

MEASURING SMALLHOLDER LAND INVESTMENTS IN NORTHWEST VIETNAM: A CROSS-
CULTURAL STUDY OF THREE HIGHLAND VILLAGES IN PHỔNG LÁI COMMUNE, SƠN LA
PROVINCE

by

RICHARD CHRISTOPHER OWENS

(Under the Direction of Bram Tucker)

ABSTRACT

In this dissertation, I investigate the connection between land tenure and the conservation of natural resources in the northwestern uplands of Vietnam (Sơn La province) through a focus on the political and economic forces that shape smallholder investment practices. Within a historically-informed context, I analyze and compare smallholder land use decisions among Kinh, Hmông, and Thái groups considering identity, cultural practices, and household economics. Recently, Vietnam has banned swidden agriculture in favor of the intensification of upland agriculture. To that purpose, it has provided technology, subsidies, and extension services targeted to lowland majority development models. During the course of this dissertation, I analyze soil conservation activities in three villages (between and within designs) and across the commune at the household level. Results from investment activities (short-term, long-term and household rate categories) show that smallholders' long-term investments are significantly smaller in relation to household investments. I contend that there are a number of social, economic, and environmental reasons for why Hmông, Thái and Kinh are not making significant soil

conservation investments. State policies aimed at suppressing swidden agriculture have been replaced with intensive upland farming, leading to increased erosion and land degradation. Traditional swidden systems do not require inputs, hence they are not receiving long-term investments. Upland farming is possible through the use of inorganic fertilizers that are necessary for HYV maize production. Examining the failure of the property rights to conserve natural resources this research makes a significant contribution to the theory of property rights This study considers the socio-cultural and economics dynamics of land title and natural resource management.

INDEX WORDS: Vietnam, property rights, Red book Certificate, Investments, smallholders, northern highlands, ethnic minority, agriculture, Kinh, Thái, Hmông

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CHAPTER 1

INTRODUCTION: MEASURING SMALLHOLDER INVESTMENT PRACTICES IN NORTHWEST VIETNAM

Introduction

One late afternoon in the summer of 2009, my field assistant and I were returning to a very poor household to clarify information about his household economy. By now I had visited households all over the commune. During my fieldwork, I had become increasingly concerned by soil erosion from upland agricultural practices, and I decided to ask him to explain more about soil erosion on his land. From his survey, I knew he reported soil erosion on his fields, but I wanted him to explain why he thought the soil was eroding. Most smallholders explained they stopped erosion by adding more chemical fertilizer to the soil.¹ Since fertilizer has little to do with erosion, I worried that I was not asking the question correctly. When pressed to explain how to prevent erosion, he said there was nothing he could do to prevent it, it was a simple fact of highland agriculture. I told him that he should tell the agricultural extension service that he needed assistance. He responded by saying the government had recommended growing trees in upland slopes to help stabilize the soil. I then asked him why almost no one, including himself, was doing this. "Oh, there is one person who is doing agroforestry in the next village over," he replied. And when I asked him if agroforestry was helpful in preventing soil erosion, he said it appeared to be working really well and that he might do it too one day, but he could not do so now due to his wife's illness and his debt from the medical bills. I was a little surprised by the depth of his answer. I had heard countless times that there was no solution to soil erosion other than adding more fertilizer. This revelation told me that he was rational in his land use decision-making; meaning, he had good reasons for what appeared to an outsider to be a suboptimal choice. Second, I learned that smallholder land use and decision-making was far from easy to explain or understand. And why explain any of this to a foreigner? Agricultural production in the village, commune and district and throughout the province followed a similar strategy of growing maize in upland fields as far as the eye could see along immense upland slopes. Maize production was the most lucrative crop to grow in the highlands for cash-strapped smallholders. Long-term soil investments that would decrease soil erosion were a luxury that would likely require government subsidies to implement. The

¹ Smallholders would claim adding chemical fertilizer to the soil would prevent erosion. They were implying that lost soil and nutrients could be replaced effectively by applying more fertilizer. If no fertilizer was used, the crops would not grow since most of the soil nutrients were depleted. Applying fertilizer was like adding new soil to the deep B horizon. Most of the topsoil had long ago eroded. The result of adding fertilizer was that soil erosion was not a concern for the time being.

² 100,000dong is about 6USD.

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100,000 dong² a year government incentive to grow and keep forests intact was not working for ethnic minorities.

I had gone to Vietnam to study whether smallholders were making long-term investments now they had land tenure and were participating in the market economy. This dissertation examines smallholders' land use and investment practices and attempts to explain them.

Property Rights and the Link to Long-term Investments

Land degradation remains a serious problem for land productivity and livelihoods of smallholders in many areas of the developing world, including Vietnam (Meinzen-Dick, et al. 2002b; Schmidt and Tadesse 2012; Wiek and Larson 2012). Soil resources are critical to food production, sustainable livelihoods, reforestation, and functioning ecosystems (Lambin, et al. 2001; Morgan 2005; Saint-Macary, et al. 2010). Degradation and deforestation often exceed conservation activities in such countries (Acheson 2006; Clemens, et al. 2010).

In Vietnam, as much as half the total land area has been significantly eroded and degraded from soil nutrient loss (Clemens, et al. 2010; UNEP 2001). Deforestation is increasingly affecting mountainous areas in the northwest highlands, threatening the sustainability of smallholder livelihoods (Katsutoshi, et al. 2004; Lam, et al. 2005; Wezel, et al. 2002a). Soil degradation greatly increases soil erosion and subsequent flooding adversely affects the natural resources of downstream communities.

² 100,000dong is about 6USD.

A central thesis of this dissertation is that soil degradation and erosion have resulted from long-term actions that are part of wider political, institutional, and economic forces. Peasants in Vietnam, Southeast Asia, and globally are caught between growing enough food for themselves and selling enough food to the market. Long-term security of land tenure provides an incentive to invest in production and conservation technologies that can improve crop yields and encourage sustainable use of land and other natural resources (Meinzen-Dick, et al. 2002). The economic and development literature argues exclusive property creates security for smallholders with land title and insecurity to smallholders without title. One result of land titling across Southeast Asia, has been the restriction of the best lands, creating stratification in resources and wealth. “Long-term investments on land depend upon the right to exclude others from interfering with enjoyment of the benefits of that investment, though they may be permitted to gather or glean. Hence, exclusion creates both security and insecurity” (Hall, et al. 2011: 8). Land titling creates exclusivity to the owner or owners allowing them to enjoy the benefit stream of the property.

This dissertation examines one small but crucial aspect in the theoretical foundation of capitalism, which claims private property rights are necessary for long-term investment and therefore in the case of farming lead to sustainable land management (Carruthers and Ariovich 2004; De Soto 2000; Earle 2000; Johnson, et al. 2002; Papageorgiou and Turnbull 2005; Weber 2002). Economists argue that creating a land market ensures individuals will have the most efficient access to land and ensures maximum economic growth. Vietnam’s 1993 Land Law established pseudo-private property rights to households for the first time, and is therefore an ideal subject of inquiry to examine the theory of property rights.

Since the passing of the 1993 Land Law, there are growing concerns about the sustainability of current land use in the highlands of Vietnam. On the one hand economic development rapidly increased from the commoditization of land, but on the other hand, land use in agriculture is rapidly disappearing by the development process it helped create (e.g. urban expansion, state plantations, resorts, and infrastructure). Smallholders increasingly suffer from financial loss due to degraded soils and reduced productivity of cultivated soils (Clemens, et al. 2010). Encroachment (extensive agriculture) in upland slopes has been driven in part by population growth, which increased by 267% between 1976 and 2010 (Lahmayer 2003).³ As more smallholders abandon traditional swidden agriculture practices (and use of a fallow system) in favor of modern, market-driven practices, the number and severity of environmental problems related to soil erosion is increasing (Wezel, et al. 2002a).

Recently, scholars have begun to examine the relationship between natural resource degradation and conservation is related to land tenure institutions (Acheson 2006). It follows that when effective rules and governance structures are in place, then natural resources will be used in such a way to meet conservation goals. However, the unprecedented rate of natural resource degradation across the globe indicates institutional rules for conservation are failing. Within the social sciences, there are competing institutional theories of how to manage resources sustainably. These include private property, government management and local community management (Bromley 1991a;

³ In 1976, the first year demographic data was collected, the population of Son La was 410,000 and in 2010 the population increased to 1,093,000 people according to government statistical data, which are error prone and should only be used as an approximate value.

Ostrom 1990). There is widespread agreement institutions are critical to natural resource management; however, it remains unclear which one works best.

This dissertation examines the private property rights theory. Many economists argue that when property rights are well defined and enforced, they can lead to economic development (Acemoglu, et al. 2004; Alston, et al. 1996; Demsetz 1967; Norton 2000). Anthropologists and other social scientists (Acheson 2006; Berry 1992; Fukuyama 2004; Hall, et al. 2011; Hann 1998; Joireman 2008; Platteau 1996; Weimer 1997) have also noted the growing significance rise of property rights in the political and economic development camp.

Private property extends well beyond ownership of a living person; today abstract bodies such as corporations and governments can hold exclusive rights (Hann and Hart 2011). Private property has evolved from individual ownership to corporations, but it has shifted from “real” to “intellectual” property. The rise of neo-liberalism is founded on the principal of private property, an institution backed by economists and policy makers that has risen to dominate the international development agenda.

Hernando De Soto (2000), one of the most outspoken proponents of land privatization, has argued that the definition of, and the defense of, property rights of the poor will increase their well-being, by allowing them to open businesses and build capital, through “meta” property, the cumulative effect from the paper trail of title and mortgage. The legal aspects of property title free up surplus value of assets, necessary capital for economic growth and development (Feder and Onchan 1987; Platteau 1996). Subsequent research has led to a number of concerns over De Soto’s “meta” property. In areas where there is no previous credit market, land titling will not necessarily lead to capital formation

(Field 2005; Gilbert 2002). Another problem with secure property rights is that they exist within complex social and political institutions that pose significant challenges to the creation of land titles. Implementation of land title can lead to unintentional consequences of inequitable property systems, adversely affecting the poor and women (Joireman 2008).

In the 1980s, Vietnam underwent a significant transition in land tenure policy, with profound changes in rural land use and social relations around land. These reforms were part of a larger economic reform called *đổi mới* in which the country moved a few steps toward the market economy. The decollectivization of agricultural production and the creation of formal property rights to smallholders in Vietnam are based on the liberal paradigm that put agriculture at the center of economic development. Once these policies were adopted, Vietnam's agriculture growth rate jumped, averaging 3.8% annually from 1986 to 2005, making Vietnam a world leader in rice and coffee exportation. These results varied considerably across Vietnam, especially across most of the rural highland areas where most ethnic minorities reside.

Property rights reforms have steadily moved toward more neoliberal policies and increasing stratification. The 2003 land law opened land titling to foreign businesses increasing additional concerns over tenure security, resulting in demands for clarity on the security of land title (Brown 2012; Cam Hoang 2009; Gillespie 2013; Pham 2012; Sikor 2004; Sikor 2012; Thuy 2012). Property rights reform was an important step to creating a land market, that once established opened the doors to international trade. In 2007, Vietnam successfully opened up its economy and was admitted into the World Trade Organization (WTO). The increased market pressure shifted resources away from rural development, especially in the highlands. Vietnam like other developing economies has

avored larger agricultural systems at the expense of smallholders (Bebbington and Batterbury 2001; Durrenberger 1984; McMichael 2006; Polanyi 2001[1944]). In Vietnam, the market was brought to the smallholders, rather than bringing the smallholders to the market, a result that has left many in poverty.

Smallholders in highland Vietnam have been compelled by government policies to produce for the market. Marxist analysts highlight the difference between choosing to produce for the market and being *compelled* to do so⁴ (Harvey 2010; Wood 1999; Wood 2006). When smallholders are pressured to intensify production by external forces, either by government policies and/or market pressures, rather than from internal pressures, such as population pressure or limited land, they may choose short-term goals, leading to degradation of natural resources (Bridges and Oldeman 1999; Turner II and Robbins 2008; Turner II and Ali 1996). This is consistent with Turner and Ali's (1996) induced intensification hypothesis. The induced intensification thesis outlines two paths smallholders can take when faced with pressure to intensify their production (Turner II and Ali 1996). When pressures to intensify are external, such as from government policy and the market, the result is agricultural involution or stagnation. The other path happens when the pressure to intensify production is internally driven: long-term investments that enhance land use are more likely to be incorporated by the community.

⁴Classical political economy argues that capitalism, such as a mature commercial society, develops when the accumulation of wealth is large enough to permit investment. Marx claims that no amount of wealth accumulation makes capital, or leads to capitalism. Capital is about a specific social relation: it occurs when there is a change in social-property relations, which leads to a chain of "imperatives of competition, profit maximization, the compulsion to reinvest surpluses, and the need to improve labor productivity by developing the forces of production" (see Wood 2006:34). Capitalism is based not on wealth accumulation but on market demands and devastating social transformations. What enables capital to exploit economies and the land is the repeated imposition, adjustment, and intensification of market demands. Smallholders, upon entering commercial agriculture, become market dependent, and hence dispossessed under capitalism (Harvey 2005).

To test the theory that privatization leads to increased long-term agricultural investments, this study investigated how smallholders are treating their lands in post-đổi mới Vietnam. This dissertation investigates two very important questions: 1) How relevant is land title to smallholders? and 2) Do exclusive long-term rights encourage smallholders to make long-term investment? These two questions (which drive the research objectives and hypotheses detailed later in this chapter) are important for natural resources, and especially land management, for many reasons.

First, any natural resource management policy needs some idea of what these resources users' activities and goals are. Second is the intrinsic value of documenting smallholder investment activities (in real property) for resource management. The link between private property and sustainability is becoming the focus of a growing body of literature and points to the importance of studying small-scale natural resource users (fisheries, smallholders, pastoralists, hunter-gatherers) and highlights the growing need to understand their land use activities (Agrawal and Ostrom 2001; Amsalu and de Graff 2007; Bauer 2000; Belsey 1995; Berkes, et al. 2000; Biazina, et al. 2011; Bridges and Oldeman 1999; Chomitz and Griffiths 1996; Marsh 2007; Morgan 2005; Nelson, et al. 2006; Netting 1993a; Netting and Stone 1996; Roothaert, et al. 2003; Rudel, et al. 2002; Saint-Macary, et al. 2010; Scherr 2000). The experience of Vietnamese highland smallholders with land tenure changes is critical to analyzing how smallholders manage their natural resources and is largely understudied (Quan 2000; Quan 2009; Que 1998; Quy-Toan and Iyer 2008; Rambo 1995a; Rambo 1995b; Ravallion and van de Walle 2008; Ravallion and van de Walle 2003; Saint-Macary, et al. 2010; Salemink 2003a; Schmitter, et al. 2010). Third is the focus on the adaptive processes involved in testing the link of property rights and long-term

investments in the margins of highland Vietnam by combining the two research questions above. Smallholder land management can be useful in knowing how smallholders are using their natural resources and understanding what drives their actions (Blaikie and Brookfield 1987; Blaikie 1985; Blaikie, et al. 2000; Clay, et al. 1998; Dietz and Adger 2003). Land rights are fundamentally important to rural areas in terms of economic security, productivity, and long-term investments in land (Bohannon 1997 [1955]; Earle 2000; Morgan 1877). These land rights are inherently political in how they are extended, enforced and created (Carruthers and Ariovich 2004; Johnson, et al. 2002). Property rights establish who can possess, own, mortgage, lease, sell, and use land. Usufruct rights establish what one can and cannot do with property. As a result of exclusivity created by property rights, inequalities begin to form, creating stratification in communities and are therefore of social, political and economic significance (Durkheim 1992; Lazic and Cvejic 2011; Marx and Engels 1993[1848]; Nazarea-Sandoval 1995; Pintelon, et al. 2013; Weber 1981; Wood and Wood 1978). Land tenure systems that maintain livelihoods have value to local communities. Land is important because it is an important resource that requires collective understanding to manage successfully. It can serve to develop and sustain traditional ecological knowledge (Berkes, et al. 2000; Charnley, et al. 2007; Inglis 1993), maintain group identity and cohesion in times of change and uncertainty (Ruttan and Hayami 1984; Turner II and Robbins 2008; Vuong and Hjemdahl 2002), provide mechanisms for allocating changing resources, and act as a tool for attempting to maintain territorial control over traditional boundaries and resources (Neef 2006; Vo Tri Chuong et al. 1998). Land tenure systems that provide support for sustainable livelihoods help promote healthy ecosystems and cultural diversity, both of which are endangered by

degradation, modernization and globalization (Brown 2012; Neef 2001a; Stevens and De Lacy 1997; Vuong and Hjemdahl 2002).

With three-fourths of Vietnam's population living in rural areas, making up about 90% of the poor, rural development and agriculture are important to the success of its economy (World Bank 2007). Agriculture in Vietnam makes up 22% of the GDP and 60% of total employment and is therefore an economically, socially, and ecologically important area of study.

Vietnam is one of the most ethnically diverse countries in Southeast Asia, with fifty-four officially recognized ethnic groups, most of which reside in the central and northern highlands. The socialist government has aimed to transform the agrarian landscape from what James Scott refers to as becoming "legible" by establishing a uniform agro-ecological landscape based on wet rice (O'Connor 1996; Scott 2009).⁵ Studying social and cultural transformation in Phông Lái commune between ethnic majority Kinh and Thái and Hmông minority groups is important because the region has remained relatively understudied for national security reasons that have until recently kept foreign researchers out of the region. A comparison of land management strategies among the three ethnic groups will help elucidate differences attributed to culture, core and periphery, and livelihood strategies.

Property rights and Investments for Natural Resource Management

The type of investments and technologies smallholders' use plays a significant role in the rate of agricultural productivity grows and in shaping how that growth affects the

⁵ "Legible" is a dynamic process involving the management and measurement of people, activities and nature; used here, it refers to crops that are predictable, measurable, and easy for the State to manage.

poor and the condition of their natural resources. Many factors constrain smallholders from adopting long-term conservation investments; the most commonly cited reason is lack of secure property rights. Investments in tree crops and other conservation investments may be avoided when they are seen as expensive or risky. For long-term investments and conservation management decisions that require joint cooperation between smallholders to implement them, inadequate or ineffective institutions for managing collective activity can limit adoption (Meinzen-Dick et al. 2002: 12).

Understanding rates of adoption and natural resource management is best understood from a dynamic perspective. Property rights and long-term investment decisions, such as technology adoption produce important changes in agricultural productivity, poverty, and in the environment, that in turn create changes in the social and economic conditions of the community and institutional management. In the literature, land management decisions are closely linked to property rights, class, and access to credit.

Class and Wealth

In smallholder communities, natural resources are key assets. Therefore, wealth is directly related to property rights over natural resources. In the literature, the ability to control resources is linked to the accumulation of wealth and therefore can influence the options available to smallholders regarding technology (Meinzen-Dick 1996). In Thailand, for example, Hmông families owning more property are wealthier, have more grain storage, and can afford to invest more in technology (Michaud 1997a).

The bundle of property rights one owns and the security of those rights combined with a household's assets, income, and food security affect the degree to which the

household discounts future gains. The degree of wealth reflects class standing in the community. Households with higher wealth can afford put a higher future value on the medium and long-term benefits produced by investments in technology according to agrarian development models. Households with a lower socio-economic class standing, will have less food security and will therefore have less flexibility to offset future investment discounts. Additionally, wealthier households are often better connected through social and power structures and to sources of information, financial resources, and new technology than lower poorer households (Grabowski 1990).

Collective action can offer solutions for poor households to barriers to long-term investment and technology adoption, alleviating food insecurity in the process. For example, in the decollectivization of pastoral land in Mongolia, herders combined resources to make long-term investments in technology that are beyond the means of a single household to buy (Mearns 1996). Working together as a group, larger expenses and risk of the investments can be spread across the group reducing the risk of exposure to anyone household.

Access to Credit

A major argument to privatization of land tenure is that farmers need title to their land so they can get access to financial credit. It is argued in the literature that farmers without access or too little credit are held back from financial markets and opportunities to make investments (Feder and Onchan 1987). With privatization of land and land title, investments are expected to increase (De Soto 2000; Feder 1988).

Formal financial institutions, are relatively rare in rural areas. In rural highland Vietnam, formal financial credit exists, but remains limited in available locations and agricultural loans. Another problem with rural financial institutions is the high transaction costs associated with lending to the poor. Providing loans to low income households is questionable such that other forms of collateral may make better sense (Meinzen-Dick, et al. 2002: 25). In the literature, suggestions to improve access to rural credit suggest informal institutions can offer group loans using joint liability mechanisms. Group loans have been practiced by the Grammen Bank (Yunus 2013). Other programs have followed suit by allowing collective action to substitute and norms of social accountability for conventional property rights as a form of collateral (Meinzen-Dick, et al. 2002). Models that are pragmatic due to high transaction costs should be considered as alternative possibilities.

Informal credit sources are important to communities that can offer a flexible lending system based on local norms. Informal loans can provide resources that are more familiar and less intimidating than formal lines of credit. Members of a group credit system are more likely to establish mutual accountability for repayment, lower transaction costs of financial services. Group credit may also provide make larger-scale, expensive technologies more feasible to acquire and operate if members share the costs of purchasing and maintaining them.

The main argument in this dissertation is Vietnam's modernization agenda policies aimed at promoting social, economic and environmental sustainability have led smallholders into chronic poverty and debt and intensified upland agriculture, increasing erosion, floods, and deforestation.

Research Questions

This dissertation asks the following main questions:

- a. How do rural Kinh, Thái, and Hmông villages differ in their short-term, long-term, and household investments? Are there cultural differences in soil conservation practices?
- b. What are the long-term, short-term and household investment rate differences within each ethnic village? Do variables related to class Influence smallholder investment rates?
- c. What are the short-term, long-term, and household differences in household investment rates across the commune level? Do class variables influence smallholder investment rates independently of culture?

Theoretical Framework

Anthropology of Property

Property relations in American anthropology can be traced to Lewis Henry Morgan. Morgan claimed “the history of property relations embodies the greater part of the mental part of mankind” (1887: 7 quoted in Hann 1998: 24). Early work in anthropology was aimed at explaining the evolution of human societies. Lewis Henry Morgan (1877) was the first to compare property cross-culturally, helping to define American anthropology. Morgan outlined a linear evolution of societies from savagery through barbarism up to higher civilization by the importance each society places on property (Morgan 1877: 525). Morgan building on Adam Smith, formalized ideal types of property reported in ethnographic accounts and newly appraised evidence from western civilization. Morgan

saw the rise of private property was a threat to civilization. The role of the state was instrumental in establishing and defending the dominance of private property and the subsequent suppression of women in society. Morgan's theories were influential to Marx and Engels who used these insights in their communist orthodoxy. As a result Morgan remains influential to Vietnamese anthropologists today who are trained under the Soviet model (World Bank 2009). The Soviet anthropology understands and teaches ethnicity as something that is internally oriented phenomenon. Ethnicity is understood to be stable, having a continuity that is passed down through each generation, with specific social structures, and distinctive cultural attributes associate in their self-consciousness (Khazanov 1990).⁶

By the latter half of the early 20th century, anthropology was primarily interested in the role of property and property relations within the community. Robert Lowie (1921) discussed incorporeal property relations, which formed prominent role in his work. Property as material culture was essential backbone of the work by Leslie White (1943) and Marvin Harris (1994).

In British cultural anthropology, the functionalist Bronislaw Malinowski's work in economic anthropology gave rise to the interest in property and material culture of the Kula ring in the Trobriand Islands (Mauss 1925[1967]). Malinowski stressed the need to move beyond legal perspectives to better understand property beyond the false dichotomy of individual and society (Malinowski 1935: 318-19; Riles 2004). Malinowski described how property is identified with mythical origins, kin relations, and forms a central identity

⁶ This understanding contrasts with western anthropologists who tend to view ethnicity as an externally oriented phenomenon that is revealed through opposition between political, social, cultural aspects within a pluralistic society.

of individuals in the Trobriand Islands. Moving beyond Malinowski's individualistic character, Firth examined property in Tikopia, finding property was communally organized but most production was considered to be individual property. Using western notions of property, he argued individual ownership could only be expressed by degrees of responsibility for the enjoyment of the group property (1965[1939]: 278).

Radcliffe-Brown using structural-functionalism paid little attention to non-western property relations. His work examined what he referred to as corporations as the basis of legal entities prior to capitalism. Corporations in pre-capitalist societies controlled access to land. Countering the structuralists, Edmund Leach (1961) argued communities were organized around property relations rather than kinship as argued by most British anthropologists. Leach questioned the assertion of explaining social stability as the normative system. Leach argued the real limits are based on geography and human modification of the environment; claiming kinship systems were a reflection of the property relations. Jack Goody's (1962) work on property compared African and western property systems demonstrating the link between agricultural production and social reproduction. Goody focused on the transmission of property by way of intensive agricultural systems in Europe and extensive agricultural systems in Africa. He linked kinship and social organization at the household level to property. In Europe property was transferred vertically by the rule of primogenitor and dowry for women and in Africa property was transferred through lateral transmission by way of collective property and bride wealth (Goody 1976). In Africa land was far more abundant and led to a more egalitarian approach to property rights than in Eurasian societies. In Africa rights over

people, negotiated through kinship and marriage, became more important than rights over land (Coquery-Vidrovitch 1997).

