainy winter season the amount of water run-off has significantly increased as a result of these large clear-cut areas on steep mountain slopes. It is therefore assumed that the chances of flooding and soil erosion have increased due to the allocation of forestry land.

Figure 27 Clear-cut mountain slopes around Doi



(Pictures take by Johan à Campo, April, 2011)

5.5.2. *Financial capital*

Indicators for impacts on the financial capital of the community are: income sources, credit opportunities and savings. Only the allocation of forestry land has stimulated financial income opportunities for households in Doi. The allocation of natural forest and agricultural land did not stimulate financial opportunities as this land and its products are used for subsistence livelihood activities and not for selling on the market. The household interviews indicate that 78% of the interviewed households currently have access to additional income sources from tree plantations. Because forestry land is equally shared among community members, the individual profit of timber and rubber production is much lower than in Thuy Duong, where the total profit from timber production is divided among a relative small number of households within the community. Income from one acacia harvest in Doi varies in between 5.000.000 VND (= about 170 Euro) to 20.000.000 VND (= about 682 Euro). The income from one acacia harvest in Thuy Duong is about 30.000.000 VND (= about 1020 Euro) to 50.000.000 VND (= about 1700 Euro). There is one household in Doi that indicates that it has some financial savings. This household is an exception to the rest of the community members that do not possess any financial savings at this time. The community can be categorized as a subsistence farmer community that daily faces (extreme) poverty. Although only one of the household interviews has savings, all of them indicate that, just as in Thuy Duong, a sum of the money from the harvest is usually used as savings, to support livelihood activities in between harvests.

Livestock can also be seen as a (financial) saving. Livestock has become more important to the villagers since they are not allowed to practice rotational swidden agriculture cultivation anymore. Fixed settlement therefore gives importance to livestock as a livelihood source. The household interviews indicate that 19 out of 23 households (83%) have livestock as a saving. It can therefore be assumed that livestock is an important source for most household living in the community. Most used livestock as saving in Doi is: pigs, chickens, cows, buffalo's, fish and dogs. In contrast to the community of Thuy Duong, about 50% of the interviewed households in Doi breed fish (in a fishpond) and dogs for human consumption. Due to animal diseases, in combination with no financial opportunities to pay for medicines, especially many cows and buffalo's have died, leaving households even more impoverished behind.

From the 18 households with forestry land, 17 households (94%) are in the possession of a RBC. This means that farmers in this village experience much more security over their allocated forestry land than farmers in Thuy Duong, where only 50% is in possession of a RBC. Land security is important because it stimulates investments in (the quality of) the land. A RBC also provides, just as in Thuy Duong, access to a financial loan from the 'Agribank'. The impact on the financial capital of the community is much larger as 17 households out of 23 households (74%) have forestry land *and* possess a RBC for it. This means that it can be assumed that a large number of households within the community have increased access to credit through their RBC for forestry land. Here again, respondents point out that this loan can become a poverty trap, whenever households are unable to repay the amount within the agreed timeframe.

Figure 28 Household respondent in Doi with RBC



(Picture taken by Johan à Campo, March, 2011)

5.5.3 Physical, human and social capital

Just as in Thuy Duong, it can be assumed that the local market at the town of Khe Tré (about 1.5 km from Doi) has experienced growth due to an increased local trade in timber (and rubber). There is however again no concluding evidence for this assumption, as there is also no evidence that implementation of FLA policies stimulates any other physical (roads, schools, health care facilities and telecommunications networks) or human capital indicators (skills, knowledge and ability to work). Social capital is measured through the social networks within a community. It can be assumed that equal allocation of forestry and natural forest land has stimulated social capital. As mentioned before, Katu societies are characterized by strong social bonds. An equal share of the benefits from FLA therefore has a positive effect on social relations and community (or unity) feeling. It is very uncommon that conflicts over (any type of) land occurs in Doi.

5.6 Conclusion

This chapter clearly shows that the livelihood impacts of the implementation of FLA policies can largely differ between two poor rural farmer villages that are both located in TTHP. Positive development impacts on livelihoods are much larger in Doi than in Thuy Duong, where FLA leads to adverse development opportunities. In Doi, almost every household has access to multiple sources of natural capital (NTFP's, forestry land, rice land, other agricultural land), whereas in Thuy Duong only a small amount of households has access to these resources. In both communities all households have access to the allocated natural forest, but the low quality and distance from the village in Thuy Duong result in an extremely low use among community members. Only 4% of the interviewed households still collect NTFPs in the allocated natural forest. A better quality and a small distance to the allocated natural forest of the community of Doi results in a use of NTFPs among the interviewed households of 70%. Access to forestry land (for plantation purposes) is also severely restricted to most households in Thuy Duong, where 16% of the interviewed households have possession of this type of natural capital. In Doi 78% of the interviewed households have access to forestry land. Finally, due to the extreme weather conditions and poor soil quality, the area of Thuy Duong is highly unsuitable to grow agricultural crops (other than rice); 80% of the interviewed households has access to rice land and only 12% of the interviewed households has access to land for agricultural cultivation (other than rice). In Doi, 91% of the interviewed households have access to rice land, and 74% of the interviewed households have access to agricultural land (other than rice). Table 16 shows the distribution of access to and use of natural capital for both research areas. The first two rows (NTFPs and forestry land) represent the direct impacts of the implementation of FLA policies on the natural capital of the two communities under research. It is clear that poverty alleviation and livelihood improvement is much more stimulated in Doi than in Thuy Duong.

Table 16 Access to and use of natural capital

	Thuy Duong	Doi	Average total research population
NTFP's	4%	70%	37%
Forestry land	16%	78%	47%
Rice land	80%	91%	86%
Other agricultural land	12%	74%	43%

In both research villages, household respondents and key-informants state that the natural forest is now better protected than before it was allocated to them. This statement must be considered with some cautiousness, as these same people also acknowledge that community members in both villages are still involved in (small-scale) illegal activities and that the quality of the allocated natural forest has decreased in the last decade.

Access to financial capital is also severely restricted to most households in Thuy Duong, whereas in Doi most households do experience increased access. Allocation of forestry land creates income opportunities, but in Thuy Duong only a small amount of the interviewed households profit from it while in Doi a large part profits from it. Although more community members have increased income opportunities in Doi, their profit is much lower than the profit that is earned from forestry land by households in Thuy Duong. In Doi, all the available land is equally divided among all households, resulting in many small plots and small individual profits. In Thuy Duong, only a few households possess (larger) pieces of forestry land, resulting in large individual financial benefits. Land security and access to additional income through the 'Agribank' is also higher in Doi, because 94% of the interviewed households have a RBC, while in Thuy Duong this is 50%. Livestock is both in Thuy Duong and in Doi an extremely important saving; as 84% of the interviewed households in Thuy Duong and 83% of the interviewed households in Doi use it to sustain their livelihood in times of hardship. There is no hard evidence of any significant impacts of the implementation of FLA policies on the physical and human capital of both communities. It does however influence the social livelihood capital of the communities. Where social relations and community bonds in Doi are stimulated through equal allocation of natural resources, social relations and community bonds in Thuy Duong are disturbed and conflicts between community members have increased due to the allocation of forestry land.