Until the 1950s it was standard practice for ethnographies to incorporate sections on material culture, land tenure, and inheritance, all of which were based on property relations (Earle 2000; Firth and LeClair 1968; Malinowski 1922). After the end of colonial era, studies on property in anthropology began to subside. Hann (1998) suggests this is in part due to the rise of economic, political, and legal sub-disciplines in anthropology that lacked a framework suitable for tackling property, a topic, which encompasses all three subfields. During the substantivist and formalist debates in economic anthropology, Paul Bohannan (1963) argued western economic theory and concepts of ownership did not universally apply. The debate between the substantivists and formalists did not have a clear victor and many anthropologists moved on from the debate into other inquiries in the 1980s.

The close of the 20th century began the formation of the New Institute of Economics (NIE) a semi-formalist group of economic anthropologists, who shared an interest in quantitative approaches to economic anthropology and predictive behavior (Hann and Hart 2011). The new institutionalists saw all economic institutions as markets, and set out applying them into formal models. These models relied on rational choice models consistent with neo-classical economics. Economists such as Douglas North (1990) and Anthropologists such as James Acheson (2006) define institutions as being “the rules of the game” property plays a fundamental example. According to the NIE, the basis of institutions and incentives for individuals is based around property and property rights. The economist Harold Demsetz (1967) argued the formation of property rights is associated with the

incentive of exclusivity. The internalization of externalities by individuals evolved to the formation of property rights over time. However this argument has been effectively challenged by common property literature. Political scientist Eleanor Ostrom (1990) demonstrated communities are able to efficiently govern their resources to avoid environmental degradation as charged by Hardin (1968). Her work had a tremendous influence in collective property systems in science.

The field of economic anthropology continues to work in the middle of formalist and substantivist debate. Followers of the NIE argue property rights need to be decisive, yet legal anthropologists show property can not be reduced to a simple economic efficient component (Riles 2004). For example western concepts of property remain problematic when applied to Melanesia (Hirsch 2010; Hirsch and Strathern 2004). However research shows private property is important. In agriculture, crops will tend to be cultivated better when households have a claim to the land and when they can pass down the land to their children and grandchildren. Other resources such as forest and water resources may be better served under collective property regimes. The key to institutional success relies on agreed upon rules that are carefully applied and respected by the community (Acheson 2006; Ostrom 1990).

Today property is much less studied by cultural anthropologists than in the past; only a few economic anthropologists and even fewer archaeologists are writing about it (Acheson 2006; Hann 2007; Hann 1998; Hirsch 2010; Hunt 1998; Hunt and Gilman 1998). Real property continues to be significant, and yet it has largely been overshadowed in economics and anthropology by other forms of property such as cultural property, intellectual property. Over the last 20 years, neoliberal ideology and new technologies have

expanded the concepts of property in to new technologies of biology, information, and communication creating entirely new property relationships (Brown 1998; Darnton 2009; Hirsch 2010; Sawyer 2004; Tsing 2005).⁷

Property relations have been evolving since the formation of societies, yet in the last two centuries the private property rights regime has risen as the dominant form (Hann 2007; Hann 1998; Hirsch 2010). Property rights intersect all aspects of society including law, economy, politics, and culture. The enormous success of the liberal paradigm has spread across the globe to many countries including post-socialist countries in Eastern Europe and Asia (Kolodko 2001; Marcuse 2008; Zinnes, et al. 2001). In Vietnam and China, where socialism still exists, the centrally planned economy has been replaced with state capitalism. However, current anthropology has had little to say on the topic, effectively ceding the topic to law and economics (Alchian and Demetz 1973; Alston, et al. 1996; Belsey 1995; Demsetz 1967; Hall, et al. 2011; Hann 1998; Johnson, et al. 2002; Papageorgiou and Turnbull 2005). Ownership involves socially recognized economic rights, and thus is important to anthropology.

Property is fundamental in directing and limiting the use of things in all societies. Property determines exclusive rights to things and can therefore be defined as the right to exclude (Earle 2000; Hall, et al. 2011; Hunt 1998; North 1981). Property has both political and social implications (Shipton 1994:384). The right to restrict access, govern, and exploit things entails the power to influence, control, and exploit people (Carruthers and Ariovich 2004). Because owners of productive assets can inhibit access from non-owners, they can

⁷ The use of digital technology has increased the concerns over ownership (most notably the web-based company Google's program to digitize millions of books). In cultural property, who can use the Sioux name Crazy Horse? Can the name be used for creative innovation or is it tied to a person, with distinct legal rights.

influence the life-chances of non-owners. Ownership can be distinguished from possession by the recognition of ownership rights by others, either directly or through a legal system. “If property appears to be dyadic, in reality it always involves triadic relationships” (Carruthers and Ariovich 2004: 24). Meaning, property is about relations between people, and the property object.

Social Institutions and Conservation Management

In the literature on land use and conservation, property rights are asserted to be an essential and necessary requirement for sustainable land management (Lynch and Talbot 1995b; Vanclay 1993). Security of tenure is a broadly understood concept and refers to an institutional framework capable of enforcing an individual’s right to land to the ability to support “a bundle of rights”, and includes the right to access, use, manage, control, or to transfer property (Meinzen-Dick and Knox et al. 2002). Institutions governing property can and often vary over their bundles of rights to the resource in question. The literature on agricultural land tenure generally agrees that secure land tenure is a prerequisite for the conservation of natural resources and higher investments in land because secure land tenure provides a return on long-term investments (Feder 1988; Feder and Onchan 1987). When farmers have clear land title, they are more likely to make long-term investments. Lack of secure land rights is argued to thwart long-term investments and lead to exploitative natural resource management and degradation (Rudel 1993).

Yet, the literature is also clear that providing secure land title does not ensure sustainable land management. For example, when external pressures are placed on communities, such as markets and population pressure, secure land tenure may be less

important to smallholders (Angelsen 1999; Angelsen and Kaimowitz 1999; Henrich 1997). State regulations and formalization of property titles in some cases may increase tenure insecurity. This can occur when social institutions responsible for managing customary property rights systems do not effectively cope or keep up with local demands for land (Meinzen-Dick et al. 2002). For example, increases in land degradation and deforestation have occurred when demands for land exceed state capabilities (Christensen and Rabibhadana 1994; Angelsen 1999). This occurred in central highlands of Vietnam the 1990s, during the coffee boom, where demand for land far out paced state governance to regulate spontaneous migrations, which led to massive deforestation and the displacement of ethnic minorities (Salemink 2003a; Salemink 2003b).

Acheson (2006) argues that all institutions of property rights (private, state, collective property regimes) can fail and it is unclear which form of property provides the best solution for establishing property right regimes. Institutional failure may be especially relevant in the highlands of Vietnam where land titles can vary in their sense of security depending on the social-cultural, economic and environmental realities of the household. For lower income ethnic minority households, local collective property institutions maybe more apt to effectively address their livelihood security needs and foster better natural resource management practices. Under conditions when the formal property system is associated with high transaction costs of maintaining the formal cadaster and titling system, distrust and incapacity of the judiciary, and by poor access to financial capital, land title may reduce rather than increase tenure security (Meinzen-Dick 2002: 295).

Institutions and property rights in literature call for a systematic analysis of case studies aimed at evaluating their conservation of natural resources. Agrawal (2001),

Bromley (1991), and Acheson (2006) have identified four distinct institutional arrangements. In the literature there is little agreement on the forms that land tenure rights should take (state, private property, and/or communal property), and who will should be recognized, and who will stand to benefit from the property regimes. The literature on common property has largely been a response from this confusion (Arnold and Campbell 1986; Baker 1998; Berkes 1989; Ostrom and Schalger 1995).

Property Rights, and Property Regimes in Natural Resource Policy

Public policy is largely concerned with managing institutional rules that control individual economic actors within the larger economy. Individual actions occur within an institutional framework that defines domains of choice. Access and use of natural resources are dictated by institutional rules. Property rights by definition, means the state provides protection to the property claim. A *right* to property becomes a triadic relationship between the object of interest, and others interested in the policy who have a *duty* to respect my right (Bromley 1990). Rights can only exist within a social framework that gives duties and enforces individuals to those duties. Therefore in public policy in environmental matters it is critical to understand property arrangements, since these give rise to behavior and legitimize “rights”.

Bromley defines a right as the capacity to call upon the collective to stand behind a claim to a benefit stream. If one has a right, then the state will step in to defend that right. To have a right in something means one has access to the benefit stream, which is deliberately sanctioned and protected by the state. To own property is to have control of a benefit stream. “Property is an income stream. When I purchase a piece of land its price is a

reflection of the present discounted value of all of its future benefit streams. By purchasing the land I am really purchasing the benefit stream- that is my property, the thing I actually own” (Bromley 1990:15). Land is referred to property, but Bromley points out that the real property is the benefit stream that I now own, and that the state has to protect.

Resource management regimes have evolved over time in an effort to manage natural resource of a community. Research can be helpful when it is directed at determining the attributes of certain land uses. To understand the role of resource management regimes requires they be defined.

Common pool resources are problematic in the social science literature for two reasons. Common pool resources (water, soil, air, forests, grasslands, fish and wildlife) are subject to depletion by users and can not be used by another; 2) these resources are hard to avoid free-rider problems (Acheson 2006). Additionally, these resources are subject exploitation by people and if unchecked can lead to total destruction and loss of the resource.

Institutions govern common pool resources in various ways and some institutions succeed and some fail (Acheson 2006). Institutions establish rules, rights and duties to members. There is no guarantee the rules will work if unchecked, successful institutions may require continual adjustments to curb over-exploitation. Institutions that must provide members with the necessary incentives to protect the resource from free riders (Olson 1965).

This problem argues Acheson (2006), is one of collective action dilemma. The dilemma occurs from a divergence of interests between what is optimal for the individual and the group. In collective action dilemmas, rational behavior by individuals can lead to

overexploitation in the resource collectively (Hardin 1968). Property rights can provide a solution to this challenging dilemma because when they are established and enforced, there is no longer the problem of “open access” and over exploitation. Given the right incentive, individuals with permission to extract resources will adhere to management restrictions. Hatcher (1990) defines effective management as solving a two-tier collective action problem. These are property rights and a management mechanism. Acheson argues (2006) institutional failure occurs when the group cannot solve one, or both, of these collective action problems. Conservation of natural resources requires property rights.

Property rights are commonly offered as a solution to open-access problems and include a wide range of organizations (Acheson 2006; Hann 1998). Institutions provide rules governing access, management, inheritance, and exclusion and from which the foundation of property rights is built. There are four possible types of property regimes: state, private, common, and non-property.

State Property Regimes

In state property regimes ownership and control over use of natural resources is determined by the state. Individuals and organizations have access to and are able to make use of the resources as determined by the state (Bromley 1991). State parks, forests and military bases are examples of state property. State property can shift to other types of land. For instance, this happened in 1955 in Vietnam and in 1957 in Nepal, when the state nationalized much of the village forests, converting them from common property. The state may directly manage the land through government agencies or indirectly lease the land to groups, collectives, or individuals. In Vietnam, individuals are given usufruct rights for a

certain amount of time. Most individuals have access to living, agriculture and in some cases forestlands in the highlands. Individuals are given usufruct rights on marginal lands through land titles and are granted ownership rights of its produce.

Figure 1.1. Types of Property Regimes

State Property

Individuals have *duty* to observe use/access rules determined by a management agency. Agencies have a *right* to determine use/access rules.

Private Property

Individuals have *right* to undertake socially acceptable uses, and have *duty* to refrain from socially unacceptable uses. Non-owners have duty to refrain from preventing socially acceptable uses, and have a right to expect that only socially acceptable uses will occur.

Common Property

The management group (owners) has the *right* to exclude nonmembers, and nonmembers have *duty* to abide by exclusion. Individual members of the management group have both *rights* and *duties* with respect to use rates and maintenance of the land owned.

Non-property

No defined group of users or owners and benefit stream is available to anyone. Individuals have both privilege and no right with respect to use rates and maintenance of the asset. The asset is an “open access resource” (adopted from Bromley 1990: 31).

In socialist Vietnam, state property regimes attempt to give users managerial discretion of the land by conveying long-term expectations in terms of renewable tenure security (15 years for agricultural land and 50 years for forest land). Socialist states are unusual in their property management. Normally, the state removes most managerial strategies from the user and there are no long-term tenure expectations of tenure security given. In between the two extreme tenure strategies (state vs. private property) exists what is commonly referred to as, “common property.”

Common Property Regimes

Common property regime is an institution where there is private property for the group or co-owners. Individuals have rights and duties in a common property regime (Bromley 1991b). Common property can be thought of as a corporate group identity, in which the members are defined by clear boundaries, common interests, and have at least some interaction with other members. Common property is similar to private property in that it is defined by its exclusion of non-members.

Common property institutions involve joint ownership and access to natural resources (Ostrom, et al. 2002: 18). The literature on commons research has been extensive due to Garrett Hardin's (1968) charge of the commons having a free rider problem and will collapse due over exploitation. Social science research has since demonstrated how the commons are characterized as having diverse institutions with embedded social practices which in most cases are able to thwart the "tragedy of the commons" and sometimes approach social, economic, and ecological sustainability (Agrawal and Ostrom 2001; Feeny, et al. 1990; Gibson, et al. 2000; McCay and Acheson 1987).

Common property research attempts to demonstrate how communities collectively strive to negotiate problems of over use and free riding by non-members. Examples of common property include endogenous authority systems, tribal groups, kin systems, extended families, and neighborhoods. These groups will hold customary ownership of certain natural resources including grazing land, forest, agriculture, and water (Beitl 2012; Bromley 1991b; McCay and Acheson 1987; Netting 1976).

Corporate group property regimes make up a large number of common property systems. In customary land use types, individuals and families are allocated property by the leaders. As long as those individuals cultivate the land, they are exclusively entitled to its produce.

Common property systems are not the same as collectivized agricultural systems that were previously found in USSR, China or Vietnam. Land in these entities belonged to USSR and to the state currently in China and Vietnam, and is completely different in nature than common property regimes. Common property exists in land that is either state land such as non-private land in the public domain or land that is open access, but which is controlled by the commune property members.

Common property is popular idea in anthropology because it illustrates the ways that communities are able to self-organize and create often-diverse institutional frameworks or embedded cultural practices that in many cases evade the tragedy of the commons. The literature on the commons is concerned with demonstrating sustainability, and the conditions under which people coordinate their activities. Sustainability in the literature is defined as the maintenance of a resource system, shared facility, or institution to ensure the flow of benefits to the members (Agrawal 2001; Agrawal and Ostrom 2002; Beitzl 2012). These systems are often based on equity through the sharing of the costs and benefits involved with maintaining the resource.

Non-property

Also known as “open access” occurs when there is no property rights or well defined rights. Access is open all. Hardin (1968) confused common property with non-

property, but in this was mistaken. Open access is thought to be very rare since many grazing areas, forests, and agriculture lands are governed by informal institutions. However, open access can occur when there is institutional failure in state, private or common property regimes.

One general cause of resource depletion is that people are not aware it is occurring; this may be especially true in the initial phase of overexploitation. This lack of awareness may be due to the complexity of the resource that makes it genuinely hard to predict the role of human activity (Berkes and Folke 1998; Wilson 2002). Where overexploitation occurs, people are likely to continue to overexploit in the absence of effective institutions or rules to govern resources sustainably. In this research I measure institutional success or failure according to the effective conservation of renewable resources. While there are problems with this definition (Rhoades and Nazarea 2007; Singleton 1998: 15-16), I agree with Acheson (2006) that if natural resources cannot be conserved for the long run, managing institutions cannot be considered successful. I turn now to discuss private property.

The theoretical basis of Private Property

One of the most basic components of capitalist theory is the relationship of property rights and long-term investments. According to the theory, private property rights provide a mechanism for solving resource problems by entering into the market. The lack of property rights has been described as reducing control and time horizons and is therefore considered to be limiting profitability and creating problems for control over possession; restricted control of resources results in inferior resource allocation and use (Eggertsson

1996). Private property rights are argued to increase efficiency, lower transaction costs, and are the link to capital formation (De Soto 2004; De Soto 2000).⁸ Economists see private property as the best problem-solving resource management scheme. Somewhat surprisingly, “No one has challenged the idea that complete private property rights help to conserve resources...” (Acheson 2006: 120).

However, incomplete private property rights are ineffective and the primary cause of market failure, which results in externalities (Barzel 1989; Barzel 2002; R. 1994). Externalities cannot be 100% controlled by privatization (Baland and Platteau 1996: 37). Negative externalities exist when some production costs are passed on to others, such as pollution in streams, or in the air. Positive externalities are when a neighbor uses the land sustainably, increasing local biodiversity. In cases where markets are efficient, and property rights are well defined, there is still no guarantee of resource conservation. Small-scale communities that rely on natural resource extraction for their livelihoods have been shown to overexploit the resource under certain conditions (McCay and Acheson 1987: 9). The Dust-Bowl conditions of the 1930s in the U.S., suggest landowners may overuse natural resources under private property regimes.

Baland and Platteau (1996) offer four conditions in which private property owners will rationally overuse their resources. The first case occurs when the growth rate is lower than the discount rate. For instance, taking out a loan with a higher rate of interest does not make fiscal sense if the resource is increasing in value at the same or lower rate. In this case it would be better to sell off the resources and invest the profit into another

⁸ For example, smallholders with property rights have efficient land use since landowners are free to use land in ways that yield the highest economic return, whether it is from cultivation, leasing the land, entering into an agreement with a sharecropper, or selling the land.

commodity with higher returns. Second, long-time horizons make it easy to overexploit resources. For example, forests can take a very long time to recover and therefore make little economic sense to invest in since the future value of forests is low (Dejene, et al. 2013; Mass and Vicary 1991). Third, uncertainty about resource availability can lead to overexploitation. In chaotic environments, resources can be hard to predict due to fluctuations in the resource. These can include disease, predation, and weather (Wilson 2002). Without reliable data on resource availability, it is easy to exploit resources when the opportunity arises. There is no guarantee an investment will pay off. The fourth situation is due to market pressures to overexploit the resources. This situation is often linked to cases of extreme poverty (Baland and Platteau 1996:46). The time horizon for people in poverty is very low. Optimal strategies that enhance the long-term quality and quantity of a resource may be passed up due to more immediate needs. Any of these four circumstances may trigger a landowner to overexploit his or her resources. And more than one will encourage property owners to degrade their resources.

Economic Anthropology and Smallholders

James Scott's *The Moral Economy of the Peasant* (1976) and Samuel Popkin's *The Rational Peasant* (1979) arrived at different conclusions about smallholder decision-making. Scott (1976) argued that capitalist farming systems introduced via colonialism pressured peasants to quietly resist market integration because it threatened their social cohesion. As land and labor became commoditized, the traditional reciprocal economy eroded, an economy encoded in moral norms of shared labor and mutual obligation to safeguard against difficult times (Dalton 1961). Peasants have existed for centuries by

relying on social capital, by being risk averse and conservative to safeguard against lean times (Chayanov 1984; Fafchamps 1992; Netting 1976; Wolf 1966; Wolf 1967; Wolf 1982). Popkin (1979) countered by claiming that moral, corporate, and cooperative peasantry in Vietnam and elsewhere was a precondition to capitalism. When denied the right to own property, peasants have *rationaly* resisted productivity in response to heavy taxes. Their unity is more of a class-based resistance than a moral economy, as there is tremendous differentiation within the group (Cancian 1989). The structure of power, property, and privilege requires peasants to behave accordingly to survive. According to Scott (1976), peasants must adapt and change their culture to move into the modern world economy; according to Popkin (1979), peasants are ready to participate in capitalism, given access to resources, information, and capital.

I now turn to discuss the concept of sustainability. *Sustainability* can be defined as the capacity to maintain an activity socially, economically and ecologically, for the long term (Acheson 2006). The definition of *sustainable development* by the Brundtland Commission of the United Nations has been often cited: “sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their needs” (UN 1987). *Sustainable agriculture* is generally outlined using social, economic and environmental components (Costanza 2001). These components contrast with each other in their assumptions about the carrying capacity of earth and the components of human impacts (technology, population size, and consumption levels) (Cleveland and Soleri 2007; Daily and Ehrlich 1992). However, sustainability is ontological and therefore must be subjectively defined to be measured (see Appendix A).

The rational peasant model in agricultural economics relies solely on economic productivity and growth to measure agriculture sustainability⁹ (Ellis 2000; Lynam and Herdt 1992; Popkin 1979). Included in this measurement is the implementation of new technologies and crop varieties that respond to chemical inputs, also referred as the Green Revolution in agriculture (Cleveland 2001). For example, development reports often suggest that farmers will adopt a new, higher-yielding agricultural production system if they are offered better information, technology, inputs, and decision-making opportunities. Within this pro-technology and high-input development model, sustainable agriculture is defined as helping farmers to adopt and get access to the latest farming technology and practices. Smallholders that adopt Green Revolution technologies are seen as progressive, while those who avoid latest technologies are often referred as “primitive,” using “backward” farming practices, by multi-national agriculture corporations and researchers in genetically modified organisms (GMOs). The goal of agriculture development by the followers of this economic model is to replace all traditional “primitive” agriculture with modern industrial practices (Conway 2003; DeVries and Toenniessen 2001).

Political economic analyses of peasants on the farm production demonstrate their social and environmental vulnerability. Smallholder surpluses are extracted from the land and household labor. When these surpluses fall, due to shortfalls in production, and when selling commodities for low prices, peasants are often forced to make up the loss by working as wage laborers to cover income shortfalls. Low returns on commodities can be

⁹ Population growth is considered exogenous because sustainable agriculture must feed a growing population, and therefore sustainable agriculture collates with sustainable growth. Measurements of sustainability are necessarily short (<20 years) to accommodate projections with low probability errors, and site specific since multilevel spatial analysis cannot be adequately defined. In this paradigm, environmental sustainability is secondary to economic growth; for example, do farmers view agro-ecological technology as promoting profits or welfare?

explained by poor market competition in traders and low prices from too many producers or from large agribusiness competitors. Indebtedness can also cause problems with producers; low savings, government taxes, school and medical fees, and transportation costs can severely influence the transfer of surplus away from the peasantry (Blaikie 1985: 119). The ability to make long-term investments will predictably become a greater burden when one faces debt.

Induced Intensification Model

Boserup's land intensification hypothesis has provoked debate among social scientists since the 1960s, as has the rediscovery of Chayanov's work on Russian peasants (Turner and Ali 1996). Boserup argued that contrary to Malthus, population pressure does not necessarily lead to land degradation, but may spur technological innovation. By turning Malthus' technology-limits-population-growth model upside down, Boserup challenged the paradigm by arguing that endogenously driven technology allowed intensification of agriculture among peasants and smallholders (Boserup 1965; Boserup 1981). Boserup argued that endogenous techno-managerial strategies of agriculture was foundational to predicting smallholder behavior. This insight influenced researchers to measure induced innovation and eventually led to the induced innovation theses and allow researchers to explain contemporary pathways of investment in and use of agriculture technology at large (Hayami and Ruttan 1985). Since her work, many studies have delved deeper into understanding and measuring social structures on agricultural intensity (Brookfield 2001; Netting 1993a; Stone 2001; Turner II and Ali 1996).

Boserup's argument stressed the differences between subsistence farmers and commercial farmers, was the same argument made by Chayanov at the turn of the century from his work on Russian peasants (Chayanov 1966). Chayanov argued that subsistence farmers respond to household consumption more than market demand and seek to minimize the disutility of labor (drudgery) rather than to maximize gain. Research has since examined the differences in smallholders and the process of techno-managerial change.

Smallholders shift from known technologies to new techno-managerial innovations when land and labor dynamics propel them to do so (Brookfield 1972; Brookfield 2001; Netting 1993b; Turner II and Brush 1987). This production logic produced the “induced intensification thesis” by researchers revealing conditions leading to land expansion (Pascal and Barbier 2006; Place and Otsuka 2000; Tachibana, et al. 2001) or land abandonment and migration (Ananda and Herath 2003; Gray and Kevane 2001; Stone 2001) versus intensification (Turner II and Ali 1996).

According to the induced intensification model, smallholders are induced to make changes in cultivation when production goals change. Variation in goals can be linked to the degree to which smallholders are balancing subsistence needs against market production needs. When social needs are put into context with cultural and ecological history, household decision-making can be better understood.

As land pressures increase from market demands or population, smallholders must apply more and more attention is given to intensify their fields. Intensification is usually done only under high land pressures, requiring higher labor and capital inputs to match land productivity vis-à-vis increasing stress and subsequent natural resource depletion.

Techno-managerial change is done in a stair-step pattern. The household makes incremental changes in labor and capital to match food production needs. When a more substantial investment is needed, households must decide the best labor and capital strategy, such as terraces, irrigation networks and/or restructuring allocation rules, cresting a threshold to intensification. Thresholds can serve as impediments to innovation, leading to what Geertz (1963) describes as involution and stagnation. Involution occurs and production increases, but with significant decreases in the marginal utility of inputs (Pascal and Barbier 2006). Stagnation can occur as the means of production do not increase and may decline.