The main conclusion of this chapter is that the allocation of natural forest and forestry land in Doi has stimulated livelihood improvement for many households, whereas in Thuy Duong this is not the case. Only a few households receive large financial benefits from it in Thuy Duong. Table 12 (on page 64) shows that 61% of the interviewed households of Doi perceive their poverty level as 'poor' or 'extremely poor'. Of these (extremely) poor households 71% benefit from the allocation of forestry land. The same table also shows that 24% of the interviewed households in Thuy Duong perceive their poverty level as 'poor' or 'extremely poor'. Of these (extremely) poor households only 17% benefit from the allocation of forestry land. It can therefore be assumed that the overall development impact on the community of Thuy Duong as a whole is negligible. This conclusion proves that ethnicity, socio-cultural organization and local participation are key factors for successful implementation of FLA policies in Vietnam. Where the ethnic Katu minority population of Doi is characterized by strong social bonds and a 'sharing culture' among its community members, the Kinh population of Thuy Duong seems more characterized by the pursuit of individual profits, instead of community benefits. Implementation of FLA policies in Thuy Duong is, according to Arnstein (1976) categorized as 'manipulation' (or non-participation), which represents the lowest level of citizen participation. In Doi, the implementation process is characterized by more local participation of the local community, and can be labeled as 'consultation' or 'placation'. Although the community had more opportunity to let their voices be heard the level of citizen participation is not yet a 'partnership', as local people could not negotiate in trade-offs with the traditional power institutions (commune and district government). Local people for example could not self-decide which areas of land were allocated to whom. The final decision was made by district government. Some of the development constraints for both communities, but especially for Thuy Duong, could be overcome if those who do not receive benefits from FLA are able to participate in the tourism projects that have been implemented in both villages. The impacts of tourism development on households are the focus of the next chapter.

Chapter 6 Tourism development in the research communities

6.1 Introduction

This chapter explains the impacts of tourism development on the livelihoods of the research communities. Ecotourism and CBT projects are identified in paragraph 1.8 of the theoretical framework as decentralized types of sustainable tourism. Both types have a similar two-fold goal: to stimulate livelihood improvement through increased income opportunities and to stimulate natural and/or cultural heritage conservation. The focus of both types is however slightly different. Ecotourism concentrates on unique natural areas, while CBT usually focuses on cultural heritage. Tourism development in Thuy Duong can be categorized as an ecotourism initiative, as the enjoyment of the natural environment is the main tourist attraction. Tourism development in Doi can be categorized as a CBT initiative, as the project has a strong focus on the revitalization of traditional Katu culture. Paragraph 6.2 and 6.3 discuss tourism development in Thuy Duong. The focus is on the sustainability characteristics and livelihood impacts of tourism. Paragraph 6.4 and 6.5 present the same information for Doi. The main findings of both research areas are highlighted in the concluding paragraph of this chapter. Paragraph 6.6 thereby provides an answer to sub research question three: *What are the environmental, socio-cultural and economic impacts of tourism development on the livelihoods of the research communities?*

6.2 Tourism development in Thuy Duong

The role of the 'Agriculture Song Thuy Cooperative' in the allocation of forestry land is already discussed in paragraph 5.2. The cooperative plays an equal important role in tourism development in Thuy Duong. Just outside the village, the Voi water stream and waterfall are located. In 1997, the cooperative invested in a (small) area alongside the riverbank of Voi water stream to make it more safe to access and thereby more attractive to visitors. Visitors have opportunities to bath and relax alongside the water stream, in two natural pools, and under the waterfall. There are also walking trails for safe access to the area and to enjoy the natural environment. Alongside the riverbank animals are carved out in natural rocks, which increase the quality of the tourism experience. On one side of the bank, the tourist area is flanked by natural forest, classified as special-use forest. On the other side the area is bordered by allocated (planted) production forest, or forestry land.

In 1998, the cooperative obtained legal permission from the commune and district government to exploit tourism activities in the area. The total length of the area is about 2 km, but on the riverbank there is only limited space for tourism activities. Yearly the area attracts about 35.000 to 40.000 visitors, depending on the weather conditions. The tourist season can last from April to September but is depending on the weather conditions as floods (and sometimes typhoons) make the area at times unsuitable and unsafe for visitors. People who want to enter the tourist area need to buy an entrance ticket that costs 10.000 VND (= about 0.34 Euro). Most people that visit the area are Vietnamese, coming from Phu Loc district and sometimes also neighboring

districts. Some international tourists also visit the area, because of its location, which is close to the (international) mass tourist destination of Lan Co Beach. Although there are three guesthouses to stay overnight, the majority of visitors take day-trips to the area. The cooperative owns one guesthouse (low budget quality) and the other two are owned by private individuals (mid-range quality). The money the cooperative earns from the guesthouse is used for management purposes. The Voi tourist area is not marketed through tour operators in any of the larger cities nearby (Da Nang, Hoi An and Hue).

Figure 29 Tourist area at Voi water stream



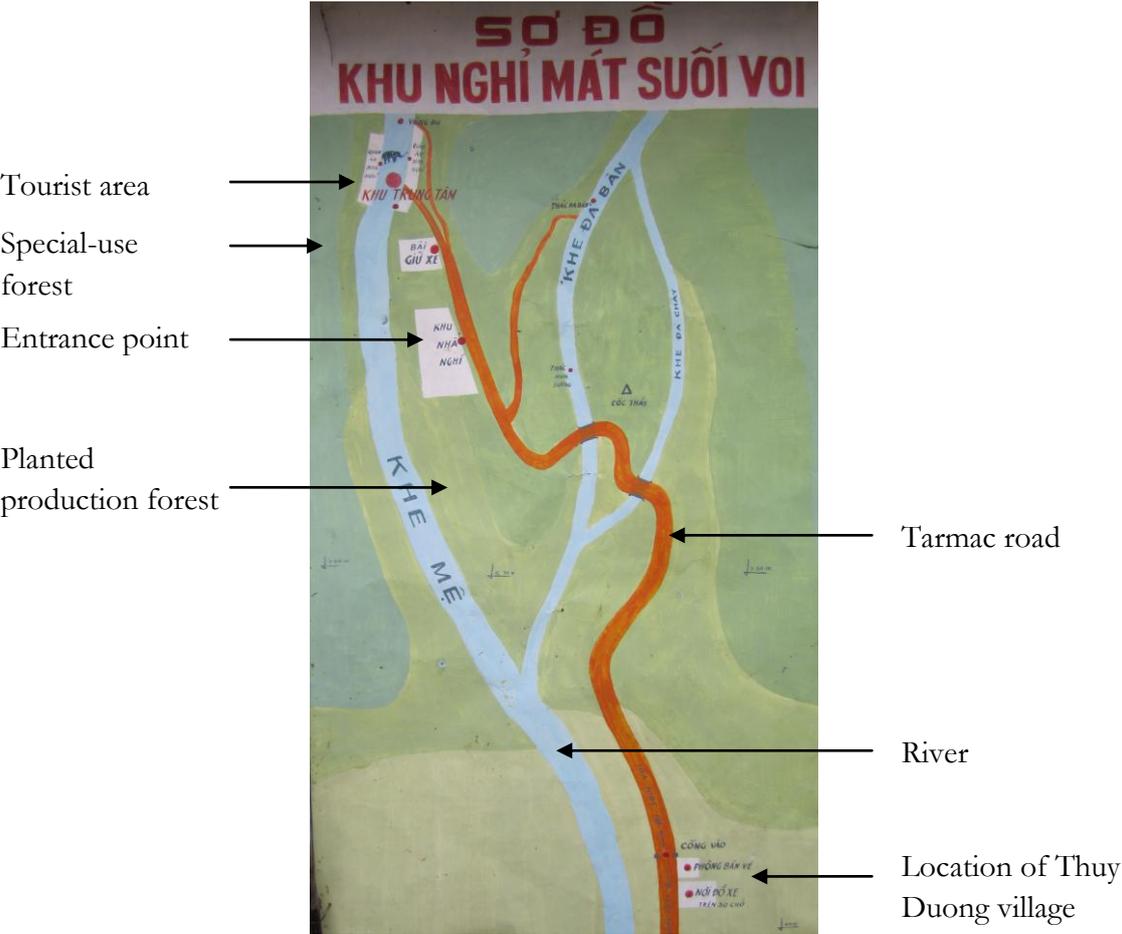
(Pictures taken by Johan à Campo, April, 2011)

Households living in Thuy Duong can obtain permission from the cooperative to sell food and drinks at the area during the tourist season. If the cooperative and the commune government approve, the household needs to build a small hut (or house) alongside the riverbank from which products are sold and where customers can sit and relax (as to be seen in figure 29). The cost of permission varies between 4.000.000 VND (= about 135 Euro) and 8.000.000 VND (= about 272 Euro) annually, depending on the allocated plot size and the location inside the area, as areas near the natural pool and waterfall attract more visitors than areas downstream. Due to the limited space available, a maximum of 25 households can sell food and drinks from their own built wooden hut. At the moment, all available space is occupied, so no other household can apply for permission. Since 2011, the costs for permission have to be paid directly to the commune government, who gives a certain amount of this money back to the cooperative. The exact figures of this amount remain unknown. Before 2011, the cost for permission had to be paid directly to the cooperative which then had to pay tax over this to the commune government. The household interviews indicate that the costs for permission are too high for most poor households. In reality this means that only more 'powerful' households had the opportunity to obtain permission and generate income from tourism activities, just as is the case with allocation of forestry land.