Socio-economic conditions can also impede induced intensification innovation and range from government policies and institutional structures of property (Place and Otsuka 2000). For example, well-defined and enforced rules of property can enhance or suppress agricultural intensification in the face of increased demands. Land title encourages landesque capital in areas where agriculture is important (Tachibana, et al. 2001) but can discourage investments in peri-urban environments (Ananda and Herath 2003).¹⁰ Secure usufruct (right to use without ownership) also encourages investments.

Environmental conditions influence whether intensification is feasible. Areas with low land quality, such as is found in parts of highland Vietnam, may exacerbate intensification processes and require more investment to sustain permanent cultivation, but on good lands soils are amenable to frequent cropping and therefore have a high yield per unit of input. Strong support for the induced intensification theses occurs under

¹⁰ Landesque capital is “permanent” improvement of the land such as terracing, drainage and irrigation systems.

conditions when smallholders are either completely subsistence or market oriented and where environmental and socioeconomic impediments are not extreme (Turner II and Ali 1996). The northwest highlands of Vietnam provide an opportunity to apply the induced intensification model.

Field Site Description and Methods

My research site is located in the Phổng Lái Commune, Thuận Châu District, in Sơn La Province, the largest and poorest province in Vietnam, covering an area of 14,209 Km² and sharing a 250 Km border with Laos (See Figure 1.1). The northwest region of Vietnam is a hilly and rocky land that is a mixture of forest and valley, with rain-fed agriculture and paddy fields that can extend from the deep valley floor to the top of steep slopes that fill the region. Across Sơn La Province, more than 900,000 people, from 34 ethnic groups, live in hamlets, villages and market towns. Three ethnic groups account for 80% of the population in Sơn La: Kinh (17%), Thái (55%), and Hmông (8%). In the Northwest portion of Vietnam and elsewhere, the highlands are increasingly opening up to development programs, investment, and regional planning as Vietnam moves through socialism to market-oriented state capitalism. The Northwest region of Vietnam is included in the much broader highland region described by geographer Willem van Schendel (2002:647) as “Zomia,” a place largely unexamined because it lacked areas necessary for state formation and has therefore been politically insignificant. James Scott (2009) describes the agrarian reform in Zomia as “the last great enclosure.” Until the late 20th century, the remote

highlands were a place where people throughout history sought refuge from the state, and lived in the margins of surrounding civilizations. The development policies of the Socialist Republic of Vietnam seek to force shifting highland agriculture systems into more intensive sedentary farming systems. Using top-down policies that promote productivity and market liberalization, the government has made little effort to understand the diverse cultural mosaic of the highlands. Interestingly, there is very little in-depth research in this area on livelihoods and the ensuing changes that brought about all this political and economic change (Forsyth and Michaud 2011:1).

My research measures investments in land by highland smallholders from Kinh, Thái and Hmông ethnic groups. This research will add to the needed local information about this complex and little-known region. International research, until recently, has been prohibited along the borderlands between Laos, Vietnam and China, and very little research of this type has been published (Evans, et al. 2000; Forsyth and Michaud 2011; Jock 1984).

Since the *đổi mới* reforms of the 1980s there have been several “qualitative shifts” in land resource use, most notably the closure of the upland frontier, which can no longer be used as a place to escape from oppression or tax collectors or provide for the next generation. Land rights were traditionally inclusive through customary rights but have now become exclusive, giving rise to multiple forms and justifications of legitimization, be it for conservation, infrastructure, development, private property, and/or ethnicity (Brown 2012; Cam Hoang 2009; Castella, et al. 2004; Castella, et al. 2006; Hall, et al. 2011; Hodal and Kelly 2013). Vietnam’s land reform project provided smallholders with formal land title and *exclusive* access to land for the first time. This shift in land security has

simultaneously led to an increase in landlessness due largely to market forces that have threatened agriculture production (see Table 1.1). After the 1993 Land Law was passed, there was a sharp increase in income inequality as measured by a rise in the Gini coefficient.¹¹

In the last three decades, smallholder displacement from urbanization has increased. In 2005 agriculture made up 21% of Vietnam's GDP, and 65% (54.9 million) of the population depended on agriculture for their livelihoods. In 1985, agriculture made up 40% of GDP, and 73% (39.1 million) of the population depended on agriculture (Hall, et al. 2011: 3). Since 1993, land ownership changed across the country. Across Vietnam households without access to land increased from 7% to 14% in 2004. These rates vary widely across the country; in the Northwest region, 1.5% of households are homeless compared with the Mekong delta, where the homeless rate has jumped to 40% (World Bank 2006). These changes have come about quickly across Vietnam and are threatening social relations between people and the land.

Today most highland smallholders fall below a poverty line of 1,789,871 VND/person/year (Minot, et al. 2003). This suggests that, counter to the expectations of the liberal paradigm, the new market has yet to be a great opportunity for capital accumulation for most ethnic minorities. Even though agricultural production has increased from the adoption of new farming practices that include expensive technology and petrochemical inputs, smallholders living in the highlands have little recourse other than continuing to grow for the market to pay off their investments and debts. Indebted smallholders are

¹¹ The Gini coefficient measures equality. A value of 0 is perfect equality and a score of 100 is perfect inequality.

compelled to work the land intensively until their farms fail and/or they are too indebted to invest more.

Vietnam's development policies have aimed at accelerating economic growth and development through exploiting the full potential of their natural resources. Development policies over the last several decades have created rapid changes in the highlands. Smallholders who have traditionally practiced swidden agriculture can now farm upland slopes with a reduced fallow period, allowing for more intensive farming. As the fallow period is now reduced to one or two years, uplands plots have higher rates of soil erosion, requiring additional chemical fertilizers for cultivation. Once the topsoil has eroded, the soil becomes denuded and cannot grow crops without fertilizers. Smallholders must choose between growing maize or less productive and lucrative crops such as cassava to allow fields to marginally recover.

Table 1.1 Inequality in Agriculture Landholdings in Rural Vietnam, 1993-2004

		1993	2004	
	Landless	Gini**	Landless (%)	Gini
	(%)			
Red River Delta	2.8	.28	6.0	.38
Northeast	1.7	.42	4.5	.59
Northwest*	0.0	.38	1.5	.52
N. Central coast	4.2	.41	8.5	.59
S. Central coast	10.6	.34	13.9	.69
Central highlands	6.3	.52	4.2	.43
Southeast	17.5	.54	38.8	.75
Mekong River	15.9	.51	26.2	.62
Delta				
Total	7.2	.49	14.4	.64

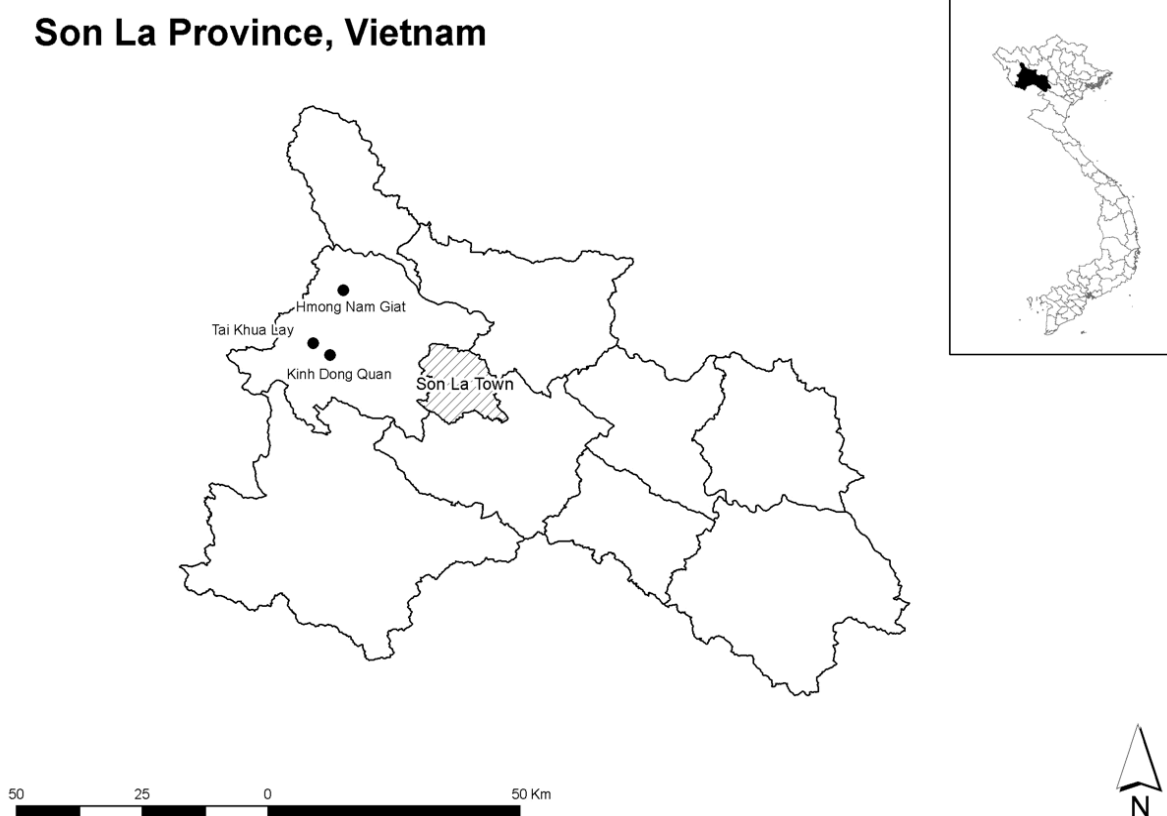
*Region where I worked.

**Based on data from World Bank report 2006. Higher Gini values indicate more inequality.

Currently, the Vietnamese government continues to implement national policies with little regard for cultural differences facing the highlanders. Current government anthropological research appears to have minimal interest in elucidating their cultural

differences, histories or future interests. Instead researchers enthusiastically facilitate policies of integration and focus on how to remove perceived cultural obstacles that restrict the political and economic neoliberal-based policies of the state (Forsyth and Michaud 2011; Goudineau 2000; Potter 2007).

Figure 1.2 Map of field site of Kinh, Thái, and Hmông villages in Phông Lái Commune, Thuận Châu District, Sơn La Province



In general, the neoliberal policies are fixated on growth and progress. Since the mid-20th century, the propaganda after decades of Marxist ideology and social evolutionism has shifted to neoliberal models of growth and development following a state capitalist program. For Vietnam this transition was necessitated by demand for institutional innovation, which in turn was largely satisfied by the development of new forms of

property rights, and more efficient market institutions. Changes in property rights were done in part to promote more efficient resource allocation through the market.

Outline of Dissertation

Using a variety of methods and lines of inquiry, I will explore how smallholders are making land use decisions following the 1993 Land Law, which established property rights and set the foundation for capitalism. The remaining dissertation will be set up as follows.

Chapter 2 presents the upland and lowland political economy of property relations of the northwest region over all of Vietnam's history, beginning with the feudal period during the dynastic era, when peasants were entitled and expected to work the land. The next section describes the French colonial period, which commoditized land and disrupted land relations. The changes following the socialist land relations and their intent to modernize the frontier region and maintain national security are covered. The chapter concludes with the current property rights established in the 1993 Land Law.

Chapter 3 discusses the ethnographic history of three ethnic groups, Kinh, Thái, Hmông in Phông Lái commune, and the broader political and economic contexts of the Northwest frontier region. I include contact with Chinese and Vietnamese dynasties, and later by French colonials and the arrival of the Kinh.

Chapter 4 compares inter-village investment practices among Kinh, Thái, and Hmông ethnic groups to determine if there are any culture differences. Inter-village analysis among the three villages reveals differences in investment activity and finds Kinh differs from the Thái and Hmông.

Chapter 5 continues statistical analysis by analyzing intra-village investment activity of the three ethnic groups. This chapter considers class-related differences within each village and finds similar results for all three villages. Smallholders within each village favor investing in their homes over their agricultural land. To assess long-term investments, I then measure ethnicity and class-related factors using multiple regression analysis to predict long-term investment activity.

Chapter 6 concludes with a summary of my findings, followed by an explanation of the implications of this dissertation for various fields. I end the chapter with a discussion of the limitations of this research and the associated opportunities for further research.

CHAPTER 2

CONDUCTING FIELDWORK IN HIGHLAND SOCIALIST VIETNAM

Introduction

I conducted surveys by visiting every house in the village. On one occasion, I went to a large Hmông household and asked the family if I could interview them. I was told to leave and was not given any information about the family. I was startled by this reaction since I only wanted to get the family's name. While in the Village I encountered several households that were not interested in talking with me at all. Half the village was excited to be interviewed or at least willing to be interviewed, but the other half refused to speak with me. Later on, I learned that members of the first family that refused to talk with me were policemen. I thought it was strange that government officials would not speak with me. I considered asking the village leader about this, but my assistant said not to bring it up, since it would be embarrassing. I did, however, mention this incident to the Ministry of Foreign relations during my exit interview as I was leaving the province. The Ministry of Foreign relations would routinely ask me if I had any problems in the field. When I mentioned my struggle to communicate with part of the Hmông village, the officials simply smiled and said this can happen with the Hmông. Although I was not really surprised by their comment, I wondered what kind of problems they were interested in hearing about from me. Most of my fieldwork was a constant struggle to understand life in the highlands and when it was permissible to ask direct and difficult questions.

Working in a totalitarian state proved to be a challenging and at times daunting task. Vietnam is a very complicated place with a rich and colorful history steeped in ancient traditions—this fact alone is challenging enough, but then on top of this, when you add in the lack of free speech, fieldwork is difficult. It has to be experienced firsthand to understand. Prior to arriving in Vietnam, I had prepared by studying the history and the language, and I was familiar with *Đổi Mới* policy. Yet Vietnam was not at all like I had read; it was far more complex. So I struggled to make sense of what I saw and heard while conducting fieldwork there. Consequently, working in Vietnam taught me more about

myself than anything else. Over 11 months, I experienced several dilemmas, setbacks, and challenges. But these difficulties and the troubleshooting I did along the way are an integral, if infuriating, part of the research process. The following addresses the challenges and blunders involved in conducting an extended case study to include “a reflexive model of science that takes as its premise the intersubjectivity of scientist and subject of study” (Burawoy 1998: 4).

In this chapter I describe the boundaries within which I found myself working in highland Vietnam and the challenges that they presented. This provides a basis for understanding the situational subjectivity of the informants, so that their responses can be understood from their “lived reality” (Reid Luc Wall 2006: 62). This dissertation fits into the category of post-socialist literature on ethnographic fieldwork which includes Eastern Europe, the Soviet Union (Petit 2013; Sowerine 2013) and more recently highland socialist Asia (Burawoy and Verdery 1999; De Soto and Dudwick 2000; Ghodsee 2011; Hann, et al. 2002; Hörschelmann and Stenning 2008).

I became interested in Vietnam while working with Vietnamese refugees and immigrants in Nebraska for my master's thesis at the University of Nebraska, which examined homegarden biodiversity and foodways. I learned that these transplanted homegardens were as diverse as they could possibly be in a temperate climate. The only traditional crops not included in homegardens were absent due to the cooler temperatures. All of the first generation immigrants I interviewed explained that their gardens provided them with their own food and a sense of satisfaction (Owens 2003). After completing my master's degree, I was offered an opportunity to study at the University of Georgia by the late Dr. Robert Rhoades, who, in addition to his interest in agricultural anthropology,

biodiversity, sustainability, pastoralism, and log cabins, had an interest in Vietnamese homegardens. I had intended to find my way working overseas as a traditional anthropologist: the obvious location was Vietnam. Not obvious was how I might actually be granted permission to conduct research there. Obtaining permission required a little luck and a lot of hard work.

I initially visited Vietnam in the summer of 2007, then again in 2009 when I conducted my dissertation research. A great deal of how this dissertation research was conducted was guided by my field methods and experience along the way. It is therefore important to reveal the conditions in which data were collected, as well as to describe what it was like to work in Vietnam during 2007 and 2009. In doing so, I add to the rich tradition of describing the messiness of ethnographic fieldwork. A researcher cannot be invisible in highland Vietnam and thus, I was part of the rural community. I lived there and interacted with the community on a daily basis. The constraints under which I found myself in Son La province are especially important to discuss because of the paucity of research on this region to date (Jamieson 1993; Sikor 1999).

The primary approach of this dissertation is the application of anthropological methods to understand the role of the insider from Kinh, Thái, and Hmông groups in highland Vietnam. To this end I used a wide range of quantitative data and verified the data with some qualitative tools. I employed the extended case study in which participant observation was important to locate everyday life in its local and historic context. The extended case study differs from traditional ethnographies such as Malinowski's (1922) *Argonauts of the Western Pacific*, which provides a comprehensive analysis of the Trobriand Islands by focusing on a specific question or management phenomenon.

Critical reflexivity or auto-ethnography has become an important part of anthropology fieldwork since the late 20th century. Anthropological fieldwork often becomes entangled in the “shadowy” areas of performing data collection (McLean and Leibing 2007). The shadowy side of fieldwork represents the blurred boundaries between personal life and formal ethnography. Subjectivity is a key part of ethnography, and can elucidate issues and perspectives from multiple actors in the community. Feminist post-structuralism has brought to light the importance of “situated knowledges” which can bring together an informed ethnology; I do this by discussing the “cultural context” of knowledge (di Stephano 1990; Haraway 1988; Harding 1991; Mullings 1999; Rose 1997). My research was influenced from the very beginning in such a way as to conform to Vietnam’s Socialist development agenda, a phenomenon familiar to many geographers and cultural anthropologists working in the highlands of Southeast Asia. In describing the realities of doing fieldwork in highland Vietnam, I also examine the cumulative network of situated responses which help inform the society that ethnographers seek to understand and study. However, the cultural context of knowledge varies according to history and cultural norms unique to each village.

Reflexivity

A major development in critical anthropology has been the deconstruction of the role of the anthropologist in shaping and creating research. Reflexive research considers my role in the research process and provides a way to consider the validity of the data. In describing my role in the research project, I hope to examine the intrinsic subjectivities involved in the anthropological method. Bourdieu (1977) argued this process of self-

reflection enables ethnography to deepen its theoretical foundation and strengthen its methodology. I will offer a confessional and textual approach through this chapter (Foley 2002: 469; Malinowski 1967; Pels 2000: 2). My discussion is personal. In an attempt to be more “objective” in this process, I intend to be part of the scientific field of study through this “second order analysis” and reflection (Robbins 2003: 11).

Entry into the Field

Gaining entry into the field is among the most difficult tasks for all field-working anthropologists (Reid Luc Wall 2006: 64). I did not know anyone working in Vietnam, and the University of Georgia has very few specialists in Southeast Asia. The bureaucratic hurdles were certainly challenging. I did not know how long it would take for my paperwork to clear. I was very lucky to have a Fulbright scholarship to provide access and government approval, yet, when two months spent in Hanoi rushing paperwork from office to office had gone by and I had finally been granted permission to leave for the highlands, even the Fulbright staff in Vietnam were surprised by the long delay.

The role of the “lone-ranger anthropologist” is not ideal in socialist countries due to the strict limitations placed on researches and the necessity of working with a government informant/field assistant/translator. Also, scholars who work in the highlands often speak multiple languages and are adept at learning new ones. However, such skills can be more alarming to government officials who may perceive researchers as having another agenda such as missionary work (Bonnin 2013; McAllister 2013; Turner 2010a). Unlike most

anthropologists working in highland socialist Asia, I had very little institutional support and relatively little command of the language; thus my research experience was actually a lot like the “lone-ranger anthropologist model” (Turner 2010; 2013).

For instance, I worked only one month with a translator from the Institute of Anthropology.¹² It was necessary to work with assistants on a practical level. Without speaking fluent Vietnamese, respondents would not understand my accent. Also, working with minority groups necessitated monitoring by the government. Then, I had to find assistants from Thuận Châu and Hanoi.¹³ The assistants could speak English, which was essential. I managed to find them with the help of the first assistant from the Institute of Anthropology. All of the assistants I worked with were not affiliated with the Institute but were required to report on my research activities. I did not learn about this until the end of my fieldwork. However, I always felt as though my actions were being monitored, a feeling which became increasingly exhausting.

Positionality, Issues of Power, Hierarchy and Identity

One day, I was traveling on National Highway 6, also known as “the heroin highway,” to Sơn La when a female passenger asked me, “Where are you from?” I replied, “Tôi người Mỹ (I am American).” Then she suggested, “You should say you are from the flower flag instead (Người Hoa Kỳ).”

¹² The Institute of Anthropology is under the Vietnam Academy of Social Sciences (VASS) in Hanoi. The researchers work for the government as social scientists charged with the duty of evaluating the state development policies with ethnic minorities, the sole object of the Institute; branding it ‘of Anthropology’ is thus somewhat misleading. They are the gatekeepers for foreign researchers and students. Through them, my research was granted and carefully monitored.

¹³ All names in this chapter are pseudonyms.

In this example my positionality comes to light in the subtle difference of describing my national identity. When I identify myself as American (Người Mỹ), I evoke the powerful memory of the war, which evokes considerable emotional baggage. Studying in Vietnam, one can never remove the stain of what we call the Vietnam War in the United States, but which is known as the American War in Vietnam. In this instance, I learned there was another way to identify myself as American (from the flower flag); I immediately switched to this term, partly out of shame of the war atrocities and partly out of desire to remove any overt negative connection with the past. Using the term “flower flag,” another word for American, removed the immediate connection with the war. From then on, I decided to avoid tying myself to the second Indochina war whenever possible. I did not ask for clarification about the term, but upon hearing it I immediately associated the American Flag with a bunch of flowers. And left it at that. The only times I did feel as though my American status carried obvious hostility was when I toured the ancient Cham relics in central Vietnam, near the town of Hue, which were apparently bombed by the Americans during the war, and surprisingly, when interviewing an older Hmông man who apologized to me since he had fought in the war. My assistant quickly replied not to worry, since “our fathers” fought that war and we were not concerned about it. I wondered how much he knew about the American involvement. I was fairly confident that nothing I could do or say would completely alleviate the aftermath of the American wartime and impacts.

Despite my Americanness, I would occasionally be greeted with excitement, and more than a few times men kissed me on both cheeks. What was interesting about this for me was the reaction it created by everyone in the room. It was meant to be a display of affection and a way of honoring my European background. My assistants were the most

astonished by this event. None of us knew what to make of it, but it made for a more relaxed environment in which to introduce ourselves.

In addition to my nationality, positionality in the field includes my age, gender, race, and, in this culture, height. Across Vietnam, I always felt that as a foreigner I was something of a curiosity, and this feeling steadily increased the more remotely I traveled. I was constantly aware of my status as a foreigner. For instance, I was expected to pay more for goods and services, including transportation. Age is important in Kinh culture because it indicates the proper pronoun to use (e.g. older or younger brother, uncle, cousin, etc). This can be measured to the day in some cases.

As a 6'3" (1.9M) tall male, I received a lot of attention. I would always hear comments about my height on the bus in Hanoi, and in the highlands I was more than a little scary to people. The average Vietnamese male is 5'5" (1.61m) tall.¹⁴ This average figure surprises me since most people I worked with were closer to 5 feet tall.

Being male offered me a high status in most homes; I was always invited to sit in a high status seat. On special occasions, such as when we had visitors or on special days, I would be invited to eat with my host family. In each instance, I was placed in a position of high status. I would eat and drink with special guests. Often, I felt I was given a higher status than the other guests. However, it was also clear that I was being paraded around for the family's benefit, maybe prestige for their neighbors. Despite my attempts to reduce my status, I was always placed at the head of the table. I always looked forward to the meals and would especially enjoy it when the women were permitted to join us. Women are not given such privileges in the Thái and Hmông communities. This reflects my positionality,

¹⁴ <http://vietnamnet.vn/vn/giao-duc/17630/9-nam-toi--nguoi-viet-cao-1m65--tho-75.html>

had I been with my wife, all genders would have been invited at the table. Women are expected to work hard and stay out of the way. During meals or watching TV, women take a backseat, often sitting so far away they are hard to notice.

Because I was immediately identified as an “outsider” by Vietnamese, I faced several challenges and ethical issues relating to identity and association (Bernard 2006: 356). Feminist scholarship highlights the importance of situated knowledge such that claims of objectivity and value-free research are routinely reassessed in post-structural anthropology and geography. Relationships of power and gender among informants have been demonstrated to be important areas in which to explore how knowledge is interpreted and represented (Mullings 1999). By describing the ways in which identities and knowledge are formed through inter-cultural perceptions, interactions, and representations, I reveal the process involved in conducting fieldwork. Thus my experience in the field becomes unique according to the power relations created and transformed during interviews, interactions, and daily life in the field. Ultimately, uncertainty remains in the evaluation and interpretation of the information I gleaned in the field. By recognizing and naming these uncertainties, I intend to validate the rigor of the research process, and displace my authority as the author (Appadurai 1988; Herod 1999; Rose 1997; Said 2002; Smith 2006).

As a researcher, I agree with Mullings (1999) that my knowledge is limited and partial due to my unique positionality (as an adult, white, thirty-something American male) as well as to the location of my research and the time in which the data were collected—it is a result of how I view and interpret the world. Working in Vietnam requires identifying the political context in which society operates.

My status in the household did change one day. While conducting an interview, I fell two meters when the porch gave way underneath my 100kg weight. I injured myself and needed to rest for a couple of days from a contusion. I landed on the small shower below the porch. Later that evening, when I was alone, all the women of the extended family came up to my room and visited with me. I was the center of attention, and they enjoyed telling me to be careful on porches and also made fun of me for being clumsy. It was very nice and highly unusual to have visitors. From then on, I felt as though my presence was becoming more familiar to the family and maybe I was human after all.