In paragraph 1.6 and 1.8 of the theoretical framework the importance of local participation and sustainable tourism development (STD) is explained. The conclusion of paragraph 1.6 is that ecotourism and CBT, as any other STD type, can only stimulate poverty alleviation and nature and/or cultural conservation if local communities participate in the decision making- and

management process. The conclusion of paragraph 1.8 is that any sustainable tourism initiative must include environmental, socio-cultural and economic sustainability to be truly labeled as STD. In Thuy Duong, the cooperative has a powerful position, because of its close ties to the commune government. Think for example at the (large) plots of forestry land that are owned by some of the highest staff members of the local commune government. According to many household respondents this is the reason why the commune government supports the cooperative in most of its plans and decisions. The cooperative now manages tourism development in Thuy Duong as a monopoly, in which they determine the rules of the game and they do not allow any form of competition, or individual tourism initiatives. This form of local citizen participation can be described as a form of ‘non-participation’, according to Arnstein’s participation ladder (1967). The fact that the cooperative is in such a monopoly position and does not allow private tourism initiatives to be developed indicates that tourism development in Thuy Duong can certainly not be labeled as an ecotourism initiative. The reality is that tourism has stimulated unequal income opportunities and thereby also a widening of the gap between the many poor households and the few less poor and therefore more ‘powerful’ households that live in the community. This might be caused by the relatively high investments needed to start up tourism development at the Voi water stream area.

Figure 30 Overview of tourist and village area



(Picture taken by Johan à Campo, March, 2011)

6.3 Impacts of tourism development on livelihoods

The previous chapter explained that most households in Thuy Duong face limited livelihood sources, as access to forestry land is limited, NTFPs cannot be found in the rather degraded natural forest and agricultural land, other than rice land, is almost not available. Rice cultivation is by far the most important livelihood source of the majority of the village population. It is however common that even (parts of) rice crops are destroyed by annual extreme weather conditions in the area, like floods and typhoons. Although the government compensates farmers in these times of crop failure with food (rice and instant noodles), the amount of food provided cannot compensate for the amount a household would have had from their own harvest. Tourism income therefore has the potential to become an important alternative livelihood source to many households that are currently struggling to survive. The impacts of tourism on the livelihoods of households in Thuy Duong is measured in the same way as the previous chapter. Again, impacts on the five livelihood capitals are analyzed, whereby the influence of the vulnerability context and the local institutions (rules and laws) is also included.

6.3.1. *Natural capital*

The area where tourism activities take place is relatively small and cannot be used for agriculture or forestry purposes. Tourism development therefore does not stimulate access to natural capital in Thuy Duong. It does however cause some adverse impacts on the quality of the natural capital of the community. Although the cooperative claims to clean the whole area regularly, there is rubbish alongside the walking trails and at the riverside area. The rubbish that is collected by the cooperative is burned. This is not an ideal for nature conservation, but as there is no organized rubbish collection system from the government in place, it is one of the few options the cooperative has. Another activity the cooperative sometimes does during the tourist season is the killing of mosquito's and flies. The water in the area attracts many of these insects during the high season. The mosquitos and flies are killed by spraying (toxic) chemicals in the area. Although this will make the area more convenient and attractive for tourists, it is remarkable that the cooperative has the permission to do this. The adjacent forest on one side is classified as 'special-use forest', which primary aim is to conserve nature. Respondents from the household interviews also point out that tourism development does negatively impact the quality of their running water supply. In the tourist season many visitors take a shower or bath in the natural pools, under the waterfall or in the river. While doing this they use so much soap and shampoo that the water downstream, which the villagers use for cooking, becomes too contaminated for this purpose. Villagers have to get their water supply than from wells, but not everybody has a well and water can be scarce during hot summers, which are rather common in Central Vietnam. These examples make clear that environmental protection is not the most important priority of tourism development in Thuy Duong. The tourism initiative therefore cannot be labeled as truly environmental sustainable.

6.3.2. *Financial capital*

Indicators for the financial capital are: income sources, savings and credit opportunities. As explained before, the tourist area offers only space for maximum 25 small wooden huts, meaning that 25 households have a permission to sell food and drinks. This means that only 13.4% of the total village population (186 households) benefits from tourism as a livelihood income source. The living standards of these households and their livelihood stability has significantly increased

due to tourism earnings. The following table presents an overview of the average annual household costs and benefits from tourism participation.

Table 17 Average annual household costs and benefits from tourism

COSTS		BENEFITS	
Annual permission	4.000.000 VND	Tourism earnings	11.000.000 VND
Government tax	1.500.000 VND (300.000 VND x 5 months)		
Monthly fee	500.000 VND (100.000 VND x 5 months)		
Total	6.000.000 VND		11.000.000 VND
Balance			5.000.000 VND

The household interviews indicate that the average annual tourism income for one household is around 11.000.000 VND (= about 370 Euro). Households with permission pay annual on average 4.000.000 VND (= about 135 Euro). In addition, households also need to pay a monthly tax to the commune government during the tourist season that on average lasts five months. The amount of monthly tax differs for each household, the average amount is 300.000 VND (= about 10 Euro / month). Households with a tourism permission also need to pay an additional 100.000 VND on a monthly basis during the tourist season to the commune government. All respondents with a tourism permission indicate that they have no idea why they have to pay this amount of money every month. These small (corruption) fees are very common in Central Vietnam. The cost of building a small wooden hut are not calculated as most respondents indicated that this only a one time investment that is not too expensive. On a yearly base, the average income gained by a household through tourism is 5.000.000 VND (= about 170 euro). This is only a small fraction of the total sum of money earned by households from one harvest of acacia timber in Thuy Duong. It must however be kept in mind that one acacia harvest only brings in a large sum of money once in the four or five years, while tourism income is generated every year. All households with a tourism permission that have been interviewed, indicate that tourist income has substantially improved their living standard and has become an important livelihood source.

Tourism development does not stimulate financial savings or credit opportunities. Even the households with a tourism permission do not gain financial savings through tourism, as the income is gradually earned during the tourist months. These earnings are almost immediately spent on daily livelihood needs of the households. Credit opportunities are not stimulated because tourism development did not create additional opportunities to gain access to a financial loan.

6.3.3. Physical, human and social capital

The physical capital of livelihoods is constructed by basic infrastructure facilities. The indicators in this research are: roads, schools, health care facilities (or hospitals), (agricultural) markets and telecommunications systems. Tourism has stimulated the physical capital of the village population, as the cooperative has built a tarmac road in 2002. The road connects the Voi water stream with the National Highway No.1 in the town nearby (Trung Kien), running straight through the neighboring village of Thuy Tu. During the household interviews, most households state that the only reason why the cooperative has build the new road is to increase their own tourism earnings. Although this might be the true reason of the cooperative, it is nevertheless a benefit for the community as a whole. It increases human mobility and makes transportation of agricultural crops and trees easier. The tarmac road thereby has improved the physical capital of the community as a whole. There are no indications that tourism development has stimulated the physical capital of the community in any other way.

Skills, knowledge and ability to work are indicators for human capital in livelihood research. Social capital is usually ‘measured’ through an analysis of the networks that are present within a community. Although human and social capital have not been the focus of the research, some information on these livelihood capitals has become available through the qualitative nature of most questions in the household interview. It seems that tourism development did almost not affect the level or quality of human capital of the community. Skills and knowledge are not improved because participants do not get any training in education in hospitality, accounting or managing. It is clear that the social capital of the community however is negatively influenced by tourism development. The household interviews clearly indicate that the amount of conflicts inside the community has increased due to the management of the cooperative. Two households actually state that they would not call the village population of Thuy Duong a community anymore. Just as with FLA, ‘powerful’ households have had better opportunities to participate in tourism activities. As a result of this, all respondents without a tourism permission have an extremely negative attitude towards tourism development. Now follow some of these quotes:

“The cooperative only allows a few people with money and with which they are friends with to participate in the selling of food and drinks and some other small-scale tourism activities.”

(Household interview, 02-03-2011)

“At this moment tourism does not contribute to the improvement of local lives in our village, only for a few ‘chosen ones’. The only people that benefit from tourism are staff members of the cooperative and the ones that are allowed to participate in tourism activities.”

(Household interview, 02-03-2011)

“I receive no benefits from tourism and I have a very negative attitude towards it, because only a few people profit from it, which causes large inequalities in our community. You have to pay a lot of money if you want to be involved in tourism activities, only wealthy people can pay this.”

(Household interview, 11-03-2011)

6.4 Tourism development in Doi

In 2003, the Dutch development cooperation SNV expressed its wish to support a community based development initiative in TTHP to the provincial government. In that same year a partnership between SNV and the Tourism Department of TTHP has been established. The objective of the partnership is to stimulate rural poverty alleviation and human development through community based development projects. CBT development in Doi has been the first initiative of the partnership, since its establishment. The key objectives of CBT development in Doi are:

- Increase of local income opportunities;
- Revitalization of traditional Katu culture;
- Increase of sustainability awareness;
- Promotion of local participation and governance in development issues.

(United Nations Economic and Social Council, 2005, pp. 9-10)

Livelihoods in Doi, just as in Thuy Duong, are characterized by subsistence farming activities and low education levels (especially among elderly community members). Tourism development therefore was a new and unknown activity to the people of Doi. Tourism skills and knowledge were lacking at that time. To maximize local participation and possible community benefits, several tourism trainings have been given by the Hue Tourism College to village participants. The trainings focused on specific tourism skills and how to maximize local traditional knowledge, skills and resources that are already present within the village community. After several practice sessions, the community was able to host its first international tourist group in 2006. Tourist attractions are now centered around two locations:

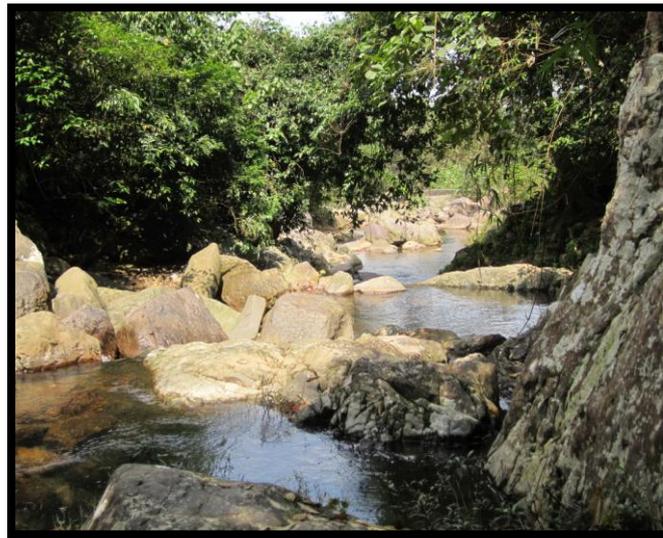
1) *The traditional Katu community house or 'Dragon house'.*

In 2004, SNV sponsored the construction of a community house, which is partially built with timber from the allocated natural community forest. A community house performs an important function in Katu societies as it is a place that stimulates community bonds. In Doi the community house is used as a meeting place for community members. Many old cultural traditions, like festivals and storytelling, take place at the community house and people meet there every day to socialize, even without any special occasion. Katu societies are characterized by their strong community relationships and their 'sharing' culture. The community house thus performs an important role in socio-cultural Katu heritage conservation. Tourism activities at the community house are focused on cross-cultural experiences, meaning that culture is shared between visitors and residents. Village participants perform traditional Katu songs, dances and play on traditional hand-made musical instruments. Visitors can take part in this. During a group visit, village participants also cook traditional food for visitors. After dinner, visitors can engage in storytelling activities with village people, play traditional games with them, or pay a visit to the KaZan waterfall and/or adjacent natural community forest.

2) *The KaZan waterfall area and natural forest.*

The waterfall is located at the edge of the village and the beginning of the allocated natural community forest. Visitors of the waterfall and natural forest can enjoy the stunning natural environment. At the river stream and waterfall, visitors have the opportunity to shower/bath and relax. The entrance fee to the waterfall and the community forest is, just as in Thuy Duong, 10.000 VND (= about 0.34 Euro). The waterfall is much visited by Vietnamese visitors from within the same district. The number of Vietnamese visitors remains unclear, as no records are being kept.

Figure 31 Doi waterfall area



(Picture taken by Johan à Campo, February, 2011)

The focus of SNV and the TTHP Tourism Department has mainly been on the development of cultural heritage tourism at the community house. Since the start of the project, Doi has annually welcomed minimal 8 and maximum 14 groups of (Japanese) tourists that visit Doi for a cross-cultural experience. Groups consist out of minimal 10 and maximum 20 people. There are two (Japanese) tour operators that market the project: Tokyo Trading and Tourist Company (based in Hue city) and Exotissimo (based in Hanoi). In addition, there is the Japanese Association of Supporting Streetchildren (JASS) that organizes group visits to the village. JASS is a (Hue based) NGO that aims to help poor (street) children to get an education and improve their living standards. Involvement of JASS in Doi has stimulated poverty alleviation and development in several ways, as paragraph 6.5 will prove. International group visits usually happen in between March and September, due to the weather conditions. Tourists are not allowed to stay overnight in Doi, as it is policy in Vietnam that tourist are not allowed to do this in rural ethnic minority villages. Visits usually take place between noon and four o'clock in the afternoon. Village members have the opportunity to participate in tourism activities. There are three groups in which participation is possible:

- A group for management, consisting out of maximum five people. Currently, the group composition is as following: village leader, village eldest, leader of the waterfall, leader of traditional songs/dances and a local nature guide.

- A group for cooking (food and drinks) consisting out of maximum five people.
- a group for entertainment (singing, dancing and playing on musical instruments), consisting out of maximum 30 people.

Each tourism group is now occupied, meaning that no other people can join the groups. People that do not yet participate in tourism activities can only join a group if they are invited for this, after another group member has left that group. So at any given time, a maximum of 40 households financially profit from tourism earnings, which is about 23% of the total village population. In the theoretical framework, the importance of local participation and decision making power for the development of a CBT project has been explained. The population of Doi has been consulted and has engaged in a partnership with the TTHP Tourism Department and SNV. The level of local participation is thereby much higher than is the case in tourism development in Thuy Duong. Whenever a group of tourists books a trip to the Doi community through one of the tour operators, the TTHP Tourism Department informs the district government about this. The district government then informs the commune government, which in turn informs the village leader of Doi about the planned visit. Although tourism development in Doi has much more community based characteristics, economic sustainability is lacking as the next paragraph will show. Luckily, tourism development in Doi does stimulate other human development benefits.