Totalitarian Regimes and Protectionist Respondents

Working in the highlands of Vietnam came with ethical challenges and restrictions on my movement and research by the government. The Institute of Anthropology played a strong role in granting my access and orchestrating my field research. These government restrictions directly shaped my dissertation research. Through everyday encounters and rigorous government surveillance, I was guided to pursue a research agenda that supported government values. This strategy was hegemonic from the initial grant and research topic, selection of the field site, and my lodging with party officials. My activities and plans for the year were required to be documented as soon as I arrived in Vietnam. I mapped out my activities including foreign travel. Whenever I travelled across the province or region, I would be asked to report my activities and provide a return date. On any given day, multiple people were watching me and asking about my activities.

During fieldwork, I found that respondents did not always cooperate. I did not expect everyone to cooperate, and I stressed the reasons why I was collecting data on household economics, that the data would be confidential, and most importantly, that cooperation was voluntary, consistent with University of Georgia Institution Review Board (IRB) guidelines for ethical research with human subjects. There is very little documentation on the refusal of informants to cooperate in the field (see Turner 2010a; Turner 2013a).

Vietnam is not an open society and self-protective behavior was prevalent in my field site. Vietnam continues to operate under a totalitarian regime, and there is no freedom of speech, movement or education. My research examining property is outright political. The very existence of the Socialist Republic of Vietnam is based on land reform and equal access to property rights. Agricultural production and improvement were important for political advancement. Steady growth in crop yields was part of the national model of modernization. Property was to be restricted, yet, on occasion, I found people who had more land than permitted by the law. When pressed to explain how this came to be, the respondent became silent. All of these factors converge to make property, property rights and agricultural production a sensitive topic of conversation. Similar issues were raised over agricultural production in post-socialist Uzbekistan (Reid Luc Wall 2006).

Throughout my research, my informants' need for self-protection resurfaced repeatedly. I struggled to earn trust in the Hmông village and with some Kinh. "In every interview and in every social interaction, there always remained a level of mistrust and self-protection, one which I believe exists not only for foreign researchers but even with social interactions within Uzbek... culture" (Reid Luc Wall 2006: 65). This quotation sums

up my research experience well. Interviewing Hmông, I often felt I was not welcome, and in fact many families would not speak with me at all. For Kinh, this reluctance may have been tied to the nefarious activities they were sometimes involved with that they preferred I not know about. Despite occasional noncooperation, by living in the community and asking questions, I could get a sense of how things worked. I tried to live a normal life and interact with everyone on a daily basis. I found that many people were indeed willing to be interviewed and offered responses that at least to me appeared candid. I would watch the respondent's reaction during the interview process for verification of expression (Galibert 2004: 461). Through this process of prompting the respondent with questions and observing her reaction and willingness to engage, I could see my questions were at times challenging and thought-provoking. As mentioned before, those who had the most to fear or hide were often telling in their coy responses and questioning my right to approach them as a foreigner, or not answer at all.

I was surprised that I had free rein to explore the entire commune or almost all of it.¹⁵ The exception to this was two resettled villages. Upon arriving at the commune, Le Thanh (a pseudonym for my assistant) and I explored homes off the main thoroughfare. One day I explored the resettled villages to see how things were going. However, as soon as I began walking up the road to the resettled village, Le Thanh shouted that these were resettled villages and that they were off limits to me. (The resettled villages were due to the Sơn La dam project, which displaced 100,000 people). I responded to him saying I could work with any village in the commune according to the Institute of Anthropology. We walked quickly through the village observing the new homes and the few people moving

¹⁵ Vietnam is divided into province, district, commune, village and/or hamlet. In the US this can be represented as state, county, city, town or neighborhood.

around. However, the fact that this village was deemed off limits reduced my curiosity (and comfort level) substantially and I asked only a few questions. This interaction with Le Thanh heightened my awareness that I was constantly on notice and under the state's gaze (Turner 2013b).

I returned to this resettled village three more times during my fieldwork. It would have been an interesting addition to my research. I did observe, however, that the homes were large and new, and included bathrooms and running water. All the homes were given the same land holdings they had before. The difference was that this land relied on rainwater rather than irrigation. During one visit, I distinctly felt hostility in the village; during a second visit there was a large celebration honoring the completion of bride service.¹⁶ This celebration was the finale of bride service and signaled the departure of the daughter from her family. I asked how agriculture was going and everyone replied that they were still working their old fields located 40km away. It was clear they were not ready to leave their old lifestyle or embrace their new one.

Host Institution

Getting access to the highlands for research in Socialist countries is difficult (Cornet 2010; Daviau 2010; Gros 2010; Sowerine 2013; Turner 2010b). To work in Vietnam, researchers need to be affiliated with a host institution (De Soto and Dudwick 2000; Petit 2013; Sowerine 2013; Turner 2010a). Each institution provides various services necessary for getting a visa, writing introduction letters and getting the necessary red stamp of

¹⁶ Bride service refers to the practice of having the groom work the farm of the bride's family after the marriage ceremony. It is a good way to be sure the bride is marrying a hard working husband and a way to alleviate the loss of the family's daughter. In this case, the husband worked on his bride's farm for 6 months. Other people told me that now days, men will often work 1-2 months.

official approval. Each institution has its own specific protocols, fees and services. Prior to arriving I was told I would need to pay for desk space at the cost of \$100 US a month. I agreed to this and asked for a bill. I also indicated that I would be working mainly in the highlands and would have little need for a desk over the duration of my time in Vietnam. Making these initial arrangements involved contacting the vice-chairman responsible for foreign visitors. This proved quite difficult because he suspected my email to be spam or junk mail and ignored it. In addition, my emails were in English. Since that official was unable to process my emails, the details of my desk space remained unclear until the end of my stay in Vietnam. Eventually I made contact with him and helped him write a letter of acceptance for me to work with his institution. Such uncertainty would be a normal part of the process.

Initial Visit to the Field

The opportunity to visit Vietnam opened up for me in 2006 after I attended the Southeast Asian Summer Studies Institute in Madison, WI, where all students from across the US as well as international students come to study languages from Southeast Asia. It was here that I met students from other universities who were also planning to do their research in Vietnam. An anthropology graduate student from the University of Hawaii introduced me to a Vietnamese student named Chaon. We were both interested in ecological anthropology, and Chaon agreed to introduce me to the government Institute of Anthropology in Hanoi, where he was a government employee. At the time, I did not realize

the Marxist-Leninist socialist agenda and the role of the Institute of Anthropology in fulfilling development policy with ethnic minority groups.¹⁷

The following summer in May 2007, I arrived in Vietnam to explore potential field sites. It was apparent that I had already made a cultural blunder. When I met with Chaon, he was noticeably irritated that I had traveled extensively prior to checking in with the Institute of Anthropology. He told me when I met with the director to be honest about my travels, noting that the director was well aware of my travel. Upon hearing this I was a little surprised I had made a mistake and that my every action had been reported. And thus, I was beginning to understand the complex world of Vietnam. In hindsight, I should have made plans to stay longer in Vietnam and visited the institute immediately to allow time for requisite paperwork to be processed.

The Institute granted me permission to work in Sơn La, but it wanted to know why I chose to work there. I explained I was interested in studying coffee production and that seemed to suffice. I was told the commune of Phông Lái in Sơn La province would be an interesting place to work since it had ethnic minorities and was growing coffee. I agreed to that. After a few days, I was given permission to go to Sơn La province. The road to the highlands required a hired car and driver. I covered the cost of food and lodging myself for the four days of research (for a total of \$500US). I was granted permission to do research in the highlands after meeting with the provincial authorities, and we made our way to the district of Thuận Châu. There was a small discrepancy with the officials initially in Sơn La, which required us to return a second time the following day.

¹⁷ <http://www.vass.gov.vn/noidung/gioithieu/Pages/gioi-thieu-tong-hop.aspx>

While we were eating breakfast the second day in Sơn La waiting, a man approached one of my assistants Quen and asked her if she wanted to buy 86 large black scorpions (3 inches long) caught in the forest of Laos. I was shocked when the assistant agreed to buy the entire batch for 350,000VND (\$21US). He put them on ice, then poured alcohol into a gallon container and proceeded to place all of the scorpions into the container. I had thought there would be no way the female assistant would be interested in the scorpions, but she explained it was a very good deal and that in 10 years the medicine would be very strong. For instance, I have a sore hip due to a bursitis and this medicine would be very effective at removing internal inflammation.

Arriving late in the day in Thuận Châu, we managed to meet with a representative who agreed to take us the next morning to see Phông Lái commune. We told the officials I was interested in working with smallholders and would like to interview some of them tomorrow. I walked around part of the commune during the day, but there was not much to see other than some buildings and a couple of stores selling dry goods. It looked pretty bleak, but I did not have many options. Later that day we were invited to the home of the commune leader. It was a very large home made from the highest-quality hardwood, the nicest in the commune. I was told such a home was incredibly expensive and would have cost a fortune in Hanoi.

That night we arranged a party with the commune officials to celebrate my decision to study in the commune. Celebrating with food and alcohol is a common practice referred to as “participant intoxication” (Fiskesjö 2010; Petit 2013). I was welcomed to work in the commune and was told I could stay with the commune official when I returned to do my dissertation research. When we returned the next day it was raining hard. Still, several

smallholders from different ethnicities and different socio-economic backgrounds were waiting to meet with us. After we interviewed 12 smallholders we stopped on the way out to look at a farm that was growing coffee by the side of the road. Unfortunately, the rain made it difficult to see very much, and the farm was growing a lot of tea and very little else. I was not sure what to think about the farming in Phởng Lái. I was surprised by how small and underdeveloped it was. I decided coffee was not important here and I would need to think about working on another subject. One thing I noticed from this trip was the amount of kickbacks involved. Everyone seemed to be getting payoffs in the form of envelopes or, in the case of the commune bureaucracy, a celebratory feast.¹⁸

During 2008, I worked on my research proposal and studied Vietnamese. I sent a formal letter of institutional affiliation from our Department of Anthropology and requested permission to work in Vietnam for my dissertation. It took a while before I heard back from the Institute of Anthropology. Thus working in Vietnam would take patience and persistence every step of the way. Chanh was in charge of working with foreign researchers and had done post-doctoral work at the University of Wisconsin, yet communication with him was always challenging and uncertain. Everything worked out and I was successful in getting a Fulbright scholarship to study in Vietnam. I had been told the Fulbright scholarship I earned would be a tremendous asset, clearing most if not all of the “red tape” involved in working in Vietnam. This, it turned out, was not entirely true.

¹⁸ I was asked to put on another feast for party officials upon my arrival in 2009, but I chose not to. My assistant Le Thanh suggested it was not necessary. However, that decision may have limited the level of cooperation I received. I met with the commune leader on two occasions, but whenever I attempted to meet at his home, he cancelled the meeting. I cannot help but wonder if I had made more of an effort toward the officials, I would have had an easier time in the commune.

The Permit Process Begins When You Arrive

Even though you have a research visa, upon arrival, you must arrange and discuss research topics with the host institute (Cornet 2010; De Soto and Dudwick 2000; Fly 2012; Sowerine 2013). It often takes months to get official clearance. Working with ethnic minorities can have additional problems that require careful scrutiny by officials. In Vietnam, I found myself constantly stumbling over various cultural misunderstandings. Some of these were simply due to being a foreigner, and other times they were involved with my being an American.

Upon arriving in Vietnam, I was asked to explain my research and submit a research proposal and set of questions that I would be asking smallholders. I found this surprising since I had already submitted a form explaining my research goals. I took the time to write out the important questions and submitted them to Chanh. To complicate things, the New Year celebration Tet was approaching and everyone was in a rush to file their end of year reports before taking the next two to four weeks off. It was two months before I could begin working in the highlands.

My entire stay in Vietnam involved a good deal of waiting around and feeling powerless, a common feeling described by many foreign researchers working in highland socialist Asia (see Turner 2010; 2013). After reading over my research questions, Chanh said to me, "I believe you." He meant that he was going to provide support and help me by locating three villages suitable for my work. Then he and two other Vietnamese anthropologists went to Son La scouting for some villages for me and another master's student to work in. I was simply informed about this trip, not invited; a problem that would later be a point of discussion.

Next, Chanh asked how much I was willing to pay for a field assistant. I said I did not know what a fair rate was, but another student in my department, Jessie Fly, had worked in the Mekong Delta and paid around \$10US a day plus room and board for an assistant. This seemed like an affordable fee, since I was planning on working in the highlands for 10 months. However, Chanh explained the minimum was \$15US, but that low rate would only attract someone who had limited English skills. A good translator could cost upwards of \$40 to \$60US a day. I explained I needed someone for an extended period, and this seemed shocking to Chanh. I agreed to pay \$15US a day, but I would pay only for days when work was performed. This was considered acceptable, but hardly generous by the Institute's anthropologists, many of whom were students themselves. As mentioned previously, the Institute often works with large development organizations, and employees are paid handsomely for their services.

Field assistants are often mandatory when one is working with ethnic minorities in the highlands (Sowerine 2013). They are the eyes and ears of the state. I knew from other reports that getting access to live in villages can be difficult or prohibited. I was surprised that I was allowed to live in Thái villages and even considered for living in the Hmông village. In the end, I was able to easily travel to the village and then come back into town. I could not have worked without a research assistant in the field due to my less than fluent Vietnamese, as a young Hanioan pointed out to me. Working with assistants was hard because I had to train them and watch them go through the survey. It is rather tedious to have to conduct interviews using a translator. Often it is amusing to witness dialogue between the informant and the translator only to get a few words out of their discussion. I valued my informants a great deal and enjoyed learning about Kinh customs and ideas. It

was frustrating, though, for me that lowland Kinh are not fond of being in the highlands and prefer not to stay there very long. This was an unforeseen challenge for me. Another University of Georgia anthropology graduate student, Jessie Fly, had worked in the Mekong Delta, and was able to work with a female assistant for the entire year. I was therefore disappointed to learn I would not have that experience and I would have to pay a higher per diem. I was promised two assistants each for a month at a time. However, I would only be given one worker a month since the other student was not interested in working in the same commune after all. I took this information very hard and did not understand how promises could so easily be broken.

Fortunately, I was able to find another translator in Thuận Châu, an English teacher named Lanh. His English was very good and he improved some of my questions. Together we conducted several surveys with Kinh, Thái, and Hmông households. After a month or so of work, torrential rain reduced our progress. When it rained hard, Lanh could not drive his scooter up from Thuận Châu. I had hoped to complete the survey as soon as possible, but numerous challenges made this process hard. I had little control over the time Lanh was available to work as he was a teacher and had other important duties to attend to during our time together. After several weeks he was called off to teach in the provincial town of Điện Biên Phủ, where he was from. However, realizing Lanh was leaving me, I was frustrated since I would need to find another assistant and I felt a lack of control over my research.

After a few months, I decided to teach English once a week in Thuận Châu at the Tây Bắc University of Agriculture and Forestry. This experience helped me learn about the region and find another assistant to work with. It is hard to summarize this experience, but

I learned the instructors did not consider forced relocation would not pose any challenges to the effected communities. I asked them to apply their expertise in considering what environmental challenges the communities might need help with. The only response suggested was the communities might miss their old homes, but others suggested. When I asked about differences related to the environment (soil, water, forest, climate) another professor said "They will be given unused land, new homes and running water." It responses were not what I had expected. The tone of the room suggested the move was going to be very positive. To confirm this, I asked if they would like to be relocated? This was answered simply no, they did not want to be moved. This suggested the state would provide as much aid and resources as could be expected. In the back of my mind, I wondered where any unused land existed. The few answers I got from my questions reflect their limited English skills. Teaching at the college would provide me with another assistant to work with. His name was Dao and his English was not great, but I had little choice, and now that the surveys were working smoothly, I was confident there would not be any problems. He was a very good assistant and worked hard to collect the data and even spoke a little Thái. But I cannot be entirely certain his approach did not bias the data in some way. I always attended the survey and watched the assistant administer it, and watched the smallholder answer the questions. I would look over the answers and try to look for problems and mistakes before leaving. After we completed most of the surveys together, Dao left to visit his family, which was good timing since I had made arrangements to work with another social scientist named Lien from Hanoi. Lien was the most interesting assistant to work with. Unlike the other assistants, he was more confident and open about Vietnamese culture. Through Lien I learned that he was expected to

communicate with the head of Tây Bắc University, who in turn would report my activities to the police. I was being watched all the time. Together we interviewed several people in the commune over the next month and put together the oral history of Phỏng Lái. We made repeated attempts to see the commune leader in his home, but were always politely rebuffed.

My living arrangements placed me in a Thái home, which happened to be that of the party secretary for the commune, a position of relative importance. I had my own room in the front portion of the house, which was built as an addition to the home to be used as a shop one day. One of the first questions I had was, how much would it cost and was the room safe? It would cost me 1.2 million VND and I would have to cook my own food. I said I would be happy to pay 1 million VND/mo. (about \$60US). The home was said to be safe since it was well known and respected by the community. However, within a few days, we were informed that someone had stolen the family's dog, indicating that the family was not as respected by the community as they had believed. A dog is supposed to work as a guard dog, and so it was a little disconcerting to me. Two weeks later, the night before my assistant was due to return to Hanoi, he was robbed of his three birdcages and five birds. He was very distraught, having spent most of his free time fixing the cages and caring for the birds. Acquiring the birds had involved going high into the mountains to purchase them from a Hmông family. The interest in birds was also popular with another field assistant from Hanoi.

Living along the main road revealed the movement of people entering into the commune center. One realization was that during the night trucks would move through carrying timber. My assistant Le Thanh mentioned that this was illegal. From our vantage

point we could look into the truck bed, but it was always covered. In fact many activities are illegal and yet go on as if they are not. I have seen exotic animals for sale outside restaurants such as wild cats, primates, and birds.¹⁹ It is illegal to sell animals from the forest. It is example of another confusing aspect of Vietnamese culture. Illegal activities can be lucrative, since this requires corrupt officials to allow the activity to persist.

I focused on conducting my research objectives, but I began to seek out people who knew about logging. One day, while in a new restaurant, I overheard a table next to me discussing how to transport wood across the province. To move wood through Sơn La town required paying off the police. This could be done for around 900,000 VND (\$94 US), a fee that apparently had to be paid each time. One day my assistant was near the police station outside the commune headquarters and overheard a frantic driver asking for assistance to transport wood in his car. The police official, made a phone call to allow this car to pass through town. Since it is illegal to transport wood in a car, this stood out as an interesting development. I eventually realized there are several rules that one must follow or there is a fee for breaking the rules. For example, in the old quarter of Hanoi one day I witnessed a young girl selling French bread on a corner being harassed by a plainclothes officer. He was yelling at her and demanding that she pay for selling on the corner. She looked down and he left, only to return a minute later. This time he threw her bread onto the street and continued to yell at her, and then he left. She picked up her bread and put in back it the basket. This showed me that every space has value and must be paid for. Next to her were other women selling bread, but they were not harassed. One day I went at ask questions to

¹⁹ I do not know the exact species of caged animals. These animals were very popular. I noticed everyone who saw the animals wanted them for their own but they were expensive. This was odd to me since even the police were also fond of the illegally caged animals.

a lumberyard in the commune. The interview was not very informative since the owner was reticent. He immediately wanted to know if I had permission to be in Vietnam and asking questions. I found this a little strange considering he had seen me every day for months and he lived across the street from a police officer who also saw me every day. I explained I was interested in knowing more about logging. He explained there is still some good wood left, but most of it has been harvested long ago and the prices jumped during the mid-1990s. Later on I went by his business and there were several people outside ready to go to work at night. I asked what everyone was up to, but no one responded to my question. It was rather clear they were planning to harvest lumber in the night. My first week in the commune, I was invited to have dinner with the agriculture extension agent's home. We enjoyed a good dinner by an oil lamp. During the dinner, he was requested to help stop illegal logging that night, but stated, "No way, I am having dinner with a foreigner tonight." I was not sure what to make of this event, but it could be that in this case, illegal logging was not permitted since it was not paid. And it suggested the movement of lumber is still a good way to make money. In another example, I met with a newly arrived Kinh migrant and asked him about logging. One night we had enjoyed drinking beer and I had discovered that over beer I had met someone who might be open to talking about logging practices. I returned to talk with him later that week and we spoke quietly in his back yard. There are common sayings in Vietnam to describe not talking openly in public, "Don't lift your shirt too high and show the scars," and, "Speak behind closed doors." I was as nervous as he was in discussing illegal logging practices. One of the first things he said was "The biggest illegal logger is the government." Every time a new road is built the forest is quickly

exploited. Today, logging is very regulated, requiring more red stamps of approval and more payoffs in the process.

In a rather forthright conversation, a Hmông villager described in detail the process of getting a logging permit: “If someone wants a permit to get wood from the forest to build a home they must go to the village leader. They must pay a transaction in the form of an envelope that is given to the village leader, the commune official, district office and forest representative at the district level. Each envelope costs 100,000 VND (\$6US)” in addition to the application fee. The district must approve of the logging permit. What is interesting is that once a permit is allocated, the permit is difficult to enforce since several people are involved in the process and it is easy to harvest more wood than the permit was intended to give. This example was used to explain the large home of the commune leader. He harvested three times the amount of wood he needed to build his home and sold the remaining lumber for a profit. Lumber extraction accelerated during the 1990s and continues today, but has slowed down partly because of the increased enforcement and reduced quality of the forest. These factors make logging difficult to pursue.

Living in Phông Lái Commune

In Vietnam, pronouns are important because they create a hierarchy based on age and gender. When speaking with Kinh, I was commonly referred to as Anh (older brother) or em (little brother), but when I lived with my Thái host family, I was referred as “Chú,” a term that reflects the status of uncle within a family or the status of a male the same age as one’s father. My name was Chú Phú (uncle Rich). I think this makes it complicated to interpret, because on one hand I am granted a position of honor that can be elevated above

“older brother” to a level similar to one’s father, but on the other hand this title distances me from older brother to uncle. In the end I felt comfortable, but not really intimate with my host family. I think the subtle use of pronouns is one example that indicates knowing and interpreting information is not at all straightforward or easy. I found working in Vietnam to be a complex and constantly evolving process.

My new home allowed me to become aware of the daily activities in the home. Throughout the day children and people would pass through to say hi, drink water or eat. After a couple of weeks, however, I noticed something about myself: I was generating a lot of trash. No one else in the home bought anything and produced no trash. I began tossing bags of trash out my window since there were no trash cans anywhere. I noticed people would stop and go through my trash looking for useful items. For instance, a plastic or glass bottle would be useful for getting rice wine. A plastic bottle could be refilled hundreds of times. I made an effort to reduce my trash footprint.

One day the satellite antenna broke and after three months the family still had not replaced it. I asked them how much it would cost and was told about 100,000 VND (\$6US). I was shocked to hear it was so affordable. The family had enjoyed watching the Vietnamese soccer team play and the news on a regular basis. But what was interesting to discover was that the loss of the TV was not a big deal. Once the antenna was determined to be broken, the family switched to listening to the radio. For over three months I would listen to a Thái story, similar to a saga. Unfortunately, I did not have an opportunity to investigate this rich tradition. Every day, a story would be told through a song without music. Had the TV not broken, I would not have known about the daily radio program.

When and How to Ask Questions

It was also hard to know what was normal and what was not. Often I might have a question about someone's behavior, and other times I would blunder through something and see what might happen. When is it possible to push for an answer? In most cases, I did not press for a clear answer, but when talking with government officials and anthropologists, I often did press for clarification.

During interviews, I worked hard on my surveys to craft a questionnaire that could be easily understood by everyone. Once I figured out how to ask questions that were "clear and easily understood" I managed to get a lot of good information. But sometimes answers were not clear and the farmer might speak about something that did not appear related to the question. I suspect my answers were simplified substantially because I was a foreigner, my assistant was Kinh, and the informant might not speak Vietnamese perfectly. Thus, complex answers become diminished as a result.

Once I began to interview individuals about their life history, I began to run into more problems with ambiguity. I could navigate most of these issues, but I realized that each method I took on required a lot of work to make sense of. For example, it became clear to me that asking the right question was really critical. Questions were often reported negatively that in fact were not negative, but asking for more information about a practice might induce a different response. For example, whenever I found a report for a very low income to expenditure ratio, by asking for more clarification on income, respondents would often remember another source of income. In most many cases, I found respondents would not report any savings, even though many were able to save some money each year. I would make a mental note of the discrepancy.

Conclusion

These lessons are examples of how I lived through fieldwork dilemmas. One can make sense of certain facts and norms in short order, but most of the complexities of everyday life have to be lived and experienced over a long time. Throughout my stay, and chiefly because I did not have anyone in my university doing research in Vietnam and who could open doors for me and allow me to use contacts in the Vietnamese administration and in the field, I made several mistakes and struggled to understand what was happening. Through all of these dilemmas and challenges, I somehow successfully interviewed 95 households from three ethnic groups during my fieldwork. In the process, I managed to get along well with Kinh and Thái, and Hmông. There were many problems along the way, and my research is largely a product of what the Institute of Anthropology had in mind when it gave me permission to work in Son La. In the end, is it worthwhile to work in highland socialist Vietnam? If anthropology cannot be practiced under the conditions it is supposed to be by Western standards (long residence, freedom of choice, little hindrance from the state), is it still valid? (Michaud 2010). Everyone who works in Vietnam would agree it is well worth it (Turner 2013). This chapter is included to highlight the complexities and dilemmas involved in working in Vietnam, allowing a reader unfamiliar with the conditions under authoritarian regimes to understand the context in which the research was carried out. Vietnam is changing rapidly, and therefore, this chapter captures a snapshot of the developments I encountered while working in Phông Lái.