6.5 Impacts of tourism development on livelihoods

Although more people in Doi profit from access to natural capital than in Thuy Duong, the overall poverty level of the population of Doi is still extremely high, as chapter 4 has explained. In theory, tourism development can therefore significantly stimulate livelihood improvement of the households in the community.

6.5.1. *Natural capital*

Impacts on natural capital are again measured by looking at natural resources. It seems that tourism development does not impact access to and use of natural resources for the population. It can also be assumed that tourism activities in Doi cause less harm to the natural environment as is the case in Thuy Duong. No rubbish has been found on the trail to the waterfall and the natural forest and none of the respondents indicates that littering is a problem. Where tourism activities in Thuy Duong also have a negative impact on the use of water for cooking, in Doi this is not the case. The running water system of the village is coupled to another water source, namely the large Tan Trach river that is adjacent to the village. Evidence of the fact that tourism development has stimulated environmental awareness or protection has not been found. In short, tourism development did not negatively impact the natural capital of the community.

6.5.2. *Financial capital*

The United Nations Economic and Social Council (2005, pp. 9-10) portrays an extremely positive picture, concerning (financial) poverty alleviation in Doi through tourism development. This paragraph analyzes the extent of the financial benefits of tourism activities for households in Doi. The research results provide a different view on financial (poverty) alleviation than the positive picture that is presented by the United Nations Economic and Social Council. Indicators for financial capital are income sources, savings and credit opportunities.

Although local people do not have to pay for a permission to be involved in tourism, as is the case in Thuy Duong, the financial benefits of participation remain negligible. The community receives a set amount of 1.000.000 VND for each group visit. About 400.000 VND of this money is spend on food (rice, instant noodles and fruits) for the whole community. This food is divided among all community members, even the ones that do not participate in tourism activities. Another 400.000 VND is divided among the tourism participants. As explained before, at any given time only 40 people can participate in tourism activities, which is 23% of the total village population. If 400.000 VND is divided among 40 people, this means that every single participant receives an amount of 10.000 VND (= about 0.34 Euro) for each group visit. If smaller groups of international tourists visit the community, less local people can participate, but their income increases. It is estimated that on average about 30 local people participate in the activities. This means that every single participant receives an average amount of about 13.333 VND (=about 0.45 Euro) for each group visit. On average, about 12 international tourist group visits take place annually, meaning that one participant annually earns about 160.000 VND (= about 5.45 Euro) from tourism. All interviewed respondents indicate that this (small) amount is not enough to increase living standards of households. Some people therefore actually refuse to participate in the tourism project, even when they are invited to join in a group. These people argue that they can better spent their precious time working on their agricultural and forestry land.

The remaining 200.000 VND (of the total 1.000.000 VND) goes into a community fund. Together with the entrance fees to the waterfall and natural forest, the community fund annually generates about 3.000.000 VND (= about 102 Euro). The money from the community fund is used for several community purposes, like the renovation of the community house and the maintenance of the waterfall area. Individual community members can also apply to the community fund in case of emergency relief, i.e. disease or death. If people have no other opportunity to pay for hospital bills or for a funeral of a household/family member, money from the community fund can be lend for this purpose. Extra marginalized community members that are not able to work, like disabled and elderly people, are also somewhat supported in their livelihood with money from the community fund. Several times a year they receive a small amount of money from the community fund to sustain their livelihoods. For example, every year during Tet holidays, these marginalized people receive 50.000 VND (= about 1.70 Euro) from the community fund. These small amounts do not significantly improve these livelihoods, as the amount of money is too small.

Table 18 Community and individual financial benefits from 1 group visit

Community benefits		Individual benefits	
Food	400.000 VND	Income	400.000 VND
Community fund	200.000 VND		
TOTAL	600.000 VND		400.000 VND

The project does also stimulate additional income opportunities as it allows private initiatives to take place. Embracement of private initiatives, next to the community project, has been identified as one of the main characteristics of CBT in paragraph 1.8 of the theoretical framework. The household interviews indicate that some village members have started to produce traditional hand-made textile fabrics and souvenirs, like necklaces, woven (rice) baskets and wooden musical instruments. Exact figures on profit from these individual activities remains unclear. Due to the relative low income from tourism, the project does not have an impact on (individual) financial savings. In addition, there is also no evidence that tourism development has stimulated access to credit opportunities in any way.

6.5.3. Physical, human and social capital

The indicators for physical capital in this research are: roads, schools, health care facilities, (agricultural) markets and telecommunication systems. The research does not provide any evidence of change of these indicators. It is therefore assumed that physical capital is not affected by tourism development in Doi.

Livelihood indicators of human capital are: ability to work, knowledge and skills. Tourism development does not increase the number of people that are able to work. It does however stimulate knowledge creation and skills, in a significant way. JASS sponsors educational opportunities for the children of Doi, as they provide:

- Primary school scholarships for all primary age children.
- Money for secondary school students that perform well (50.000 VND per person annually).
- Money for the University of Nam Dong district (2.000.000 VND annually).

Households in Doi save a significant amount of money by not having to pay regular primary school tuition fees. Keep in mind that households in Doi have a high number of (young) children. The money saved on tuition fees is spend on livelihood survival for the whole household. Skills are also stimulated by tourism development. Many old cultural Katu traditions have almost been eradicated due to extreme poverty and assimilation in Kinh culture. Especially young people from the village adopt Kinh cultural expressions and grow up without much knowledge of traditional Katu skills. Tourism development stimulates conservation of unique Katu culture, in that sense that villagers now again practice their traditional songs and dances, play on hand-made musical instruments and produce handicrafts and souvenirs for tourists. In paragraph 1.8.2. it is explained that a true CBT approach generates community benefits that act as incentives for participants to conserve cultural (and/or natural) resources, as they now become livelihood sources (The Mountain Institute, 2000). This is what is happening in Doi and it stimulates the re-vitalization of traditional Katu culture.

Figure 32 Human capital: primary school education and traditional skills



(Picture taken by Johan à Campo, April, 2011)

The social capital of the community is also influenced by tourism development. Since the initiation of tourism development in Doi, the three tourism groups (management, cooking and entertainment) regularly come together to discuss tourism matters, social networks are in this way increased. Although Katu societies are already characterized by strong social community bonds, it is logical to assume that the intensity of social relations has increased due to tourism development. People that do not participate in tourism still receive benefits from it (food, primary school scholarships, community fund). Almost all community members therefore show a relative positive attitude towards tourism development in the household interviews.

6.6 Conclusion

Tourism development that integrates the three sustainable development principles has the potential to benefit poor rural livelihoods and to stimulate natural and cultural heritage. This chapter, just as the previous, clearly shows how livelihood impacts of tourism development can differ from one place to another.

The research indicates that tourism development has no impact on the access to and use of natural resources for both research populations. It does however cause some negative impacts on the quality of the natural resources. Especially in Thuy Duong, environmental pollution is a serious threat to the quality of the natural capital of the community. In Doi, negative impacts on the natural environment, due to tourism activities, are absent.

Tourism development does stimulate the financial capital of both communities, although impacts largely differ between the two villages. In Thuy Duong, only a small percentage (13%) of the interviewed households is involved in tourism activities, whereas in Doi a somewhat larger percentage of the interviewed households takes part (23%). More 'powerful' households in Thuy Duong that have obtained a tourism permission experience substantial livelihood improvement, while the majority of the (poor) population has no opportunity to financially profit from tourism development. In Doi, more households profit financially from tourism, but their individual gain

is minimal, as they share the tourist income among all participants and among community members that are not involved in tourism activities. The impact of the financial capital is therefore negligible and it does not stimulate livelihood improvement.

The physical capital is only improved in Thuy Duong, as a new tarmac road has been constructed there, in order to increase tourism accessibility. The new road improves the livelihood of the community as a whole, as mobility is much increased by it. On the other hand, human capital has only increased through tourism development in Doi. Traditional Katu cultural skills and educational opportunities are largely stimulated by the tourism project and the additional development effort of JASS (NGO). The impact on the social capital is negative in Thuy Duong, where it disrupts social relations, which leads to an increase of conflicts. In Doi, tourism development stimulates the strong bonds that are present within every Katu society.

The main conclusion of this chapter is that the tourism development did stimulate the financial capital of a few, already more 'powerful', households in Thuy Duong, while leaving the majority of the households impoverished behind. In Doi, more people participate in tourism activities, but the impact on their financial capital is limited. This is again shows, the influence of ethnicity on development issues. In Doi tourism earnings are shared among all community members, whereas in Thuy Duong only a few households receive large individual financial benefits. Where the ecotourism initiative in Thuy does not stimulate environmental protection, the CBT initiative in Doi does stimulate socio-cultural heritage conservation substantially. Actually, these two case studies make clear that both tourism initiatives in fact cannot be labeled as truly sustainable. Tourism development in Thuy Duong creates negative and unsustainable environmental, socio-cultural and economic impacts. Tourism development in Doi only creates unsustainable economic impacts.

Chapter 7 Conclusions and discussion

The introduction of this Master Thesis presented two global development problems: rural poverty and deforestation. It is acknowledged that especially in Southeast Asia many poor rural people tend to share the same location with remaining areas of natural forest. Livelihoods of these forest-based people are dependent on the availability of, and access to forest resources. Availability and access to forest resources in Southeast Asia however becomes more and more limited to forest-based people nowadays. First, ongoing deforestation (and forest degradation) limits the amount of available forest resources and second, the active promotion of protected natural areas, like national parks, severely restricts access of local people to forest resources. Salafsky and Wollenberg (2000) identify three types of relationships that can exist between forest livelihoods and nature conservation: no linkage, indirect-linkage, direct linkage. The relationship that is present between forest livelihoods and nature conservation is largely dependent on the implementation characteristics of policies. Top-down government policies tend to create no linkages between forest livelihoods and nature conservation, while bottom-up (participatory) governance policies are much more characterized by indirect or direct linkages. Bottom-up policies are much more tailored to the local context than top-down government policies. Decentralization and local participation are therefore two key concepts of the alternative (bottom-up) development paradigm. Within this paradigm, the sustainable development approach takes central stage. This approach acknowledges decentralization and local participation as important, because they provide local people with more decision-making power in development issues that directly affect their livelihoods. This sustainable development approach is characterized by its integrated and balanced focus on environmental, socio-cultural and economic sustainability. This Triple Bottom Line (TBL) framework, developed by Elkington in 1998, is also used in this research to analyze the sustainability of the development instruments under research.

The research is concentrated on rural development in Central Vietnam and has a focus on two popular decentralized development instruments: forest land allocation (FLA) and local tourism development. FLA entails the allocation of forestland to (groups of) households and communities for use, management, protection and development of forests. Local (small-scale) tourism projects are also recognized as a means of enhancing local development while stimulating nature or cultural conservation. It is therefore however necessary that the project includes the principles of sustainable tourism development (STD). Two types of STD that are presently being stimulated by the Vietnamese government are ecotourism and community-based tourism (CBT).

Vietnam is a country that stands out from the rest of Southeast Asia, considering deforestation and poverty alleviation. Deforestation and forest degradation levels in Vietnam in the second part of the 20th century have exceeded other countries in the region. In addition, although Vietnam experiences rapid industrialization and economic growth since the introduction of the economic reform policies (*Doi Moi*) in 1986, the country remains one of the poorest countries in Southeast Asia today. Poverty remains widespread among the Vietnamese population. Poverty incidence is highest in rural, remote and forested mountainous areas, which are commonly inhabited by ethnic minority groups. People living in these areas experience extreme poverty and are living

further below the national poverty line. The focus of the research is on two rural communities living in Thua Thien Hue Province (TTHP). One of the research communities, Doi village, is located in such forested mountainous area. Its inland location is close to the borders of Bach Ma National Park (BMNP) in the southeast and Lao PDR in the west. All community members here belong to the Katu ethnic minority. The other research community, Thuy Duong village, is located near the South Chinese Sea in the eastern low lying part of TTHP. Its location is further away from BMNP and Lao PDR. All community members are Kinh (ethnic Vietnamese). Both research communities are located in the buffer zone that surrounds BMNP. According to Salafsky and Wollenberg's framework (2000), the relationship between the livelihoods of the research communities and nature conservation in BMNP can be categorized as an indirect link as livelihood activities are excluded in the protected area of BMNP. Communities in the buffer zone do not receive any (financial) incentive to conserve biodiversity and it might therefore be assumed that nature conservation (or bigger: sustainable development) is not their main concern. Both communities are categorized as poor forest-dependent communities, where rice cultivation is the main source of livelihood support for most households. The communities also share a high (weather) vulnerability context that annually threatens livelihoods, as (parts of) agricultural crops are destroyed and people are in danger of losing their lives due to typhoons, floods and landslides.

The research has two objectives: (1) to gain an insight into household poverty levels of the research communities and (2) to gain an insight into the livelihood impacts, are caused by the implementation of FLA policies and tourism development in the research communities. These objectives indicate that livelihood improvement is the primary focus of the research, while nature (forest) conservation is a secondary focus. The main research question (*Do forest-based households experience livelihood improvement through the implementation of Forest Land Allocation policies and the development of tourism in the communities under research?*) and the sub research questions are based on the two objectives. The main research question analyzes whether or not (sustainable) development has taken place through implementation of FLA policies and the development of a local tourism project.

Three poverty dimensions of households have been analyzed in this research: education, living standard and income. It has become clear that households in Doi experience higher poverty levels than households in Thuy Duong. First, educational level of respondents in Thuy Duong was much higher than in Doi. In Thuy Duong, 44% of the respondents had followed secondary education (2nd cycle), while in Doi this number was only 17%. Second, living standards of respondents in Thuy Duong were also identified as higher than living standards of respondents in Doi. Although the availability of basic services is nearly the same, other selected indicators of living standard indicate that households in Doi experience lower living standards. Access to enough food to support the whole household is limited in Doi. It is therefore assumed that the prevalence of hunger is a poverty characteristic that is more common to households in Doi than households in Thuy Duong. Household poverty perception in Doi is also higher than in Thuy Duong. In Doi 35% of the interviewed households consider their household as 'poor' and 26% considers it as 'extremely poor'. In Thuy Duong, only 4% of the interviewed households consider their household as 'poor' and 20% consider it as 'extremely poor'. Third, the income dimension of poverty was also lower evaluated in Doi as in Thuy Duong. Less households in Doi are able to

pay for school tuition fees and healthcare (of all household members), than households living in Thuy Duong. The conclusion that households in Doi experience higher poverty levels based on the selected indicators is confirmed by the findings of Müller, Epprecht and Sunderlin (2006) which acknowledge that ethnic minority communities in Vietnam have made much slower progress in poverty alleviation than ethnic Vietnamese (Kinh) communities.