CHAPTER 3

HISTORY OF PROPERTY RELATIONS IN HIGHLAND VIETNAM

Introduction to Land Reform in Vietnam

Land rights²⁰ are fundamental to understanding agricultural and natural-resource-based economies (Angelsen 1999; Hanna and Munasinghe 1995; Netting, et al. 1993; Tisdell and Roy 1997; Turner and Ali 1996). Changes in usufruct rights and land tenure can have significant implications for agriculture improvements, redistribution of agrarian wealth, and agricultural and forest conservation practices. In Vietnam, concepts of land tenure have changed significantly in the past century, creating a highly variable understanding of local property rights, national rules, and myriad land-use practices in the margins. I will explain these complicated outcomes and overlying practices by going through the history of cultural land use in this chapter.

Land tenure in Vietnam is crucial to understanding the Vietnamese ethnic minority. Class differences linked to property lie at the heart of Vietnam's Socialist revolution. Important works such as *The Moral Economy of the Peasant* (Scott 1976) and *The Rational Peasant* (Popkin 1979) debated the nature of landless peasants, landlords, and usury in pre-colonial Vietnam and the importance of land in conflicts during the rise of the communists (McElwee 2003:385). Land reform was a central theme of the Viet Minh's

²⁰ Property is defined as the right, legal or moral, to ultimately determine the use and control of something, including the right to transfer such rights to others. Within the conceptual framework provided by law, this control is assured by the power of the law, or by the power exercised under the law, and not by any separate power. However, philosophically, property concepts can exist outside a legal framework.

regime in the August Revolution of 1945 and was carried out in the 1950s. In the 1960s collectivization was implemented (with limited success) in the highlands, and by the 1980s land rights and rules shifted to include ownership of land. On the local level, land control was substantially weakened but was never completely suppressed by the national government. Green Revolution technologies, government incentives and market pressure induced an intensification of upland slopes.

With decollectivization initiated as part of *đổi mới* [renovation] and the opening of Vietnam's economy in 1986, *de jure* agricultural property rights shifted back to households. The law on land ownership was passed in 1993. It initiated an extensive process of returning land holdings to households, a process that in many ways was establishing private property; the caveat was the land is owned by the people and managed by the State (Mellac 2006). Households were given long-term property rights, allowing them to transfer ownership, lease, inherit, and mortgage their agricultural property. Although the 1993 and 2003 Land Laws recognize private interests to sell, mortgage, and transfer, they retained state prerogative powers over private land use rights (Gillespie 2013). The creation of red book certificates established *de facto* land title, granting land tenure to households for 20 years for agriculture, 50 years for forest, and homes for life of the owner (head of household). In the wake of the 2003 Land Law, official land grabs increased to 1 million hectares, which exceeds the 810,000 hectares redistributed during the socialist reform in the 1950s (Gillespie 2013). The state continues to control commercial farms, forests, and other protected areas adjacent to *de facto* forms of common property (McElwee 2003:404).

The result of overlapping *de jure* and *de facto* land regimes has led to confusion over access rights and control over natural resources. *Đổi mới* policy initiated in 1986 was

targeted specifically to agricultural land. However, pressure and incentive to farm led to expansion of lands claimed by households. Traditional swidden practices were reestablished. The result was an expansion of upland slopes, most of which were barren land and forest, which were cleared and used for agriculture (Gillespie 1995). To correct this, the 1993 Land Law was passed, allocating agriculture and forestlands to households. Local *de facto* reality of land use is constructed from culture practices and has in many incidents overruled *de jure* rules at the local village level. The role of the market economy and ecological conditions raises questions addressed by political ecologists in *The Political Ecology of Soil Erosion in Developing Countries* and *Land Degradation and Society* (Blaikie and Brookfield 1987; Blaikie 1985; Blaikie 1989). Their findings merged natural resource sciences with social sciences revealing a holistic understanding of land degradation. These studies, combining local knowledge systems and upland agrarian practices, helped elucidate how capitalism drives smallholder intensification of land use to meet demands for cash flow. The induced intensification model (Turner and Ali 1996) provides two pathways smallholders can take to adjust to pressures from population, policy, and/or natural resource degradation.

This chapter will show how the formalization of rights to land is influenced and contested by diverse land systems with the introduction of the market economy. The formalization of property is producing a class society through property holdings. Formalization of property is expected to lead to soil conservation practices through long-term investments, but has led to short-term investment strategies as smallholders adjust to the demands of the market and the need to earn cash. Faced with new economic challenges and responsibilities, marginalized smallholders have little choice but to intensify

agriculture practices in steep upland areas that were intended to be used as forestland according to national policy. However, policies at the provincial level have encouraged intensive annual crop production along upland slopes. The results of the property rights are new inequalities, separating ethnic minorities and Kinh, rich and poor, and men and women. This chapter will conclude that a policy aimed at promoting soil conservation through privatizing land has instead led to greater exploitation of natural resources and exacerbated poverty.

This chapter begins with a description of theories of land tenure and land management, followed by a brief history of land tenure regimes in Vietnam during the feudal period of Vietnam, the French colonial era, socialist Vietnam and the post-*đổi mới* era. The next section examines the effects from *đổi mới* policies on land use using the induced intensification model. The last section concludes that the establishment of pseudo-private property rights to households led to more competition between households for access to upland slopes, disrupted customary land use practices, resulting in social inequality and an overall intensification of land use.

Southeast Asian Agrarian Transitions

Southeast Asia is undergoing a massive agrarian transition that is part of a larger global process. Over the last few decades there has been a large and growing body of research on the topic of agrarian change (Bonnin and Turner 2012; Drahmoune 2013; Hardy and Turner 2000; Henin 2002; Turner 2013b). The rural agrarian transition(s) can be broadly defined as the transition of societies from primarily rural communities that are

dependent on agricultural livelihoods and organized through rural social structures, to urbanized and market based economies (De Koninck 2004). The agrarian change in Southeast Asia is multifaceted varying widely across Southeast Asia, yet there are some similarities and patterns that can be drawn over the last two decades. Initial stages of agrarian change were focused on “green revolution” technologies and high yield varieties, which led to an increase in rice production in the lowlands and export-crop production in the uplands.

The work of Hart, et al. (1989) *Agrarian Transformations*, marked an important shift in understanding agrarian change in Southeast Asia. Hart et al. highlighted important theoretical changes including recognition of power that went beyond the relations of production, the need for local-level studies to understand how agrarian transition is occurring in specific places, and the need to look beyond agrarian classes and class relations to understand the specific effects on gender and class formation. This approach brought critical analyses to the “household” model. An example of this approach is reflected by Michaud (1997a) research on the changes in wealth within a Hmông community in Thailand. One result of the agrarian transition and market integration was the community became more monetized and stratified community.

Another trend has been a decline in peasant economies; this is mostly in relation to labor as a significant source of income yet overall, the agriculture remains a consistent livelihood strategy in rural communities (Drahmoune 2013). The result has been an overall greater economic diversification of household economies. Some engage in seasonal employment in urban areas or may “choose” to work permanently off farm (Hirsch 2012: 399; Rigg 1998: 592). Other larger regional trends reveal there has been an increased

integration of rural production at the national and regional levels, leading to a growth in agribusiness and contract farming since the 1990s (Kelly 2011: 480; Neilson 2008).

Migration has become an important aspect affecting rural livelihoods in new and profound ways that are transforming villages spatially through long-distance relationships. These changes are having effects of gender norms and identities as well as consumption patterns and lifestyles (De Koninck, et al. 2012: 30).

One of many aspects of the agrarian transition includes migration (Kelly 2011). Across Southeast Asia migration is major component of livelihood strategies. Populations are now highly mobile as commuters and emigrants, and are able to communicate between “home” and “host” locations more easily than ever before. For example, Hall (2011) and Latt (2011) describe how migrant labor shapes agriculture production practices. Immigrants in rural areas provide labor, but are treated as outsiders with different sets of entitlements than local workers. In some Thailand, there is a disenfranchised rural underclass resulting from a lack of membership in the community and that is subject to violence and deportation (Latt 2011). Migrant workers from Shan/Burma provide important labor that has helped Thailand achieve a national success, through their low-cost labor that has been essential to achieving organic production. Yet, they are classified as illegal by Thái legal codes. Hall (2011) demonstrates a similar case with migrant workers in Malaysian palm oil plantations, where workers are subject to abusive working conditions and the state’s policy of detain, arrest, beat and deport.

Crop booms attract workers from across Southeast Asia. These can take the form of spontaneous migration, waged migration, and movement by state sponsorship whose movement may be based on political as well as economic motives (e.g. New Economic

Zones in Vietnam and Indonesia's transmigration program). The second example provides a compliant and easily exploited work force; the other migration examples provide movement sanctioned by the state. Though migration is not new, it highlights the fact that change encompasses many different aspects of the process.

Recent studies on agrarian change include Cauoette and Turner's(2009) *Agrarian Angst and Rural Resistance in Contemporary Southeast Asia*, which examines changes in five Southeast Asia countries (Indonesia, Malaysia, the Philippines, and Vietnam) using an actor-oriented approach. The agrarian transition trajectories have become more complex and widespread and far reaching in their effects on communities. Research on agrarian transition includes analyses on agribusiness at different scales, from local contract farming arrangements, emerging regional and global market chains of agricultural products, to a resurgence of plantation agriculture and associated migrant labor across Southeast Asia. Other important issues include socialist governments merging into market-oriented economies, multinational development projects, increased preference in conservation programs, and increases in civil society groups (Cauoette and Turner 2009).

Another edited volume by Bunnell, et al. (2013) is *Cleavage, Connection and Conflict in Rural, Urban and Contemporary Asia*. This work considers rural-urban interactions and the tensions occurring in Indonesia, India, Malaysia, and Thailand. Stress an agrarian myth is largely created from political perspective, in which they question the rural and urban differences may be more imagined and constructed. Walker's (2012) book, *Thailand's Political Peasants: Power in the modern rural economy*, provides another example of peasant struggle, rural transformations, and politics in northern Thailand. Peasant stratification in Thailand demonstrates the rise of peasant that has attained food security

by relying on a diversified economy. Thailand provides peasants with subsidies, allowing for greater economic freedom.

Other important works on Southeast Asia demonstrate the crossroads of rural and urban transition. Hall et al. (2011) *Powers of Exclusion: Land dilemmas in Southeast Asia*, is important in its scope and depth in the changes of land tenure across the region revealing new relationships between people and the land. The book covers class formation in Indonesia, identity in the Philippines, boom crops in Vietnam and Malaysia, community based natural resource management in Cambodia, and land and forest allocation in the Lao PDR. They conclude that the changing property relations create winners and losers. Dilemmas over land and property rights will continue to emerge and there are no easy answers. Those with property rights benefit precisely because they have exclusive access to a benefit stream, whether it is an individual, a community, or the state. Another important book covers the Southeast Asian Massif by Michaud and Forsyth (2011a) is *Moving Mountains: Ethnicity and livelihoods in highland China, Vietnam, and Laos*. This volume examines the relationships along the borderlands of China, Laos, and Vietnam between livelihoods and ethnicity and provides clear examples of the economic and social transformation that is well underway.

The book by Singh (2012) *Natural Potency and Political Power: Forests and the state authority in contemporary Laos*, examines the relationship between people (culture and identity) and natural resources in the rural margins. Her work examines the complexities of living in rural communities struggling to move out, the decline of the forest, and elite control over natural resources.

All of these books examine and provide insight into the complexity of agrarian change. Issues related to people and land, livelihoods, conflict over natural resources and conservation. The growing body of work in Southeast Asia reflects a growing interest and understanding on the agrarian transformations from a perspective that includes livelihoods, natural resources and the larger trends of development (Rigg 2013). Rural populations in Southeast Asia are experiencing a profound transition that cuts across social, economic, and political aspects that are interesting because the region provides many examples of how communities are grappling with this change. Some are embracing the change and others are resisting the change.

Theories of Land Tenure and Land Management

In the literature on land tenure in tropical forest use and agriculture conservation, many authors claim the number one socio-economic aspect for long-term investments is possession of private property rights (Hanna and Munasinghe 1995; Lynch and Talbot 1995b; Vanclay 1993). Land tenure can be defined as an institutional framework that provides 1) legal protection to individuals and 2) provides individuals the exclusive right to use resources as they wish provided it does not violate someone else's rights, as well as the right to transfer the property on a voluntary basis (O'Driscoll Jr. and Hoskins 2003). The literature on agricultural land tenure attempts to demonstrate that secure land rights lead to better land management of soil due to the stability of long-term land rights (Meinzen-Dick, et al. 2002:2). In Thailand, Feder and Onchan (1987) showed that smallholders with land rights invested more resources than forest squatters. Examining long-term

investments in the uplands, researchers found that the key factor to improving forest management in Asia was recognizing untitled property rights of those already in residence (Fox 1993; Lynch and Talbot 1995a; McElwee 2003; Neef, et al. 2006; Sikor and Truong 2002; Somanathan 1991). It is widely claimed that insecure property rights inhibit long-term investments in agriculture and forestry, due to the long time horizon required for trees to mature and organic matter to be incorporated back into the soil. According to the theory of property rights, smallholders are therefore much more likely to make long-term investments given clear property rights and formal title to land (Castro 1991; Chung 2002; Deininger and Feder 2001; Feder 1988; Feder and Onchan 1987; Neef 2001b; Neef and Heidhues 1994). Additional benefits of property rights include a lower risk of free-riding, better discount rates over the long-term, and the facilitation of contract agreements with outsiders (Richard 2000). With legitimate land titles, there are fewer disputes over property boundaries and ownership, and lower costs of enforcement (Freudenberger 1995; Goodale and Sky 2000). Many economists assert that the lack of government policies to provide property rights, formal credit, mechanisms for land transactions, and secure land tenure prohibits any chance for sustained rural development (Deininger and Feder 2001). De Soto (2002; 2000) has argued that formalization of property rights is essential to development, investments, and poverty reduction because households can convert assets into capital.

A closer reading of the literature on property rights and long-term investments demonstrates there that is no guarantee that property owners will choose to conserve their agriculture and forestlands. Empirical studies of property rights reveal a wide range of results that obfuscate the role of formalization and property investment (Bromley 2009).

Feder and Onchan (1987:311-12) provide no empirical evidence for their claim of tenure security and farm investments. Feder and Onchan's (1987) study addresses questions to financial market behavior rather than smallholder behavior. Interestingly, this study influenced several others concerned with formalization of land title and investment practices in Sub-Saharan Africa, which revealed farming investments are not directly connected to land title (Bromley 2009). In one report, the World Bank concluded that providing increased tenure security does not necessarily require formalization of individual titles, but rather that simple measures can be taken that would lower costs and establish investments (Deininger 2003). De Janvry et al. (2001:13) states

...intensification of land use can occur without formal property rights. ...In many situations, titling may increase transaction costs in the circulation of land, create new sources of conflicts if formal land rights are assigned without due recognition of customary arrangements...and not add anything to efficiency in resource use.

Land title does not necessarily lead to greater investments in land. Investments can in themselves be used to increase and obtain security. Issues relating to legal pluralism, with *de jure* and *de facto* land tenure laws, can lead to institutional inefficiency and high enforcement costs (Meinzen-Dick and Pradham 2003; Platteau 1996). Bromley (2009:24) inverts the liberal association of property rights and investments stating that a lack of tenure security does not necessarily preclude investments, but may in fact encourage investment to strengthen the litigant's security in a legal case. Secure land tenure in agriculture and forest conservation may be less significant when there are external influences from the market or population pressure (Angelsen and Kaimowitz 1999; Henrich 1997).

In addition to limited effect of land titling, it can be a very complex and expensive process. In situations where there are high transaction costs for attaining land titles and maintaining formal cadaster, ineffective judicial systems, and limited access of peasants to formal government institutions, collective land tenure systems are apt to be more effective in maintaining tenure security and natural resource management than formal governing bodies. Ineffective government institutions and regulations that replace customary property rights can *lessen* tenure security (Meinzen-Dick and Pradham 2002; Meinzen-Dick, et al. 2007). Conservation investments are especially important to smallholders, but without institutional support, market pressures may favor short-term over long-term decision-making.

Land titling remains important. There are cases where land title is important to investment activity. For example land titling is a significant factor for farmers in the US (Soule, et al. 2000) and in the Philippines (Shively 2001), where farmers will invest more in soil conservation on land they have title for than on rented land. And Lutz, et al. (1994) conclude that land title is important but does not guarantee that soil conservation will be practiced.

Limitations in credit markets, secure land tenure, and short planning horizons further hamper long-term investments for soil conservation by poor smallholders due to risk of failure in consumption needs in the future (Pender and Fafchamps 2006; Shively 2001). The induced intensification model is an important examination of how smallholders adapt to rising land pressures. It is a synthesis of research on smallholder land use.

Induced Intensification Model

The induced intensification model proposed by Turner and Ali (1996) examines the influence of internal and external pressures affecting smallholders (Chapter 1). According to their model, agricultural change refers to changes in technology and management in cultivation. Smallholders are induced to make changes in cultivation as production goals change. Many smallholders are constrained in their choices, which researchers call "allocative proficient behavior" (Schulter and Mount 1976). Smallholders vary widely in economic status and subsistence and market orientation within communities and therefore will respond to market demands in various ways. Adjusting to market demands, whether increasing or decreasing, creates a shift in technology and management production strategies. Turner and Ali (1996) argue that labor-efficient practices are less risky and more likely to expand cultivated areas when farmers are faced with increased demand. This option is common when there is a surplus of land. As land pressure increases, smallholders are more likely to opt for intensification over land expansion. Intensification of land use requires more labor and capital to raise productivity and is therefore likely to occur only under conditions of rising land pressure vis-à-vis land degradation (Boserup 1965; Brookfield 1972; Stone 1994; Stone 2001; Turner and Ali 1996).

Smallholders shift from known technologies to new techno-managerial innovations when land and labor dynamics propel them to do so (Brookfield 1972; Brookfield 2001; Netting 1993b; Turner II and Brush 1987). This production logic produced the "induced intensification thesis" by social geographers revealing conditions leading to land expansion (Pascal and Barbier 2006; Place and Otsuka 2000; Tachibana, et al. 2001) or land

abandonment and migration (Ananda and Herath 2003; Gray and Kevane 2001; Stone 2001) versus intensification (Turner II and Ali 1996).

According to the induced intensification model, smallholders are induced to make changes in cultivation when production goals change. Variation in goals can be linked to the degree to which smallholders are balancing subsistence needs against market production needs. When social needs are put into context with cultural and ecological history, household decision-making can be better understood.

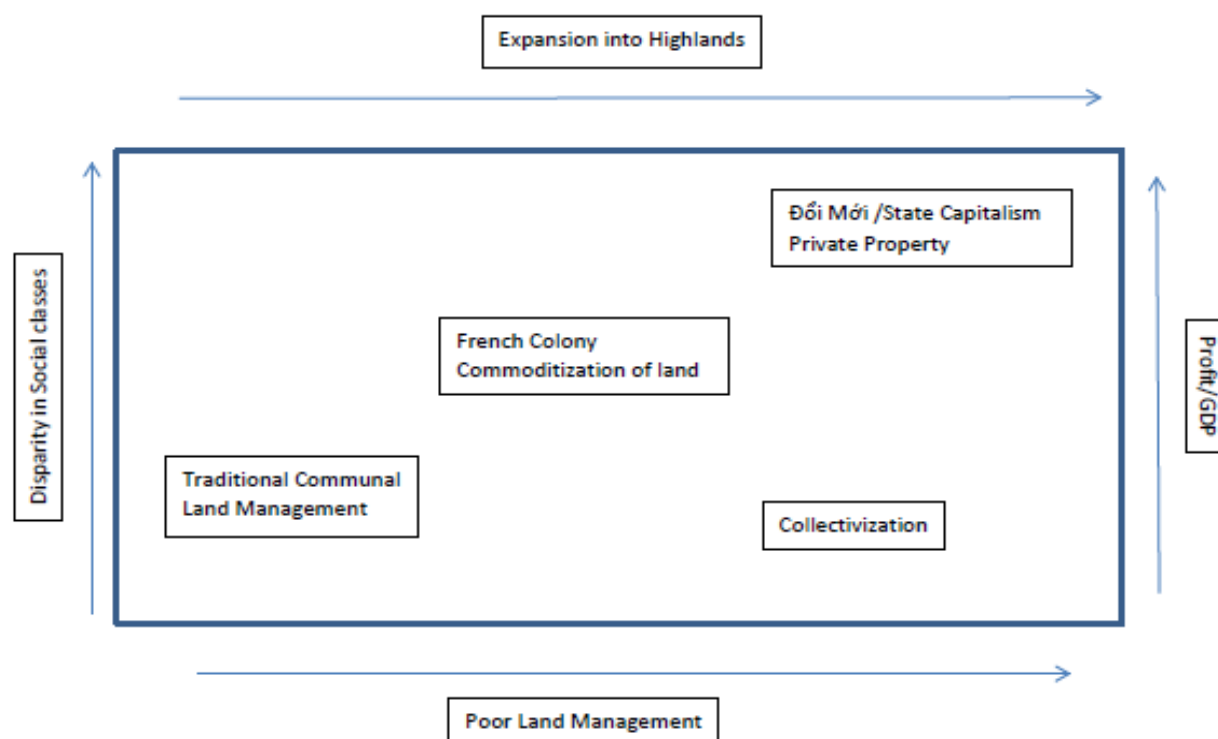
As land pressures increase, smallholders must spend time to intensify their production. Intensification is usually done only under high land pressures, requiring higher labor and capital inputs to match the land productivity vis-à-vis increasing stress and subsequent natural resource depletion. Techno-managerial change is done in a stair-step pattern. The household makes incremental changes in labor and capital to match food production needs. When a more substantial investment is needed, households must decide the best labor and capital strategy, such as terraces, irrigation networks and/or restructuring allocation rules, cresting a threshold to intensification. Thresholds can serve as impediments to innovation, leading to what Geertz (1963) describes as involution and stagnation. Involution occurs and production increases, but with significant decreases in marginal utility of inputs (Pascal and Barbier 2006). Stagnation can occur as the means of production do not increase and may decline. The next section examines social and environmental conditions of agriculture in highland Vietnam.

Property relations in Vietnam are highly complex due to the multiple and varied socio-political influences, cultures, and land reforms that have shaped the concept of property throughout history. Understanding property in Vietnam is further complicated by

the practice of customary laws at the village level. In the agrarian state of Vietnam, access to farmland has traditionally been considered a fundamental right to peasants. Today, equitable access to land remains a core issue of Vietnam's socialist doctrine's legitimacy of which redistribution of property was central in the process of decolonialization. The People's ownership and state management of land form the basis of Communist ideology and legal definitions of land tenure and land use. Land management has emphasized conservation practices to rebuild the environment, which has suffered after prolonged warfare and poor communal land use that degraded natural resources (Chung 2002). The government designed several policies aimed at promoting efficient and sustainable land use in the 1980s. Đổi mới policy was largely successful in generating strong economic growth by allocating land use rights to households. In post-socialist Vietnam, property rights have become more complex and important in the new market-driven economy. In classical economic theory, individual property rights are essential to driving the private sector and economic growth of the country. Land tenure matter for highland smallholders because they have profound influences on agricultural productivity, redistribute agrarian wealth, and conserve natural resources (see figure 3.1). This figure represents a framework in which to view different land tenure regimes according to increases in profit/GDP, agriculture expansion in hills, degradation of land, and socio-economic stratification. The directional arrows indicate the increase in any of these four variables. Looking at traditional land management, we see there is a low socio-economic disparity, good land management, low profits, and less expansion into upland slopes. This directly contrasts economic renovation from đổi mới land tenure shift to private property. However, I will argue Vietnam's rapid economic growth is quickly changing the country with development

projects and new roads that are harming forest and agricultural lands. I must review the history to explain why government policies and market pressures are pressuring smallholders to degrade the land.

Figure 3.1 Land Tenure Regimes Overtime in Vietnam Comparing Class, Highland Expansion, Level of Profit and Land Management



Historical Property Rights in Vietnam

The complexity of property rights in Vietnam is due to the varied influences of land use that have combined communal and private property regimes together (table 3.1 and Appendix B). Land in Vietnam is rooted in mythic origins that legitimizes communal ties

and establishes an eternal legacy²¹ through ancestral worship. Property in Vietnam has experienced various permutations, interweaving local practices with foreign influences including Chinese, French colonial, socialist, and contemporary Asian and western land use patterns. As a result, land law in Vietnam is an amalgamation of different forms of knowledge that overlap and are a result of historical patterns (Gillespie 1998). Property relations in Vietnam exist in multiple forms, and include regulations, laws, cultural values and practices (Marshke, et al. 2012). Newer conceptualizations generally inform the “official law,” which is superimposed over the older “unofficial laws.” Unofficial laws make up community habits and practices that can support and/or subvert the official law and contrast with official laws established by the government (Gillespie 1998:558). Property rights often involve a combination of customary and political authority for legitimacy in Vietnam (Sikor 2008). Similarly, property rights outline a range of privileges permitted as well as prohibited for individuals and for communities concerning specific resources. Rights to property (land and forests) can be held by individuals, shared by a group or held collectively by a group or a village, granted use to government agencies, and non-government agencies.

²¹ The village guardian spirit symbolizes the common aspirations of the village, including the history, customs, ethics, and legal codes, and provides a basis of meaning for communal land practices (Jamieson 1993:29-30).

Table 3.1 Land Tenure Regime Changes in (Lowland) Vietnam

Land Tenure Regime	Time period	Land classification	Natural Resource Management
Feudal Period	Pre-1896	Communal property	Customary laws intact, natural resources managed by the village notables.
Colonial Period	1883-1954	Private property	Plantations are established, commons are taken leaving many property less.
Socialist Period	1954-1986	Communal property	State owns land, creates collective farms, and State Forestry Enterprises to extract highland lumber, customary laws break down.
State Capitalism Period	1986-present	Long-term tenure rights established	Private property and customary laws are blended in each village.

Land rights in Vietnam are further complicated by geographical factors. Vietnam can be divided into highland and lowland regions, with the former experiencing the rule of law to a much lower degree throughout history. The upland regions have traditionally been separate from lowland empires, a point made clear by *The Art of Not Being Governed* (Scott 2009). Scott reinforces the highland: lowland binary in which swidden agriculturists are shaped and defined by the lowland state. His work highlights the “non-state space” in “Zomia,” a geographical area covering highland Southeast Asia and South Asia. The process of enclosure after WWII brought had arrived in the highlands, drawing a close to the highlands as a place where they could escape the clutches of the state. Highland ethnic communities have had much less government influence than lowland populations since there has been minimal influence from state bureaucracies. Scott argues that the highland binary dynamic forces one toward centralization and the other toward establishing

segmentary social divisions, a result of historical processes of resistance to the state (e.g. slavery, conscription, taxes, corvée labor, epidemics, and warfare). Scott's work reinforces the importance of borderless peoples, their history, and understanding transnational flows and processes of geography in highland Vietnam and the rest of Zomia.

Feudal period: Land Tenure in the Lowlands

Information about the period prior to the arrival of the French is limited due to the documentation available (Quang 1970). After the Chinese colonization era of Vietnam (111BC-939AD), control over land by the emperor was more of a priority than people, a reflection of the fact that there were more people than land. The first Vietnamese royal dynasty was the Ly Dynasty, which changed the country's name from Annam to Dai Viet (1009-1225AD) and established Hanoi as the capital. The Ly Dynasty helped modernize the agriculture system, and established administration officials, who were trained in civil service modeled after the Chinese bureaucracy. Dai Viet spread its influence southward from the crowded Red River Delta by granting feudal lords large tracts of land. Peasants were motivated to move to new territory by the allocation of property rights to households that work to clear new lands. This benefitted the imperial court through tax collection and peasants benefitted from new opportunities to gain access to land in the frontier. The success of the program is demonstrated by the fact that by the early 19th century, the Nguyen Imperial court had extended its rule into the Mekong delta region. In 1827, the imperial court decreed that newly cleared lands were to be divided so that the state retained two-thirds of the cleared land, which was to be used by peasants and would be

taxed. The remaining land was to be given to the landlords were given one-third of the land at a reduced tax²² for private lands.

In addition to spreading the empire along the coastal plain, the imperial government would provide more land to subdue political upheavals from villages. Land expansion helped alleviate village upheavals by granting new lands.²³ By opening new lands to poor peasants, the authorities quickly defused uprisings.

The expansion of new territory introduced new villages and ethnic groups into the emperor's realm and under a centralized Confucian bureaucracy. The bureaucracy recorded land tenure in a register, noting village land and private property. All lands that were not under cultivation including forests belonged to the emperor (Mathieu 1909). Lords and mandarins of the royal court at Hue could share these land rights to cooperative villages and landlords as private land. Additionally, the emperor could grant out public cultivation land called *cong diên* for paddy production or public pasture, forest or residential lands called *cong tho*. These public lands were primarily for village use and management. It is estimated that 5-15% of a villages' total land area consisted of *cong diên* and *cong tho* land, which was managed by village for use by poor households, which might not have enough irrigated land for paddy production (McElwee 2003:394). In the village of Duong Lien on the Red River Delta, in 1914, a majority of the land in the village was classified as public. Out of 431 *mau*²⁴ of public rice fields, 349 *mau* were given out every six

²² Private lands were taxed less than public lands in the mid-1700s. For every mau (*Mẫu* is a unit of land equal to 3600m² in the North and 4970m² in the South) of land, land was taxed 150 bowls of rice compared to 40 bowls for private land. By 1875, all public land was taxed at the same 40 bowl rate as private land (Tran Trong Kim 1964; cited in McElwee 2003:394).

²³ This was discovered during the Tay Son Rebellion in 1788, and was again a problem in 1820s with villages in the Nam Dinh area during the Phan Ba Vanh rebellion (McElwee 2003:393, footnote 181).

years to the villagers. 51 *mau* was given to soldiers, 1 *mau* to the guardian of the village temple, and 2 *mau* to people older than 70, 3 *mau* to the elders association responsible for holiday preparations, 4 *mau* to village cohort organizations for ceremonies, 1 *mau* for the village headman and vice headman for their services, 5 *mau* to the village teacher, 6 *sao*²⁵ 10 *thuoc*²⁶ to the local Confucian society, and 10 *mau* was rented out to earn money for the village communal activity and tax fund (Vu Van Hien 1955:114). Common lands tend to be important in deltas and areas important for irrigation due to the need to maintain dikes and irrigation ditches.

Village planning in lowland Vietnam was guided by customary land and the wishes of the local Council of Notables²⁷. Social rules were embedded in the villages according to oral and written traditions deriving from Taoist, neo-Confucian and animistic beliefs. Customary rights were organized along family lines since households determined actual ownership and use of land (Gillespie 1998). Villages recognized and rewarded long-term investments in land by households. Village communal agricultural property was generally allocated to villagers. According to the Lê Code (1428-1788) villages were required to pay a portion of their harvest as tribute to the emperor, which was used to build infrastructure (Whitmore 1984). Villages were organized more as corporate structures to meet their collaborative demands of tax payments since the central government interacted only with the village leader. Outside of tribute obligations, villages were essentially free to do as they pleased (Jamieson 1993). Villages were rather autonomous and practiced rituals honoring the village protective spirit that symbolized the history, rituals, and the culture of the

²⁵ *Sào* is a unit of land equal to 360m² in the North and 497m² (*Sào* is 1/10 of *mẫu*).

²⁶ *Thuốc* is unit of land measurement equal to 24m² in the North and 33m² in the South.

²⁷ Notables included rich landowners, mandarins and village elders (Dao Ming Quang 1970).

village. Land rights were passed down through clans and lineages, and village cohesion played an important role in all land transfers. Since land was not commoditized, the village life and property transactions were largely separate from external laws and government officials.

Land was part of the social fabric of the community and was not privately owned in the same sense as in the West, where land was a commodity (Adams and Hancock 1970). Private land could not be bought or sold since it was considered an integral part of the community and was imbued with customary rules. The village was tied together through the land and worked together to maintain it as a corporate entity where everyone was responsible for paying land tax, providing military conscripts and *corvée* labor (Adams and Hancock 1970; Jamieson 1993:29). The village was dealt with as a complete unit and provided it met its obligations to the State, it was left alone. In pre-colonial Vietnam, land could be rented out but never sold according to usufruct laws that prevented land from forfeiture. This system actively worked to suppress accumulation of land. Filial piety ensured that some sections of land were protected since the land belonged to the ancestors and the family descendants. Money from the rented land ensured the continued ritual services for ancestors.²⁸ Legally, the emperor could revoke individuals' rights to land, but in practice this never happened because the village as a whole was dealt with rather than households. This system was considered untenable to the French. The social contract regarding village land use required that land be kept in cultivation and cultivated land was taxed.

²⁸ Family land is fundamental to ancestor worship. According to Vietnamese beliefs, immortality is achieved through ritualistic practices and remembrances of their descendants. Patrimony land (*tu dien*) was important; while it could be leased out, the family could not forfeit its usufruct rights to the land.

Land Tenure in the Northwest Highlands

In the Northwest highlands, ethnic minorities were relatively autonomous from imperial rule, and the largest ethnic group in the Northwest highlands was Thái.²⁹ Today, Thái make up more than 1.6 million (according to the 2009 census). The Thái identity is mainly linguistic, but there are several social and cultural group identities, many of which share a common mythical origin story (Sadan 2006). In Vietnam, Thái are split informally into black and white groups. Black Thái power was located in Thuận Châu formally called *Muang Maui*, and at the height of their power in the 14th and 15th centuries they controlled 100 muang from Hoa Binh in the South to Yunnan Province in the North. In Thái ethnohistory, the *muang* formed the basis of a rather complex social organization that was comprised of several villages and relied on wet rice agriculture.³⁰ The leader of each *muang* was run by a prince or *chao*, who provided inclusive rights to land to village members. In North Vietnam, a confederation of twelve Thái principalities was established, forming a type of “feudal serfdom.” The structure of this society consisted of five classes: nobility, ranked administrative notables, priests and heralds, the peasants who were divided into free and bounded, and lastly house servants (Condiminas 1990; Mellac 2006). Phởng Lái, Black Thái were autonomous until the late 19th century (Sikor 2001; Wyatt 1984). Thái *muang* principalities remained separated from Chinese, Vietnamese, and Laotian states. Hmông ethnic groups were also autonomous residing in the high upland slopes away from

²⁹ The ethnic name Thái is interchangeable with Thai in Thailand and Lao in Laos. I use Thái to the ethnic group in Vietnam. Thái have lived in Vietnam for more than 1,200 years, having migrated from Yunnan province, China. In Vietnam, Thái form two closely related groups: white and black Thái. T'ai is also commonly used in Vietnam to describe the Thái ethnic group.

³⁰ The *muang* is a highly complex socio-political structure. Muang translates as country and is not scale-based; muangs vary in size from villages up to the provincial or national level (for a detailed account of the historical muang, see Condominas 1990).

Thái, Chinese, and Vietnamese control. Hmông practiced swidden systems, relocating their village. The Black Thái arrived in Northwestern Vietnam in the early centuries AD from China and settled into the greater Da River watershed of Northwestern Vietnam. With an elevation of 500m, the lowland valleys were well suited for wet rice production, and adjacent upland slopes ranging from 800 to 1800m were used for swidden agriculture. This composite system relied on intensive land use in irrigated lowland valleys and shifting swidden in the uplands, which utilized a 5-10year fallow. The *muang* were managed through customary law and were similar to political district levels found today. Within *muangs* there were smaller political units. The *muang* consisted of several villages and was ruled by a lord (*phia* or *chau đin*). The ascribed *phia* belonged to the noble caste and assigned other notables at the *muang* level (Cam Hoang 2009; Sikor 1999). The *phia* had symbolic control over all the paddy fields in the *muang*. In actuality, his property was restricted, a historically defined to a set of fields, but he was in control over the land and peasants had no access to private property (Condiminas 1990). Remaining paddy fields were communal property and used by the villagers.

The *phia* and notables' power was mainly utilized by organizing village labor. Households assigned to their lands were responsible for cultivating the fields and supporting the *phia* without compensation. Villages rather than the notables decided how to allocate paddy fields. Customary law was followed by highland ethnic groups to allocate and settle disputes over land use rights (Mellac 2006; Vo Tri Chung, et al. 1998). Boundaries of access were controlled within Thái communities, which allocated land for multiple uses and preservation. Forests were divided into restricted use and communal use for village members. The *phia* managed customary rules and prohibited outsiders and

village members from using sacred forests. Restricted use forests included watershed, sacred, and ghost forests (Nguyen 2005; Sikor 1999). Watershed forests located along mountain streams were widely feared and were associated with spirits responsible for protecting natural resources for the village (Nguyen 2005; Vo, et al. 1998a). Sacred forests (100-300m²) were often designated by their overall health and were the spiritual center of the village and provided protection from disasters and illness. Ghost forests were reserved as the village cemetery and ranged from 1-2ha in size. In contrast, common forests provided open access to forest products to all village members. Forest property was a collectively managed in which sanctions for misuse were doled out by village elders. Material sanctions and social pressures kept villagers away from violating customary rules, and the fear of ghost reprisals prevented Thái from over-harvesting the forest (Cam Hoang 2009). Customary laws protected and preserved forests for the *muang*.

Hmông, also referred to as Miao in China, began arriving in the French Tonkin area en masse during the second half of the 19th century due to political turmoil in Sichuan and Guizhou provinces in China (Culas and Michaud 2004). The Hmông population in Vietnam is more than 1 million people, and forms around 8% of the ethnic minorities and about .065% of the total population according to the 2009 census. Little is known about origins of the Hmông ethnic group. Sometime in the 19th century Hmông appear to have migrated into Vietnam seeking new land for swiddening purposes. Their interests were to grow opium, a demanding crop that depletes soil nutrients quickly (Culas and Michaud 2004). Their arrival into the region managed to just precede the arrival of the French. As such little is known about their land use practices other than swiddening when they arrived in Vietnam and Laos. There are indications that Hmông /Miao were practicing intensive

agriculture in China prior to migrating. Some 19th and 20th century missionary accounts describe Miao/Hmông with permanent structures and farming practices. Beauclair describes the Miao/Hmông in cultural practices as being rather dynamic in Southeast Asia which

... conveys a biased picture of the people, with the result that the Miao, among the tribes of Southeast Asia, have come to occupy the place of simple mountain dwellers, on a comparatively low cultural level. The more so, as they suffered cultural losses in their new surroundings, they had to return to primitive farming methods, as the Miao in Indochina and Thailand. (De Beauclair 1960:273, cited in Culas and Michaud 2004:65).

Whether or not Hmông were sedentary prior to emigrating from China, once they arrived in Vietnam, they practiced swidden agriculture in the upper portions of the highlands.

In summary, rural land law was much less strict than imperial codes would suggest. Imperial laws blended patron-clientism and local cultural values in relation to the distance from authority. The farther villages were from Imperial rule, the less important the emperor was in the village. Imperial rule and unofficial laws received both formal and informal recognition. Territorial concerns of nation states were not introduced until the arrival of the French. In the uplands, Thái and Hmông were largely outside Imperial rules. Customary rules enforced land use that helped protected and preserve forests, benefiting the *muang*. Land was not commoditized and cultural values at the village level worked to ensure everyone had access to land, could work the land, pay taxes, and could live sustainably.

French Colonial Legal System and Property

The arrival of the French in Vietnam radically changed land tenure relations by establishing private property and thereby making landed property into a commodity. The

French colonialists invaded in 1848 starting in Cochinchina (South Vietnam) and extended with the annexation of Annam (Central) and Tonkin (North Vietnam) regions in 1884. Legal authority by the French was based in principle through a treaty with the Vietnamese Emperor Tu Duc. However, the legal authority assumed that the emperor possessed eminent domain over all lands as was the case in Europe (Quang 1970). This new property raised the problem for the French of how to raise revenues and secure administrative control over the countryside (Adams and Hancock 1970). After some initial missteps, the French were successful at importing a French legal system based on foreign legal theories, which had significant influence on rural and urban land practices (Hooker 1978). Using the newly established legal system, the colonialists declared territorial and judicial dominance and addressed individuals rather than corporate villages for the first time, a process that established a new tax and tenure policies that would have profound social and economic influence across the rural countryside (Adams and Hancock 1970; Gillespie 1998). Land that had belonged to the Emperor, Mandarins and the villages was transferred into the hands of the French and Vietnamese landlords, who consolidated properties to form plantations. This was done through the establishment of a land market that regulated land prices and land use, which previously had never existed (Adams and Hancock 1970). In traditional Vietnam, land was virtually never sold since villages owned land collectively. Formal land titles were administered to individuals by the French, providing a means to access the French capitalist market through mortgaging their property (Bassford 1987:91). Using the *Dia bô*³¹ tax system as a proxy for land registry, the French assigned property ownership to the head of households (Hooker 1978).

³¹ The system of *Les Registres* (*Dia bô*) was established in 1925 by decree of the civil code in France. Coch-

The legal code initiated a rights-based rational legal system in which social and economic structures were determined through objective laws (Gillespie 1995: 65). French civil law classified property into moveable and immovable³² objects and public versus private ownership. Under the French legal code, the transference of property rights required a complex bureaucratic legal system to regulate and settle disputes. In land transactions recorded for Vietnamese and French citizens, customary and imperial rules were excluded. The French Civil Code for land was only applied to French and Europeans, and came under the General Land Management Bureau, and was regulated by the courts (Hooker 1978:156). Chinese (*Asiatiques Assimiles*) and indigenous Vietnamese relied on village customs for most land transactions and occasionally on the *Nguyen code*.³³ In the case of conflicts, French law was followed; since theoretically rational rules naturally overruled any informal rules, no other legal system could coexist. Changes in land holdings were rapid due to the need to establish a productive agricultural system that could be sold off as landed estates to French colons (Brocheux 1995). Once plantations were purchased, labor was recruited from the countryside. Many of the plantation workers became tenants and sharecroppers on the estates, creating a stratified society of landlords and sharecroppers (Ngo Vinh Long 1984). All “unused” lands such as village commons were given to French colons provided the free land was put into production and could be taxed. French seized unused lands claiming that these lands were considered common land

China, Annam and Tonkin created indefeasibility of title, in which actions claiming rights in immovable property that were not revealed in the process of applying for property were not admissible (Hooker 1978:160).

³² Property rights acquisition and loss in *rem* and *in personam* formed the basis of the French Civil Code dating back to Napoléon 1.

³³ The Nguyen code (1813-1945) allowed owners of land to lose legal protection of their property rights to occupancy if they failed to cultivate and inhabit land beyond the prescribed 30 years for family and 20 years for non-relatives.

according to imperial laws. According to this logic, common lands were claimed as state land by the French. Total seized lands in 1930 were 104,000Ha in the North, 168,400Ha in central Vietnam and 605,000 Ha in South Vietnam (McElwee 2003:398). The land seizures created an agrarian society that was largely landless due to the loss of common lands, the severe conditions of sharecropping, and the high taxes imposed by the ruling colonialists. Increasing rural unrest over the insufficient economy and limited land led to changes in the French regime to free up communal lands in Tonkin to stabilize the region (White 1991:149). However, unrest continued to grow despite the attempts in 1930s to ensure village land was redistributed every three years equally. French land management had created a highly stratified society that could not be undone due to the scarcity of land and surplus labor. In 1931, North Vietnam had only a limited amount of arable land (12.7 % of the total area) averaging one percent of a hectare per person. Three percent of families held 52% of the arable land, 36% held 37% of the land, and the remaining 11% of land had to provide subsistence for 61% of the peasant population (Tran Ngoc Bich 1972). This distribution of land holdings remained essentially the same until the August Revolution in 1945.

French Presence in the Northwest Highlands

In the northern highlands, the French arrived in 1895 to Sơn La province and established a colonial outpost. The provincial name Sơn La changed to Vân Bú in 1895 (Cam Hoang 2009). French interests in the uplands were primarily in resource extraction of gold, coal, and timber and did not alter the feudal land system, keeping it semi-autonomous until the French withdrawal in 1954. The French were relatively uninterested

in the remote highland regions where the Hmông resided. They did, however, establish relations with the Thái Chiefdoms. This relationship enabled Thái to exploit Yao³⁴ and Hmông ethnic groups in various ways (Corlin 2004). Under the French the highest government provincial territory was the *Chau*. The district level within the *chau* was *muang* (Nguyen 2005). Thái were brought in to serve the French colonial officers and to collect taxes. Forestland occupied by Thái villages was not controlled by the French who were mainly interested in commercial development. Traditional land tenure remained intact and was followed by highland ethnic groups to allocate and settle disputes concerning fires and agricultural land use rights (Vo, et al. 1998a). Boundaries of access were controlled within communities, allocating land for multiple uses and preservation. Forests were divided into restricted use and communal use for village members. The Hmông and Yao customary laws were left intact during this time. The exploitation by the French and Thái most likely influenced Yao and Hmông to ally themselves with the Việt Minh (Michaud 2000:349-53).

Under French colonial rule, a federation of Muang called Sip Song Chau Tai (the country of twelve provinces), was permitted to remain separate from Tonkin French administrative rule. The Thái federation, an old feudal system controlled land along the

³⁴ Yao, sometimes known as Zao, Mien or Dao, reside in the SE Asian Massif. In North Vietnam highlands, Yao live mainly along the border of Vietnam, China and Laos (but can be found in Thailand, Myanmar, France and the US). The estimated 2,637,421 Yao living in the Southeast Asian Massif and Southwest China in 2000 speak a language in the Hmong-Mien language group. The Yao in Vietnam and Laos practice an old form of Taoism, but many have adopted Buddhism and Christianity. Yao arrived in Vietnam in the 1700s to escape oppression by Han Chinese, who began colonizing their lands. Yao settled in less populated valleys and practiced agriculture and hunting and fishing. Yao were under French control in the 19th century and were introduced to western-style education. Yao in Vietnam would become embroiled in nationalist movements and subsequently collectivized agriculture would disrupt their culture. When the French were defeated in 1954, Yao living in Vietnam were cut off from the Yao in Laos, who were recruited by the Americans to fight North Vietnam. Yao living in Laos fled to Thailand and were later resettled in the USA, where today there are estimated to be more than 60,000 (see Michaud 2006; Minahan 2012).

Black River watershed. Auguste Pavie³⁵ secured the Northwest highlands from the Black Flags (highland warlords from China) by aligning with the Tai Federation. Sip Song Chau Tai was led under the Đèo family, most notably Đèo Văn Trì³⁶, who unified the twelve provinces and Đèo-văn-Long, who was in charge in 1954, when the Sip Song Chau Tai federation dissolved. The formation of the Thái federation (mainly White Thái) colonial administrators along the Black River (Song Da), in Western Tonkin created tension between the long-established Thái ethnic group and ethnic minorities in the region, namely by the Hmông (Culas and Michaud 2004).

French law ended in 1954 with the Việt Minh victory at Điện Biên Phủ. Following the defeat, the Geneva agreements in July 1954 split the country at the 17th parallel. The land north of the line was the Democratic Republic of Vietnam (DRV) and went a under different legal system than the Republic of Vietnam (RV) in the South. The RV continued to apply French civil law, expanding it to include title registration (*Dia bô*) and experimented with land reforms (Hooker 1978:160).

At first, I was confused by the lack of discussion about the history of land use in the commune. However, it is not surprising considering the severity of changes and the fact that was I was an outsider. As a result, very little was said about this period in Phỏng Lái, as many smallholders had little to say if anything about their livelihoods in the past. However, I discovered many Thái fled the country, and today there are a few Thái refugees living in Des Moines, Iowa.

³⁵ Auguste Jean-Marie Pavie (1847-1925) was a French Colonial civil servant, explorer, and diplomat in the Tonkin and Laos borderlands (Michaud 2000).

³⁶ Đèo Văn Trì, a former Black Flag leader and Lord of Lai Châu, was made leader by Auguste Pavie in 1890, making him the official leader of the Sip Song Chau Thai (twelve provinces). Đèo Văn Trì remained in charge until 1909, when he died (Culas and Michaud 2004:77).

Land Tenure Under the Socialist Legal System

Changes in land ownership that left many peasants dispossessed and discontented under the French colons were a significant reason behind the Vietnam Revolution in 1954. The 1955 land reform of the new DRV allocated land back to the peasants. Absentee landlords, plantations, large farms, and colonial lands were confiscated for collectivization purposes. Over 800,000 hectares of land were distributed to two million peasants in the North and new village leadership was created (Corlin 2004:299). Land reform was a first step towards the collectivization and ownership of all productive lands by the socialist state.

Land law in the DRV was influenced by the Maoist model of land reform and was litigated using the same property laws from the Soviet Union. The goal of the DRV was to efficiently modernize the country. Customary rules and feudal land traditions were replaced with “rational, progressive, socialist legislation” (Gillespie 1995:66). According to the 1960 Constitution, peasants, craftsmen, and capitalists could own land; however, this was not actually permitted in practice (Quang 1970). The 1960 Constitution categorized three types of land: state, private and cooperative ownership. While in theory private land could be used to generate income, in reality private land was either nationalized or converted into cooperatives.

Initial reforms introduced after the 1945 revolution were a reduction in rent by one-quarter (and removal of any supplementary rents), a more equitable distribution of common lands, and all colonial lands from French and Vietnamese collaborators were distributed to poor peasants. By 1950, additional land measures were established to include that land abandoned for five years was expropriated and all debts originating

before 1945 were abolished. Since French colonial rule was never fully established in the highlands, traditional common property land rights remained intact, but land was managed in the lowlands through institutional control (Michaud 2000; Salemink 2003a; Sikor 2008). After independence from France in 1954, the North Vietnamese government organized policies around the control of people through controlling land. Socialist land reforms in the highlands were less severe than in the lowlands (Tran Thi Que 1998) and collectivized agriculture was also less organized and totalizing in the highlands (Michaud 2000).