Analysis of the livelihood impacts of FLA implementation on households in the research communities has shown that development outcomes can largely differ and that the local context plays a paramount role in successful implementation. Positive development impacts on livelihoods are much larger in Doi than in Thuy Duong, where FLA leads to adverse development opportunities. Households in Doi have increased access to natural capital (NTFPs and forestry land) through implementation of FLA policies. Distribution of forestry land in Doi is characterized by equally sharing the available space. The close distance to the allocated natural forest (of medium quality) results in high use of NTFPs among households living in Doi. In Thuy Duong, increased access to natural capital (forestry land) is only available for a small number of households, as forestry land was only distributed to more 'powerful' households living in the community. NTFPs are (almost) not available to households living in Thuy Duong, as the allocated natural forest is rather far away from the village and is characterized by low quality. The distribution characteristics of forestry land in Doi and Thuy Duong have also influenced the financial and social capital of both communities. Allocation of forestry land stimulates access to financial capital (income sources, savings and credit opportunities) in Doi for 78% of the interviewed households, while in Thuy Duong only 16% of the interviewed households has increased access to financial capital as a result of allocation of forestry land. In Thuy Duong, this leads to a widening of the gap between (extreme) poor households and not poor households. Since FLA policies were implemented in Thuy Duong, the number of conflicts has significantly increased, thereby impoverishing the social capital (networks / community bonds) of the community. In Doi this is not the case, as most households profit from increased access to financial opportunities and community bonds are therefore further strengthened. The main conclusion considering the implementation of FLA policies is that this has significantly stimulated livelihood improvement for most interviewed households in Doi, whereas in Thuy Duong only a small number of interviewed households receive benefits from it. The fact that FLA has an adverse impact on the social capital of Thuy Duong indicates that this development intervention is not sustainable. FLA implementation in Doi shows much more characteristics of sustainable development, as it increases local income opportunities, it strengthens the social networks of the community, and it stimulates local forest management and conservation.

Analysis of the livelihood impacts of tourism development on households in the research communities again confirms that development outcomes are strongly influenced by the local context. Access to natural capital is in both communities not influenced by tourism development. In Thuy Duong, it does however stimulate environmental pollution. Access to additional financial capital is severely restricted to most households in Thuy Duong as there is only limited space for tourism activities and a permission is too expensive for most poor households. Only 13% of the interviewed households in Thuy Duong participates in tourism activities. These households receive large financial benefits from tourism. Access to additional financial capital in Doi is somewhat less restricted, but here again there are limited options to participate. In Doi,

23% of the interviewed households participates in tourism activities. Although more households financially profit from tourism in Doi, the impact on the financial capital of individual households is negligible as the low tourist earnings are divided among about 20 to 40 households. Only in Thuy Duong the physical capital of the community is stimulated by tourism development, as it has led to the construction of a new tarmac road that connects the village with the National Highway No.1 and the town of Trung Kien. Only in Doi has tourism development stimulated the human capital of the community, as traditional Katu cultural skills revive and educational opportunities are sponsored. The impact on the social capital is the same as with the implementation of FLA policies. In Thuy Duong social relations are disrupted due to limited participation options for poor households. Although participation is also limited in Doi, households that cannot participate in tourism activities still receive other benefits, i.e. community fund, primary school scholarships, food and cultural heritage conservation. The main conclusion considering tourism development in both communities is that none of the two initiatives can be labeled as 'sustainable tourism development'. In Thuy Duong, the ecotourism project causes a negative impact on the quality of the natural capital and it stimulates only the financial capital of a few households. As a result of the widening gap between poor and not poor households, an increase in the amount of conflicts between households in the community has occurred. In Doi, tourism development does not significantly have an impact on the natural capital of the community. Although the financial capital of more households is stimulated, the low individual gains are not economically sustainable. The CBT project is however socio-cultural sustainable as it actively stimulates cultural heritage conservation and strengthening of community bonds.

The analysis of the impacts of FLA and tourism development on livelihoods contributes to the current development debate on decentralization and local participation. The research shows that decentralized development instruments *can* stimulate livelihood improvement and nature or cultural conservation. The effectiveness of these instruments is however largely dependent on local context factors, such as ethnicity, distribution characteristics, participation options, sustainable development characteristics and the vulnerability context. It is essential to recognize that without adequate understanding of these underlying local factors and careful planning and management, decentralized development instruments might generate unwanted and unsustainable impacts on poor rural communities. In the case of the two research communities, 'development', defined as a change for the better, only occurred in Doi through the implementation of the two interventions. In Thuy Duong, the implementation of the two development instruments also marked a structural change, but it was not a change for the better, as most households do not benefit from it. For future implementation of FLA and small-scale tourism development in Central Vietnam it is advised to make an in-depth analysis of the local context.

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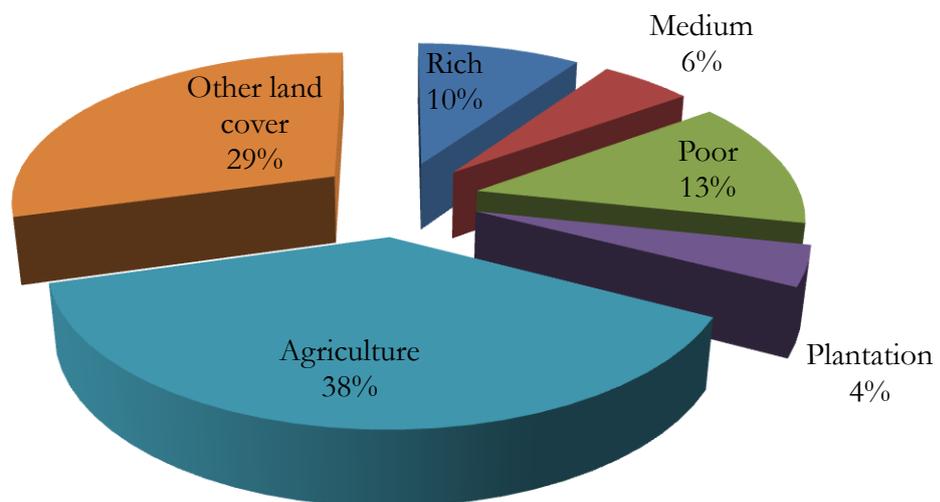
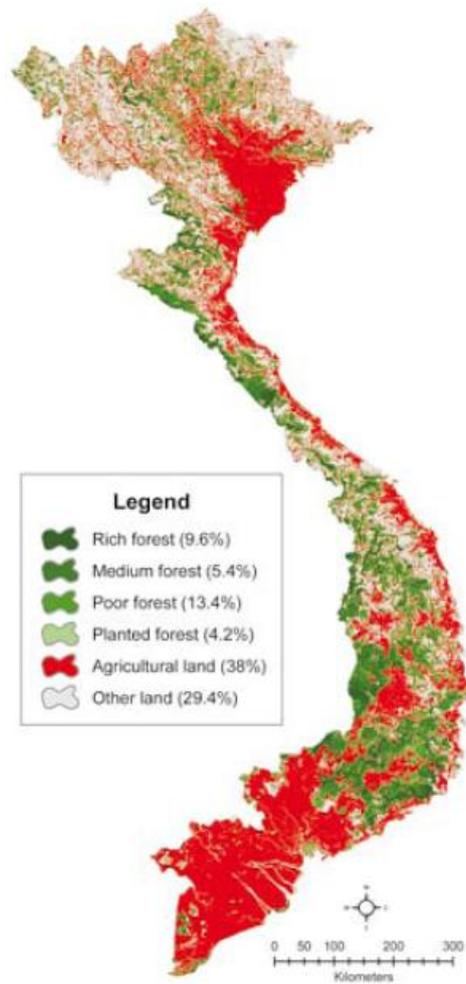
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Appendices

Appendix 1: Forest quality in Vietnam (1999)