In Sơn La Province, the Thái muang political system ended with the formation of the DRV. In 1955, Ho Chi Minh established the Thái-Meo Autonomous zone in the Northwest (Corlin 2004). Political and administrative staff was recruited predominately from local ethnic groups. With the unification of the country in 1975, the autonomous zones were abolished. The party viewed the lowlands and the uplands as equal citizens under the 1980 Vietnamese constitution.

Socialist development in the highlands policy followed a unilinear model. Directives on land use were justified as “scientific” as necessary based on a particular interpretation of Marxist theory. Upland ethnic minorities under this framework were seen as evolving at different rates towards “modernity.” Starting in 1954, Vietnam’s socio-economic policies set out to remedy the economic and cultural divide between the majority Kinh and the other fifty-three ethnic minorities (Cam Hoang 2009). Policy changes were implemented to suppress several traditional upland ethnic minority agrarian practices deemed to be unscientific (*không khoa học*) and backward (*lạc hậu*). These policies targeted customary natural resource management, traditional land rights, and other forms of traditional land use practices (Rambo 1995a; Salemink 2003a). Customary land rights dictating shifting

agricultural practices requiring a fallow period lasting more than a decade at a time were now prohibited by the state. Fallow land seen as unused potential land for the taking would solve two problems. Abundant and underutilized natural resources could now be extracted more efficiently and hill tribes would be tied down to one location. In 1968, the government passed the “fixed cultivation and settlement program” (*định canh định cư*), which consolidated ethnic minorities together under state control (Cam Hoang 2009). The new technology and high yield varietal seeds doubled output in areas that were accessible to water (Ducourtieux and Castella 2006).

All land owned by the French was reclaimed and redistributed under a nationalizing process of the Vietnam Worker’s Party (VWP). Most agricultural land was organized into communes under the cooperative system. Villages and rural sectors were mainly targeted with the legal changes in land law. Attempts by the VWP at controlling free-market activities through collectivization and eradicating French and Chinese traditions were never fully realized in the DRV (Moise 1976:70,72). The VWP tolerated some discrepancies provided the collectives were functioning along the old village boundaries. The Land Reform Law promulgated in 1953 reallocated urban land and housing, and claimed all commercial property for the state. By 1960, an estimated 86 percent of peasant households had been organized into collectives.

Concurrent with collectivization, a massive resettlement program shifted war refugees from densely populated areas along the Red River delta to new economic zones in the central and northwest highlands. New economic zones were located in areas that were classified as “unused” land and would be acceptable for lowland Kinh peasants (Corlin 2004: 300). The arrival of Kinh led to conflicts over natural resources in the highlands. This

was especially true in the central highlands, where problems continue today between ethnic minorities and Kinh (Hardy 2003). In Phông Lái most Kinh were poorly prepared to make a living in the highlands and struggled in the harsh conditions, relying on Thái and Hmông ethnic groups for help.

Vietnamese Highland Development Strategy

During the American war in the 1960s, cities were evacuated due to the threat of bombing, and new economic zones were established in the rural areas to encourage agriculture production (Chandola 1977; Forbes 1996). One of the resettlement policies and operational strategies involved moving Kinh to less densely populated areas in the uplands. This strategy brought in a new workforce to exploit the natural resources of the area and initiated a national strategy of securing highlands by integrating the uplands and lowlands. Under the new economic development zone policy of the 1960s and 1970s, approximately 4 million people were resettled along the Da River Watershed (Vo Tri Chung, et al. 1998). Kinh were placed along Highway 6 in Son La Province to establish communes and a new modern socialist culture through the establishment of new economic zones (NEZ). One of these new frontier settlements was Phông Lái commune, which was formed in 1961 with Kinh from the Red River Delta province of Hoa Binh. At that time Phông Lái³⁷ consisted of several Thái villages occupying the valleys and semi-permanent Hmông villages in the uplands areas.

³⁷ An interesting historical footnote about Phông Lái is that sometime in the early 1950s, prior to the arrival of Kinh settlements, the Thái village Khâu Lay decided to relocate. All but six Thái households dismantled their homes and relocated to Tuyền Giáo district in the west, where more water was available. In 1952, Khâu Lay grew again as more Thái began to move into Khâu Lay village since the soil was good, and there was good grazing and farming opportunities despite the seasonal stream flow. Hmông had been in the area for a long time, but were restricted to the hills by the Thái. The rapid influx of Kinh into the area had profound social and environmental changes on landscape.

As part of the NEZ policy, State Forest Enterprises (SFE) were established to extract forest resources in the highlands. NEZ policies encouraged Kinh migration that centered around agriculture and forestry areas in the highlands. In Northwest Vietnam, Kinh population went from 640,000 in 1960 to 2,560,000 in 1989 (Vo Tri Chung, et al. 1998). This 400% increase in population significantly stressed the natural resources. SFEs were clearing houses for clearing large tracts of lumber. Many SFEs were poorly managed, leading to expansion of private logging enterprises that cleared forests for settlement and agriculture.³⁸

The Democratic Republic of Vietnam (DRV) nationalized all natural forests in the mid-1950s and forests were immediately logged. In 1958, 6.85 million hectares (40% of the total land area) of forest were under the DRV, with an estimated 15% to be of quality stands (Dinh 1967:61 cited in McElwee 2003:402-3). Estimated logging exports in 1960 are more than one million cubic meters for the year and subsequent years after. The nationalization of the forests led to a dramatic change in deforestation in the highlands. The result left many areas stripped of trees, leaving large areas bare; these clearings were converted to agricultural land. The large number of SFEs meant logging was a major source of income on the black market. Shifting agriculturalists in the highlands were affected by the commercial and illegal logging practices that accelerated. The practice of burning the economically valuable forests was banned and pressure was applied to encourage intensive agriculture. And yet, over time, much of the highlands in Sơn La Province would become

³⁸ I asked a successful businessman in Phòng Lái about logging practices. I had overheard him one day discussing the current practices of transporting illegal wood through the province. He said, "Trees were felled by removing the outer layer of the tree at the base so that it could be ignited. Once the tree fell over, the tree could be evaluated as to its worth; trees that were hollowed out and rotted were left to burn and valuable trees were put out using a banana tree to snuff out the fire" (fieldwork 2009).

completely bare.³⁹ During the 1980s, government revenue from logging jumped from \$200 million to \$10 billion US (McElwee 2003:405). The black market for logging accelerated in the highlands, with little of the official statistics reflecting the peak of industrial roundwood harvested at the time (Brown and Durst 2001). In Northern Vietnam, forest overuse was more accelerated, since *de jure* state land in forests was turned into *de facto* open access for the poor to gain access to non-timber forest products to supplement their income and diet (Sikor and Truong 2002).

Logging accelerated in Phông Lái during this time to supplement income by smallholders due to the low-yielding commune harvests. Large areas of forest were cleared and converted into upland agricultural fields. Life was hard, and many individuals struggled to manage the one hectare of land they were assigned. Low food production required everyone to eat rice with cassava during the winter months, dampening everyone's spirit. Kinh were initially unfamiliar with highland agriculture systems and had to get help from Thái villages, many of which had supported the French previously. Over time, the DRV abandoned agricultural production from annual crops, shifting to horticulture instead. It was decided by provincial officials that tea production would be better suited to the region. A trade agreement to export green tea to the USSR sealed the deal. Many Kinh switched to growing tea, but Thái and Hmông did not. Overall collective farming was stressful to manage for Kinh.⁴⁰ More than a few Kinh households opted to leave the system. They would use communal buffalo to harvest wood illegally at night, and

³⁹ In 1990 only 8% of old-growth forest remained in Sơn La province.

⁴⁰ In Phông Lái, Kinh and Thái ethnic groups initially collaborated in building a collective farm, but cultural differences prevented them from working together, resulting in two separate collectives. Thái would start work earlier but break for breakfast at 10:00 AM and Kinh would break for lunch at noon and work later in the afternoon. Thái would finish the workday by mid-afternoon. The longer commute to the collective farm meant Thái were required to work harder just to get to the site. After a year, both groups found it easier to work separately.

then would sell it on the black market. Once these households had made a profit, they would leave the commune in the middle of the night without saying word to anyone. As Kinh struggled to establish and maintain their own collective farms, they were less successful working with Thái ethnic groups in the highlands due to cultural barriers and only barely got started working with Hmông villages before the state decided to dismantle the whole collective farm system.

Cooperative land was owned by the state and used by the people. Private property did not exist; however, smallholders were given plots of land to manage. During the radical socialist land tenure regime change, customary land practices did not entirely disappear. Throughout the 1950s and 1960s traditional land use practices and customs remained a strong social tie that bound the village collective together (Vo, et al. 1998a). That villages resisted state policy and interventions that challenged customary traditions in the Northwest highlands is revealed through the failure of collective agriculture to take hold (Kerkvliet 1995). In Phông Lái, villages established their own collective farms according to their recognition of resource use rights, rather than doing so for the socialist state farm agenda. State exploitation of lands meant local forest customs were no longer adhered to, and soon there was rampant forest exploitation and timber extraction in the commune. Local resistance to changes in land tenure rules and household production was widespread across Vietnam, and the failure of collectivization is well documented (Kerkvliet 1997; McElwee 2003; Neef, et al. 2006; Sikor 1999).

Socialist legality⁴¹ in DRV lacked formal structure and struggled for uniformity. Vietnam Workers Party (VWP) cadres would adopt more of a patrimonial approach rather than follow the formal rules. Laws were not always publicized and could be suspended quickly whenever VWP deemed it necessary to denounce political rivals for confiscating land illegally. Legal institutions were set up to support formal laws, yet had little direct involvement with the legal system. Courts determined laws according to Party interests and the Ministry of Justice was dissolved (Gillespie 1995:68). Prior to unification, very little importance was given to the socialist legal system. Legal institutions were not supported despite several attempts to bring enforcement of the law to the political and social forefront until it was too late. The sixth party congress strengthened the legal code and enforcement with the renovation policy of *đổi mới* in 1986. Vietnam had transitioned from a centrally planned economy to a market-based economy.

Đổi Mới and the Formation of Property Rights

In the mid-1980s, the central government shifted away from central planning and began to break up the collectives, devolve state forest enterprises, and initiate the privatization of industry and trade as a matter of political survival (Sikor 2012). While communes in the North had been effective during the American War (Second Indochina War), their willingness to continue sacrificing for the good of the nation began to thin significantly after the 1975 unification. The resulting problems and lack of food required bold action by the government. In 1986, Vietnam put forth a series of reforms known as *đổi*

⁴¹ Socialist legality is predominately concerned with social compliance and does not differentiate between polity and the legal system, which Western rule of law does (see Gillespie 1995: 69 footnote 51). Social legal systems are based on civil law, using additions and modifications from Marxist-Leninist ideology. Civil codes had to be interpreted by the courts (much like German and French civil code system). Socialist legal system is similar to civil law, but with an expanded public law sector and diminished private law sector.

mới, aimed at liberalizing the socialist economic and political policies. Vietnam, like China, shifted its economic policies from a centrally controlled to a market-oriented economy. Major reforms were necessary due to severe food shortages and pressures from the rural communities that eventually led to agrarian reform over a series of gradual changes (Fforde 2000; Kerkvliet 1993:20). In 1988, resolution number 10, “Renovation in Agricultural Management,” was passed by the politburo. Households were granted more responsibility under the new “household contract.” Farmers were given seed, fertilizer and livestock directly and were expected to return a set minimum quota back to the commune. Peasants were granted land use rights to assigned plots: 15 years for annual crops, and longer for perennial crops. The state owned the land, but left the responsibility of distributing it to the communes and villages (Henin 2002). According to the 1988 Land Law, land could not be sold or transferred (Hayami 1993).

The promulgation of the 1993 Land Law included forestlands in an attempt to regulate their use and went much further toward privatizing land. Land use certificates or red books were given out to households describing their land holdings, tenure and location. The 1993 Land Law classified property into six categories: agriculture, forestry, urban, rural, residential land, special use and unused land. Land value is determined by the people’s committee at the provincial level. Land allocation is determined at the district level, and land use planning is the responsibility of province, district and communal level of government authorities. Article 3 states that 1) the state will protect the legal rights and interest of land users; 2) households receiving allocated land shall be entitled to exchange, transfer, lease, inherit, mortgage, the land use right. The above rights are to be implemented only during the term of land allocation and with correct land use, as

stipulated in the law. All households are entitled to receive land use rights provided they are physically and financially able to use the land. In practice, because of the discretionary power of local officials, forest and agricultural land allocation is controlled by the local elite (Clement and Amezaga 2009; Sowerine 2004). The result has led to stratified ownership of property and wealth accumulation.

In 1993, the new land law further liberalized property rights to households. Forestland could be used for perennial crops and was granted for 50 years, while agricultural land was assigned for 20 years for annual crops. Land for homes was issued for life. The new land law allowed households to buy, sell, mortgage, lease or inherit their land use rights (Land Law 1993:Section 3.2).

The new land law took a few years to implement in the highland commune of Phông Lái, but in general the new land law had an immediate influence on household productivity. The value of land was established through bidding and contracts. Underutilized land held by the commune was now in use, and all remaining plots of land were being farmed as households sought to maximize their land holdings (Henin 2002: 5). As a result, agricultural productivity increased from subsistence-based to intensive production of cash crops. By 1995, food production had increased well above the population growth rate, and Vietnam had become the third-largest exporter of rice (Fforde and Seneque 1995: 108).

One advantage of the new land law was the provision of legal title to lands and to peasants, elevating them from being undifferentiated laborers during the collectivized period to possessing rights to land, which had become a marketable commodity. Households with land title (red books) now have ownership rights for a set period and can access bank loans or mortgage their land for credit. In a short time, land transactions

became associated with commercial transactions, usury, and black market activities with urban property transaction of unlicensed properties (AusAID 2001; Corlin 2004).

Economic development in Vietnam had been initiated from the 1993 Land Law which commoditized the land.

The commodification of land led to the formation of class divisions across Vietnam. Land transactions have greatly favored local officials and elites. For instance, in Phông Lái officials knew ahead of time which lands would be developed and bought land up cheaply and could sell land later for a profit. Households became stratified by their knowledge of and access to government programs that enable them to access more financial resources. For instance, being a member of the youth union, veterans' union, women's union, and/or the farmers' union entitled members to a loan from each group. In this way, households could collect multiple loans, from their membership. This loophole is no longer permitted. It was apparent that a few Kinh households in Phông Lái managed to access the lion's share of communal funds and were building large multi-storied homes, which would tie up communal funds for several years until the loans were repaid. These homes were placed along the main road and were designed to be small businesses. Every government official in the commune had a better-than-average home and was involved with land sales and/or had started successful businesses. Considering ethnic minorities have limited access to government resources and information due to barriers in geography, education, language, and culture, they are far less likely to have equal access to financial capital (Neef 2001b; Saleminck 2003a; Sikor 2001).

In an interview with a Hmông leader, he explained the normative process of land titling in the highlands:

“Trước đây, nếu một người canh tác trên mảnh nương rồi để hoang để mảnh nương phục hồi. Khoảng năm 98 này thì chia đất, rồi bốc thăm, anh A được mảnh này, anh B được mảnh khác. Khoảng sau 1 năm, Nhà nước chỉ thị cấp sổ đỏ, mọi người không du canh du cư nữa. Sau đó khoảng 3-4 năm thì được cấp sổ đỏ để quản lý rừng.”

“In the past, [prior to the 1993 Land Law] if [someone had] a piece of terraced land or in the wild area (unclaimed land) then Hmông would let the land go into fallow after using it. [After the 1993 land law, he describes the process] This is about dividing the land in 1998, then draw, Mr. A is this piece, Mr. B is the other piece. After about a year, the State-level indicator red book, [if] people are no longer nomadic. Then about 3-4 years later everyone was shall be granted the red book for forest management.”

In this statement, we learn prior to the 1993 Land Law, Hmông relied on a fallow system in the hills and were free to migrate. The state began allocating land in 1998 in the Hmông village by random draw. Once the property had been assigned, the state made sure the property was in use by the household. After a few years, RBCs were issued to each household.

The process of devolving commune lands into private pieces varied considerably from village to village depending on culture, history, and environmental conditions. In the North, where collective farming had been established for nearly a generation, land was divided up according to household size. Some villages drew straws to determine how to divide up the property since any other system would be very complex (McElwee 2003:406). In the South and in the central highlands, land often reverted back to the previous owner prior to the establishment of the commune (Hayami 1993; Kerkvliet 1997; Scott 2000b; Sikor 1999).

In Phông Lái, land was distributed more or less according to the number of workers in the household at the time, with variations in each of the three villages studied (figure 3.2). In 1994 red books for home and garden land were handed out to all villages that were in close proximity to Highway 6, the center of the commune. In 1998 forest and agricultural land was assigned to households in accordance with the 1993 Land Law. In 2002, the red

books were collected and re-issued with maps showing property. Land was evenly divided in the villages, and those who wanted to sell their land could do so. Land was divided proportionately in each village in slightly different ways. In the Kinh village, land was allocated as follows: 500m² of wet and 850m² of garden land per adult. In the Thái village, the allocation was 100m² wet farmland, and 500m² upland croplands, but no garden land was provided.⁴² Additionally, the selling of cropland was quickly prohibited to protect the village from losing additional farmland from land sales. In the Hmông village, 2000m² of dry cropland was given to individuals in the household. Very few households had access to irrigated lands since their village was entirely in upland areas. While this system appears egalitarian, land quality in the villages varies considerably. Land with access to water and roads was of much higher value due to the ease of access and quality of the land. There were some complaints in the process; for instance, local officials and elites tended to acquire the best lands, and children and elderly family members were granted the same amount of farmland as working adults, who presumably would need more land to live on.

Each village I studied had various ways of distributing lands, using different proportions on the village holdings, and had different understandings about their land rights. The 1993 Land Law states that land is owned by "the People," meaning the Nation, but managed by the State, which allocated land to households for long-term and stable use.⁴³ Presumably these rights were renewable, inheritable and transferable, making the land essentially privatized, at least in the eyes of many smallholders, who acknowledged

⁴² Gardens are an important part of Kinh culture and thus garden RBC were included in the Kinh village. Thái and Hmông villages were given living land that included space for a garden. Forestland RBC included upland plots which were given to households who had legitimate claims on uplands, which was the case for the minority villages but not Kinh.

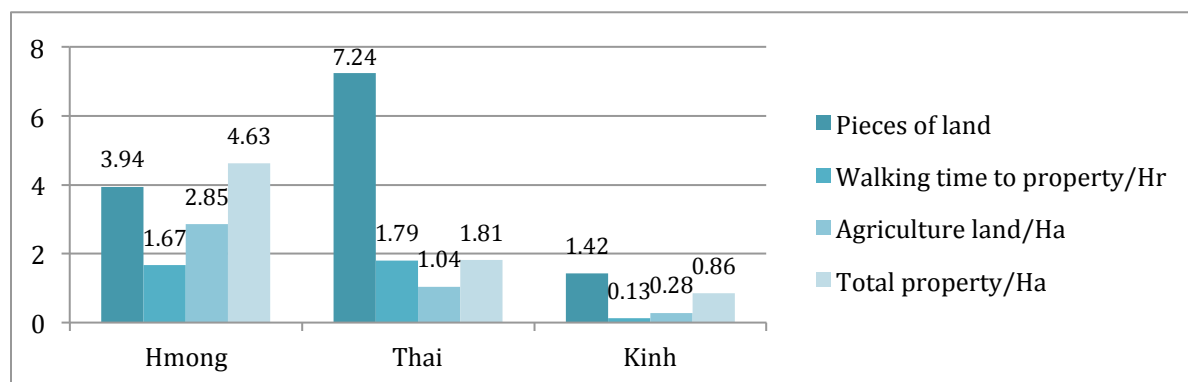
⁴³ Households were given a 20-year lease for annual crops and 50-year lease for perennial crops and forestland; households were given for life. Land, however, is owned by the State.

they believed their title was for life. The majority of Kinh households were familiar with the statutes of the 1993 Land Law, but results were mixed in the Hmông village, and the majority of Thái households were not familiar with RBC property rights and believed their rights were forever. Some households hoped land would be redistributed in the future to account for the growing population, as had been done during the collective period. When I asked village heads how land distribution was received, they said there were fewer problems now than in the past. Red books provided a clear boundary for claims to be established. One of the striking differences between the villages was where plots of land were divided (table 3.2). Kinh (Đông Quan) and Hmông (Nậm Giắt) villages had land that was more concentrated, with fewer plots scattered across the village boundary (1.42 and 3.94). But in the Thái (Khâu Lay) village, land was scattered all across the landscape in small pieces (7.24). Plots closer to the village and irrigation were more valuable than more remote valleys and hills. And several smaller plots were less desirable than fewer larger plots. To reduce problems of land quality, plots were divided up according to their quality; each village attempted to give households access to wet and dry crop lands equally. This system distributed risk equally across the landscape, creating a “shared poverty” (Geertz 1963) and reducing village conflict (McElwee 2003). The 2003 Land Law opened land to foreigners and commercial interests to purchase land rights. This change in the law has increased the incidence of land grabs by government officials.⁴⁴ In some cases smallholders who have made long-term investments have lost their land due to local government greed forcing land sales and graft. Since the law’s enactment, attempts to compensate households

⁴⁴ Land grab cases make up 30% of court cases; over 1 million hectares of land have been seized in the last decade. See World Bank Report: Recognizing and reducing corruption risks in land management in Vietnam <http://documents.worldbank.org/curated/en/2011/01/13686356/recognizing-reducing-corruption-risks-land-management-vietnam>

for land value based on current real estate market value have taken a long time (Gillespie 2013). Not surprisingly, the allure of easy money has increased the number of land seizures by government officials. Land disputes have skyrocketed as a result of increased number

Figure 3.2 Cross-cultural Comparison of Mean Number of Land Holdings



of government land grabs and the subsequent low compensation payments. The temptation to seize land is due to the high profits made by investors, and corrupt officials will likely be addressed in the new 2013 Land Law. One possibility is that private property may finally be acknowledged. Other proposals include circumscribing state prerogative powers, to avoid creating private property. This proposal would prevent government land grabs of farm land by establishing “acquisition with compensation,” a policy more akin to the western concept of eminent domain, which recognizes property rights can only be taken with compensation. As state concepts of land move incrementally from the socialist notion of peoples’ ownership and state management toward the idea of private proprietary rights these issues will remain complicated. The concept of private property remains elusive for ideological reasons, but the 2013 Land Law looks to give smallholders greater legal protection (Gillespie 2013). Households that were not satisfied with distribution of land could clear unused land, preventing conflicts, and previously unclaimed lands were quickly

claimed by families and put into cultivation. Unclaimed lands were considered of poor quality during the collective period, but now were considered worthwhile. Households also claimed any remaining unused dry croplands, expanding deep into the surrounding bare hills. Land that had been designated as forestland was being used to grow annual crops. And curiously, dry lowland plots were used to grow coffee, tea, fruit trees and perennial crops. Previously unused lands were tax free for 3-5 years, providing additional incentives to expand land holdings (McElwee 2003:410). Clearing land and planting crops or trees established rights to the land, as is the case elsewhere in the world. Land left fallow for more than three years was considered abandoned. If a person wanted to use land cleared by someone else, he had to negotiate the terms with the other household. I spoke with one smallholder who revealed that he had a few 15-year cassava plants left, which were previously used to lay claim to fallow land over 15 years and were not intended for consumption. These seeds were no longer used since nearly all land in the villages was actively being used. If any conflicts over land use did arise between parties, forested areas could still be cleared.

Land value began to increase after red books were handed out in 1998. A small land market developed. Land was swapped, sold and bought, although transactions were very limited, and Khâu Lay village was quick to put a ban on selling land. The going rate for lowland property was one to three times the value of upland property. Nearly everyone stated that they had little interest in swapping land, and almost everyone wanted more land since many smallholders had been forced to sell land to the state to make room for two Thái villages that were forced to move into the commune because of the Sơn La Dam project. Land values jumped markedly in 2008 when the government purchased land to

make way for relocated villages due to the Sơn La Dam project on the Black River, which was estimated to relocate more than 90,000 people from 2007-2010 (Cuong, et al. 2006). It was well known that local government officials knew ahead of time that the State planned to buy up land in 2008 to establish new villages and bought land prior to the sale, earning a profit. Land prices shot up as a result of smallholders looking to replace the land they were forced to sell.

With only one exception, every household with whom I spoke stated that they intended to give their land to their eldest son. It is interesting to note that even though collective land was given equally to men and women, most preferred the patrilineal pattern of inheritance. Red books were not equally distributed; they were distributed through patriarchy to the head of household, unless the household was survived by a widow.

Vietnam's Agrarian Change in the Highlands

The privatization of property had profound effects in the uplands of Vietnam. By dismantling collectivized agriculture, establishing household responsibility systems in farming, and commercializing agricultural production, *đổi mới* policies raised standards of living by creating broad economic growth. Reforms in the highlands led to a decrease in funds for infrastructure, a decline in health, education, and welfare services, a decline in state-controlled fertility programs, and the depletion of natural resources (IDA 2007; Kerkvliet and Porter 1995; Seldon 1993; World Bank 2007).