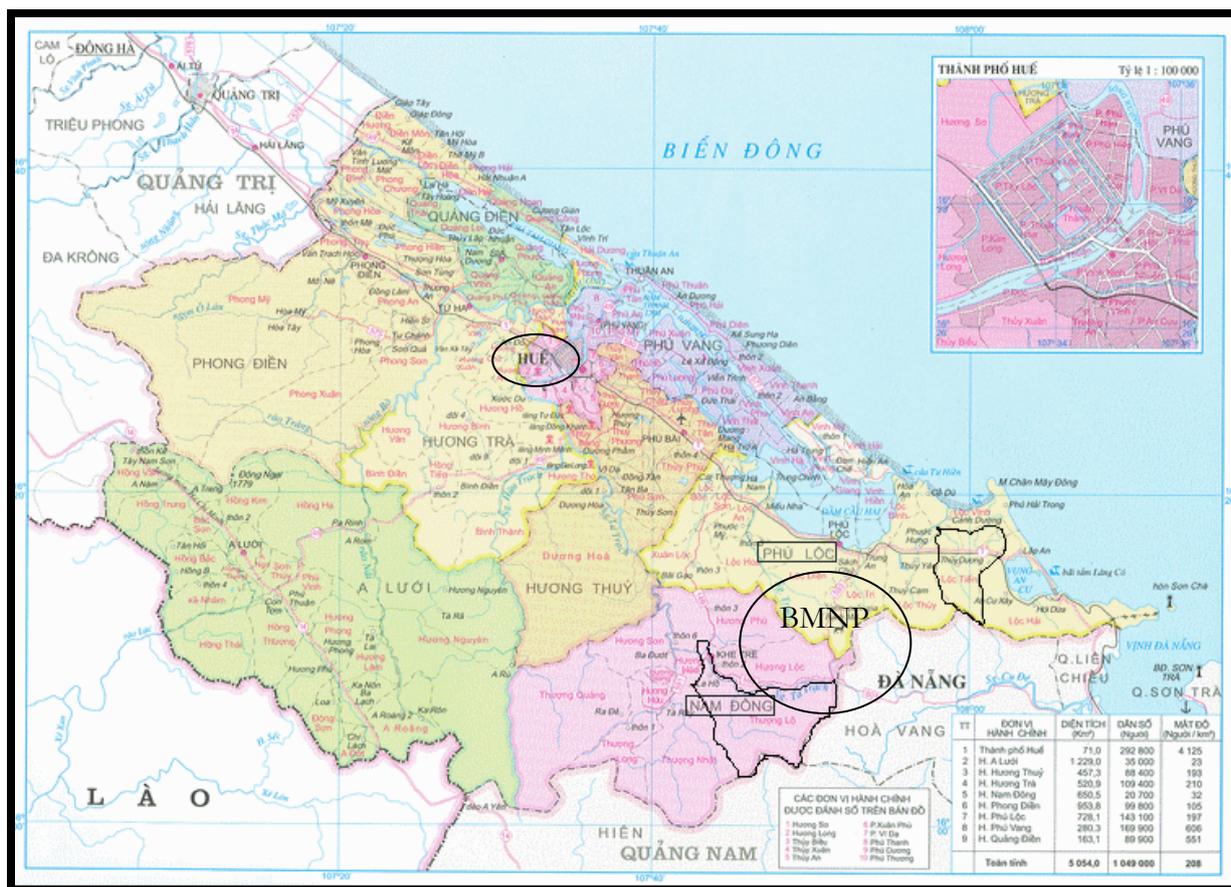
(Müller, Epprecht and Sunderlin, 2006)

Appendix 2: Regions of Vietnam



(Duy et al., 2010)

Appendix 3: Overview of Thua Thien Hue Province



(Vietnam Economic Association, 2011)

Appendix 4: Household interview questions

General questions

1. What is your name and age?
2. How large is your household?
3. What is your household's main income source?
4. What other activities does your household do for livelihood support?
5. Does your household use NTFPs? If yes, please indicate which ones (rattan, fuel wood, animals, fruits, nuts, medicinal herbs, forage, thatch for roofs, etc.).
6. Did your household receive any money or anything else from the commune or district government?
7. Does your household have livestock? If yes, please indicate which ones (buffalo, cow, chicken, pig, duck, dog, etc.).
8. When was rice land allocated to your household and by whom?
 - How large is the size?
 - Do you have a RBC for the plot? If yes, from whom did you get it and when?
 - How many times a year can you harvest the rice?
 - Do you sell part of your harvest or is all used for household livelihood subsistence?
9. Has (other) agricultural land been allocated to your household?
 - If yes: - When
 - By whom?
 - What is the size?
 - Do you have a RBC for the plot? If yes, from whom did you get it and when?
10. Do you feel that the living standard of your household has improved since agricultural and forestry land allocation? Why?
11. Did your household used to practice swidden cultivation before (forest) land was allocated to you? If yes, what type of swidden cultivation and for which crops?
12. When was your house land (and small garden land) allocated to your household and by whom?
 - How large is size?
 - What crops do you plant in your garden?

- Do you have a RBC for the plot? If yes, from whom did you get it and when?
- 13. Is the size of allocated land (forest/rice/agricultural/house) dependent on the members of the households in this community.
- 14. Do you feel that land (forest/rice/agriculture/house) is equally divided among and allocated to households in this community?
- 15. Are there sometimes conflicts/tensions over land in the community?
Does this now happen less often than in the past? What is the influence of FLA?

General poverty indicators

- 16. What is your education level (and grade)?
(none, primary, secondary first cycle, secondary second cycle, higher education)
- 17. Does your household have electricity?
- 18. Does your household have running water?
- 19. Does your household have a (simple) toilet?
- 20. Does your household have enough access to enough food or do household members sometimes experience hunger?
- 21. How would you categorize your household? (not poor, neutral, poor, extremely poor)
- 22. Does your household have enough money to pay for school tuition of the children belonging to your household?
- 23. Does your household have enough money to pay for healthcare?
- 24. Does your household have (financial) savings?

FLA (forestry land)

- 25. Has forestry land been allocated to your household?
If yes:
 - When?
 - By whom?
 - What is the size?
 - Do you own a RBC for your plot? From whom did you receive it and when?
 - What kind of trees do you grow? Why these?
 - When can you harvest your planted trees?
 - How much money do you receive for one harvest?

- What is the quality of the land? Why do you evaluate the quality like this?
- Does your household practice slash-and-burn?

26. Did you have an opportunity to influence the decision about which area of forestry land was allocated to you and the size of it? Can you describe how this process went?
27. What changes did the allocation of forestry land bring to your household?
- Do you now grow other crops or trees?
 - Has livestock become more important?
 - Did your livelihood/lifestyle change?
 - Are you now less poor? Did your livelihood improve?

FLA (natural forest)

28. Has the natural forest been allocated to the community or household groups?
29. Does the community or household group have a RBC for the allocated natural forest?
30. When was natural forest allocated and by whom?
31. What is the size of the allocated natural forest and where is it located?
32. How is the natural forest categorized? (Protection, special-use or production)
33. What is the quality of the natural forest? Explain your answer please.
34. Do members of your household often visit the natural forest?
If yes, what is the purpose of your visit?
35. Are members of your community still involved in illegal activities (cutting of trees/poaching) within the natural forest and/or within the borders of BMNP?
36. Is the natural forest good protected? Who is responsible for this?

Tourism development

37. Did the implementation of FLA have an influence on tourism development?
38. What kind of tourism activities does your community offer and where do they take place?
39. Can every household in the community participate in tourism activities?
40. Are you or any other member of your household involved in tourism activities?
If yes: - What kind of benefits does your household receive from tourism?
- Do other households receive the same benefits?

- Did tourism income improve the livelihood of your household? How?

41. What are the benefits of tourism development for the community as a whole?
Are these benefits equally shared among households?

42. What is your attitude towards tourism development? Please explain your answer.

Appendix 6: Participatory maps

Map of Thuy Duong



Drawers of the map



Map of Doi



Drawers of the map