Since the Socialist Republic of Vietnam (SRV) has been in power, government agencies in Vietnam have implemented regulations related to land tenure and land use in upland villages with the aim of facilitating economic development and minimizing land

degradation. This has been a daunting challenge considering that more than 50% of Vietnam's soils are classified as problem soils in terms of fertility and productivity. "Green Revolution" technology has brought in high yield varietal seeds, fertilizer and herbicides, resulting in more intensive land use as smallholders have shifted to market production. Government policy has strongly encouraged smallholders to adapt to using modern technology in Phông Lái. Cultivation across the uplands has increased 300% from 1960-1984 and has continued to expand significantly due to increased population pressure (Wezel, et al. 2002b). Population growth has increased from 679,000 in 1989 to 1 million in 2003 (Pham Manh Cuong 2005). This shift has further degraded highland soils in the northern mountains of Vietnam, which are classified as highly degraded due to erosion, leaching, deforestation, organic degradation, landslides, poor cropping patterns, acidification, steep terrain, etc. The seriousness and speed of soil degradation continues to increase without abatement, which is a threat to the entire uplands and will eventually lead to agricultural involution and stagnation (Neef 2001a; Nguyen, et al. 2008). Ironically, establishing property rights of agricultural land was argued to increase soil conservation practices and create long-term soil fertility but led only to increased soil degradation. The highland soils have become severely degraded through SFE deforestation and from intensifying the upland agricultural system. This section explores some of the reasons why deforestation has continued to be a problem in the highlands by examining the induced intensification model.

One important driving factor behind intensive agriculture production has to do with the development of the livestock-grain complex system in Vietnam. The introduction to high yield varietal (HYV) maize in the early 2000s was brought about by the increased

demands for livestock feed. The new demand for maize resulted in the increase of upland maize production (figure 3.3). From 1980-1990 maize production increased moderately at 1% a year. By the 1990s, maize increased significantly with the aid of government subsidies and the market demands from the burgeoning livestock feed complex. The pressure to increase maize production coincides with the 1993 Land Law establishing forestland tenure in the highlands. Land classified as “forestland”(slopes >30°) is actually used intensively to grow annual crops maize, dry rice, and cassava rather than more stable perennial crops such as bamboo, fruit trees, coffee, tea, or forestry. Maize increased from 431.1m tons, 800ha in 1990 to 909m tons, 800 ha in 2003 (Anh, et al. 2005). The introduction of Green Revolution technology (HYV seeds, fertilizer, and herbicides) increased grain production. In Sơn La maize production went from 9.6 tons in 1990 to 310.12 million tons in 2008 over an area of 92,657 ha. Sơn La went from a subsistence-based to a market-based economy in a few years. Government policies promoted a national seed development program for maize hybrid seeds, for example LVN10, which proved successful in Sơn La. In addition to research, there are government policies for transportation and price subsidies in the highlands to encourage smallholders to adopt new technologies aimed at higher economic efficiency, including expansion of a second maize crop on hill slopes(Anh, et al. 2005). Fertilizer use for all crops is increasing, although for very poor households, use in maize cultivation tends to vary. Bank loans for poor households are targeted for fertilizer and livestock investments.

Speaking with a Hmông respondent about his seed selection, he describes the new hybrid seeds on the market and his strategy for investing the next year:

“Cách đây 2 năm trồng giống ngô khác, hiện nay có giống ngô mới (K54, C919, 9001) rất là phù hợp với đất và cho năng suất cao. Có giống lúa 3 tháng. Đất bạc màu thì có thể bón phân đạm NPK, thời gian sinh trưởng của lúa 3 tháng nên rất phù hợp. Giống cây

trồng năng suất, cho thu hoạch nên bà con tích lũy được tiền. Ví dụ được 10 triệu chi tiêu thức ăn... hết 3 triệu, còn 7 triệu thì để tích lũy cho năm sau.”

“Two years ago [I] planted other varieties, there are now new maize varieties (K54, C919, 9001) is a suitable [for sloped] land and [has a] high yield. There are varieties of rice [that grow] in 3 months. Soil may [need] nitrogen NPK fertilizer. Rice growth [has a] duration of 3 months should be very ideal. Seed yield: farmers should harvest [or save] the accumulated cash. For example spend 10 million [for]food ... all [remaining profit] 3 million to 7 million, to accumulate for the following year.”

In this statement, the smallholder is describing the relationship between the new High yield seeds and the need to apply fertilizer to ensure a good yield. The new crops mature in 3 months allowing for a profit that can be set-aside for the next season. It is clear, new varieties are very popular in the community. The new technology continues to arrive, influencing land use practices.

Most loans are for 5VND million (\$300USD) and are for 1 to 2 years if they come from communal organizations referred to as unions. Bank Loans are larger but require more paperwork and often banks prefer to keep the interest rate of the loan. In a conversation with a Hmông respondent on loans:

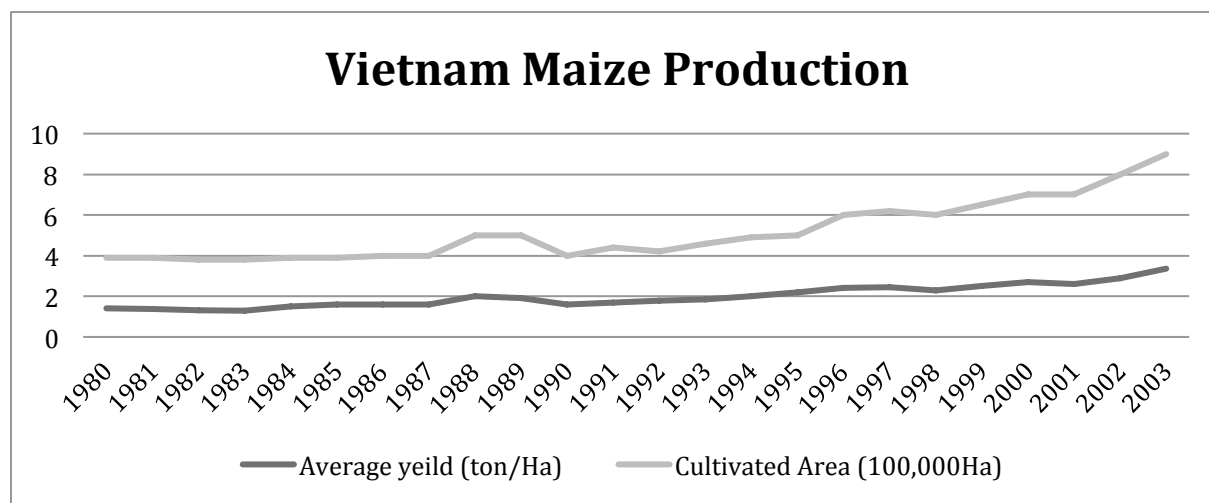
“Tôi chưa vay tiền của ngân hàng vì không biết đầu tư vào gì. Chi đoàn thanh niên, do Ngân hàng chính sách cấp, một suất là 5 triệu/người. Thời gian vay là 5 năm, năm thứ 4 phải trả 2 triệu đồng và năm cuối thanh toán toàn bộ cho Ngân hàng. Tôi vay tiền mua bò, cũng tích lũy được 5 triệu nên mua 2 con bò. Hiện nay tôi đã có 4 con bò. Bò ăn ít, uống ít nước. Vay vốn từ đoàn thanh niên dễ hơn từ Ngân hàng. Ngân hàng phân bổ vốn cho đoàn thanh niên, đoàn thanh niên cho thanh niên ưu tú vay. Sau khi lập danh sách thanh niên ưu tú được vay tiền, đoàn thanh niên xã sẽ gửi cho huyện đoàn. Huyện đoàn chuyển danh sách qua Ngân hàng chính sách. Người cần vay sẽ đến Ngân hàng chính sách nhận tiền.”

“I do not borrow money from banks to invest in [without] knowing anything. The Youth Union, issues [loans] by policy banks, [at] a rate of 5 million/person. The loan period is 5 years; 4 years to pay 2 million [and the] last year paid for the entire bank loan. I borrowed money to buy cows. I also accumulated 5 million to buy two cows [more]. Currently I have 4 cows. Cows eat less, drink less water. Borrowing from youth groups more easily from banks. Bank capital allocation for youth groups, youth groups for young elite loans. After you make a list of elite youth loan, Youth Union will send delegations district. District transfer list through Group Policy Bank. The borrower will need to take the money bank policy.”

The loan process is easier if done through unions, but they are done through lottery system. Here the Hmông respondent reveals he has will only take a loan when he has a goal in mind. Getting a loan requires going to the bank and signing paperwork and agreeing to the banks policies. In this case, the Hmông peasant decided to purchase cows that are easier to manage because they need less food and water. Such an investment can have long-term returns since offspring can be sold or loaned out to others.

Extension services targeting maize production for Vietnam between 1993 and 2003 totaled 9.95VND billion (less than \$700,000USD). Policies encouraged maize production through subsidies and funding for intensive upland farming(Anh, et al. 2005). Prior to subsidies and HYV seeds in 2000, maize in remote villages was retained for consumption. Upland farming is encouraged by the government even though it is not sustainable due to high rates of erosion⁴⁵ (Schmitter, et al. 2010).

⁴⁵ According to the FAO, 15,900, 000ha of land or 50% of the soil across Vietnam is degraded. Sloping land >25degrees accounts for 13,136, 800 ha or more than 60% of the total land mass. Survey results suggest serious soil loss by erosion on sloping land is estimated to be 2 billion tons/year. Vegetation cover has a significant influence on the rate of erosion. Forest cover is important to protecting land by regulating rainfall and limiting land erosion. Perennial tree planting such as afforestation and coffee crops with coverage of 90-96% during the rainy season protects soil. Summarizing soil survey results from the central highlands and midland regions in 14 cooperatives in Thai Nguyen, Dak Lak, Vinh Phu, and Bac Kan, the State of the Environment in Vietnam 2001, reveals water loss rate was 2% and soil loss was 0.05ton/h/year. For grass covering 70-80% of the land, water loss was 12% of soil eroded totaling 2.4 tons/ha/yr and on barren highland soil with 10-15% vegetation coverage, water run off was 62% and soil loss was 223tons/ha/yr. Erosion rates for year-old coffee plantation, intercropped with shade trees, was 44-59tons/ha/yr. On land with extensive annual crop cultivation, the soil loss was 250-300 tons/ha/yr. (See http://www.rrcap.ait.asia/pub/soe/vietnam/issues/state_and_impact/land_state_and_impact.htm).

Figure 3.3 Rise of Maize Production across Vietnam, 1980-2003

Induced Intensification in Phông Lái post-Đổi Mới

Đổi mới policies added economic pressure and incentives to smallholders, influencing their techno-managerial strategies toward market production. The demand for maize in Sơn La by the livestock-feed complex and government incentives led to intensive upland cultivation. Maize production is popular, other fruit tree crops do not have as much competition due to limited market options. Most grow maize, cassava, dry rice and paddy rice intensively using green revolution technologies rather than more ecologically suitable perennial crops. Market research by the government is limited to annual crops, and since rice, soya and maize crops have a well-established market economy, there is no rational reason not to continue growing annual crops in upland slopes. Annual crop production has accelerated on hills ranging from 33-91% inclination despite the severe erosion problems (Schmitter, et al. 2010; Vezina, et al. 2006). When I was there all the farms were in working

order and erosion was tacitly acknowledged to be occurring; it was not a real concern to extension agents or to the smallholders. When smallholders were asked how to solve erosion, they all answered that adding fertilizer to the fields solved erosion. This response came up over and over and reflected a complex reality. Fertilizer does not solve soil erosion, but it does replace the nutrients necessary to grow maize. Within villages, smallholders listen to each other and the government officials who promote upland crop production by encouraging the use of HYV maize and petro-chemicals. Even though the 1993 Land Law was designed to provide property rights to smallholders and to promote soil conservation measures and eventually *landesque*⁴⁶ capital, this was only done along lowland valleys with access to streams (see photo in Appendix C).

Smallholders are locked into a stagnant agricultural system where production will eventually plateau and may even decline. Since the next logical step in Phông Lái requires a major investment for terracing, necessary to prevent erosion, most smallholders have reached their threshold for intensification. The demand for production is high, but without access to water, irrigation systems are not a feasible investment here. The result is that smallholders cannot get past their low-return threshold. In addition to a lack of water, smallholders with upland property have pieces of land that are very small and highly scattered, making a return on their investments too low to consider.

The agroecology of the Northwest highlands varies between extremely poor uplands and prime lowlands. The uplands limit the normal amount of intensification outlined in the induced intensification model. In the prime lowlands of Phông Lái, crops include paddy rice and either maize or soybean crops and thus have a high productivity per unit of input. In

⁴⁶ *Landesque capital* is “permanent” improvement of the land such as terracing, drainage and irrigation systems.

poor lands, crop yields are low and require tremendous investments for long-term cultivation (Gleave 1996; Levi 1976; Turner and Ali 1996). The uplands are very steep and are prone to erosion, and were intended for perennial crops and forest production. Due to the dry environmental conditions, the soils can handle only one crop a year. The environment is complicated by a deep B horizon (clay layer below the topsoil), which is receptive to fertilizers. However, after a few years, the soil becomes very dry and airy with a change in color. When the soil is burned from fertilizer, it is easily erodible from wind and rain. Now that smallholders have good access to HYV maize seeds and fertilizers, they are hooked on this new techno-managerial style. Even though smallholders are more or less cognizant of their soil eroding, they have little recourse but to continue their land use strategy. The market is limited to a few cash crops and maize continues to be the best commodity, even though the local market is often saturated from the commodity, lowering the farm gate price and profits of smallholders.

Conclusion: Influence of Changing Land Tenure Systems

Land tenure regimes have changed significantly in Vietnam, resulting in several negative socio-economic and environmental outcomes for the poorest households. In the highland regions poverty remains high due to misunderstandings of the highland ecology. The 1993 Land Law was a radical shift away from a relatively mild approach to land use toward a more direct approach by individuals. This change in land tenure reflects the growing demands of regulating a larger population and the need to simplify government oversight. By establishing pseudo-private property rights to households, the state was

shifting away from its previous tolerance of letting customary tenure rules stay largely intact. Government control over forest and agricultural land established by the 1993 Land Law challenged this long-standing ideal that local communities can best determine their own land use. The ensuing fragmentation of land altered many customary land practices and has led to the loss of communal lands and allowed competition for access to these lands in the community, resulting in social inequality. Land titles were given to heads of household, who are primarily the family patriarch. State intervention through the 1993 Land Law attempted to control and improve agricultural production systems, but did so without a good understanding of the environment and socioeconomic fallout that followed.

The 1993 Land Law facilitated changes in state intervention of traditional agriculture:

- The establishment of a forest protection agency to manage forest preservation.
- The establishment of extension programs for farmers by people's committees at the district level.

The intention of these programs was to guide farmers away from protected forests and to provide training in intensive land use practices (Gillespie 1995). However, since extension agents in Phông Lái were understaffed and had minimal education, they provided new Green Revolution technologies only to smallholders, often with no understanding of the product and its suitability to the region. The result was that in a short period smallholders could intensify agricultural land in the uplands using technology they could barely understand or control. The continued success of the HYV maize yields has overshadowed any erosional concerns.

Institutional rules governing land use behavior remain limited in their application to ethnic minorities, and while conservation of natural resources is acknowledged to be a

concern, the main interest by the state is focused on promoting Green Revolution farming strategies by subsidizing seeds, fertilizers and transportation costs of maize. Đổi mới policies in the highlands gave property rights to smallholders to increase incentives to adopt modern technology and apply conservation practices. And yet government subsidies encouraged unsustainable farming practices in Sơn La by offering subsidies to smallholders to grow a second upland maize crop. When faced with government policies and subsidies to cultivate maize in the uplands, smallholders have had little choice but to intensify the upland agricultural system. And considering swidden farmers are highly impoverished, with low-quality land, they are unlikely to make a successful transition in accordance with the new land use rules without government subsidies aimed at perennial production. Rural land policy in Vietnam has been governed by a desire at least in part to encourage productivity and sustainability and preserve social stability. The State has little choice other than to tolerate a certain amount of dissonance since it has never managed to completely control society, and thus has to rely on local land practices and rules to cover the gaps in policy.

CHAPTER 4

HIGHLAND CULTURAL AND ECONOMIC INTERACTION: A HISTORIC PERSPECTIVE OF LIVELIHOODS

Introduction

Vietnam is one of the most ethnically diverse countries in Southeast Asia, with fifty-four officially recognized ethnic groups (or nationalities, *dân tộc*), most of which reside in the central and northern highlands. The Vietnamese highlands have undergone a significant transformation over the past century as a result of colonialism, two Indochinese wars, and multiple political regime changes. This chapter provides an overview of the cultural geography of the northwest highlands and livelihoods, and the processes of social and cultural change in Phông Lái commune between ethnic majority Kinh and Thái and Hmông minority groups. Over the past fifty years, since the 1960s New Economic Zones (NEZ) scheme that sent lowland settlers into the highlands (Hardy 2002), the arrival of Kinh has led to sweeping environmental and cultural changes and the marginalization of highland ethnic groups.⁴⁷ The most significant influence on ethnic minorities was the establishment of the heavily centralized state system and the subsequent push to modernize the highland periphery. In 1986, the Vietnamese Communist Party, following China, abandoned strict socialism in favor of state capitalism, a mixture of capitalism and socialism. During the last century, the rural highlands have become, to varying degrees,

⁴⁷ Mông was used to identify Hmông in the 2009 census in Vietnam.

integrated economically, socially and politically with the Vietnamese nation, largely defined by the cultural standards of the lowland Kinh. One of the goals of the Socialist Republic of Vietnam (SRV) has been to transform the agrarian landscape from what James Scott refers to becoming “legible” by establishing a uniform agro-ecological landscape based on wet rice (O’Connor 1996; Scott 2009). Despite the significant changes in the cultural and natural landscape resulting from vigorous state-led policies, ethnic minorities continue to negotiate this process of change on their own terms – what Jean Michaud (2012), after Sahlins (1999), calls the “indigenization of modernity”. Ethnic traditional practices are changing, but many old ways persist despite government attempts at suppression. This chapter puts into context the historical cultural and political interactions between peripheral ethnic minorities living in the northwest and the majority. Multiple social and environmental changes over the last century make for a complex and diverse process of adaptation by ethnic groups, making it hard to succinctly come to any definitive conclusions (either positive or negative) about the influence of current socialist policies. To date, the remote region of northwest Vietnam has remained relatively understudied until recently due to difficult access for foreigners in connection with national security. In this chapter, I argue that ethnic groups are adapting to new social and economic pressures, largely the result of a systematic attempt by the state to modernize and integrate the highland frontier, which has increased natural resource exploitation to unprecedented (and, I argue, unsustainable) levels. Government policies are aimed at maximizing agriculture production as part of Vietnam’s larger modernization goals. In the short run, economic gains appear to be positive, but the longer economic view suggests the rate of exploitation is not sustainable due to the fragile environment.

This chapter opens with a discussion of northwest geography, then describes the ethnicity and population of Phông Lái commune, Thuận Châu District, Sơn La Province. The next section discusses the traditional livelihoods of ethnic minorities before describing the majority and minority social relations over time. The final section discusses the environmental effects from development policies in the highlands. This overview represents a summary of ethnographic research and the current status of ethnic groups in northwest Vietnam. It is not meant to be a comprehensive analysis, but more of an overview of change in the northwest highlands.

Geography of Sơn La Province, Northwest Vietnam

The northwest region lies within the central eastern border of the Southeast Asian Massif (see figure 4.1) (Michaud 1997a); it has also been referred to as “Zomia” (Scott 2009; van Schendel 2002).⁴⁸ The geographical area is more based on societies than on boundaries, and in Vietnam this includes the northern and central borderlands of Vietnam. The northwest region of Vietnam is a mountainous region consisting of six provinces including Sơn La (see figure 4.2).⁴⁹ There are 2.5 million people living in the region according to the 2009 census. The formidable highlands consist of a seemingly unending

⁴⁸ The Southeast Asian Massif includes societies residing above 300m across the highlands and overlaps eight countries: China, northeast India, Bangladesh, Myanmar, Thailand, Vietnam, Laos, and Cambodia. This region has been called “Zomia” by van Schendel (2002) and James Scott (2009). The region is highly diverse, but Scott (2009) argues to be similar in terms of desire to be free from domination and subordination by various lowland state societies that have historically attempted to integrate them.

⁴⁹ Northwest region includes the provinces Điện Biên, Hoà Bình, Lai Châu, Sơn La, Lào Cai and Yên Bái.

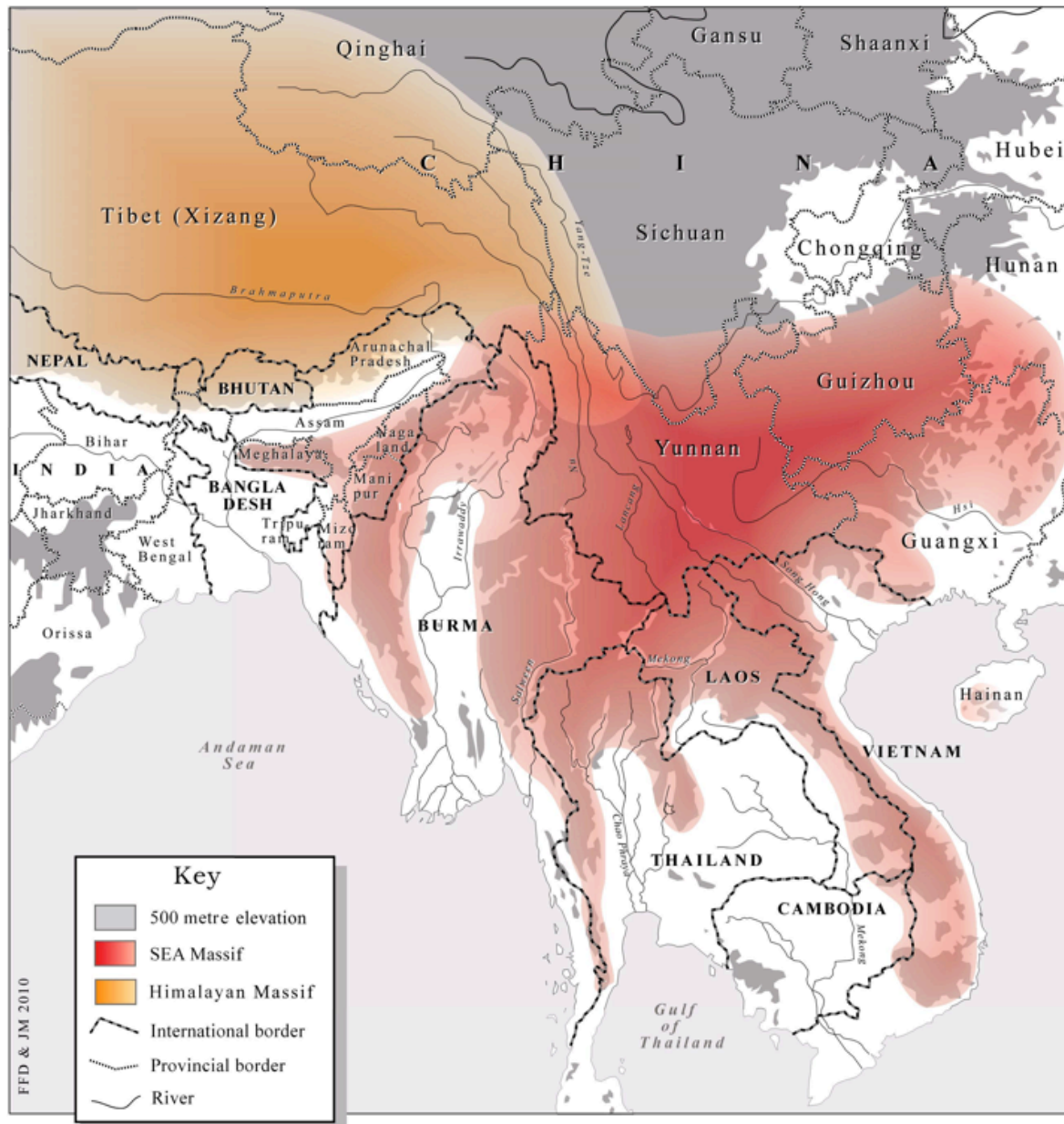
labyrinth of steep hillslopes and narrow valleys, consisting predominately of Acrisol⁵⁰ and Ultisol⁵¹ soils (Juo and Franzluebbbers 2003). These red and yellow soils have low nutrients but respond well to fertilizers and can be used in swidden agriculture provided organic matter is not severely depleted. A seven to 10-year fallow is necessary for soil nutrients to regenerate.

Sơn La province is bordered by Điện Biên Phủ province to the west, Lào Cai province to the north, Hòa Bình province to the east, and the national border of Laos to the south (see figure 4.2). The tropical monsoon climate has precipitation predominately between November and April. Sơn La Province has an area totaling 14,174 km², making it the largest province in Vietnam, but with a population of one million people living in ten districts, it is one of the least populated provinces. Major ethnic groups in Sơn La include Kinh (17%), Thái, Hmông (13%), and Mường (8%).

⁵⁰ In Vietnam Acrisols are used for subsistence farming, partly in a system of shifting cultivation. Acrisols correlate with red-yellow Podzolic soils, and are strongly weathered acid soils. Land use is limited due to a paucity of plant nutrients, crusting and high susceptibility to erosion. Management of Acrisols requires careful preservation of the surface soil containing organic matter needed to facilitate farming.

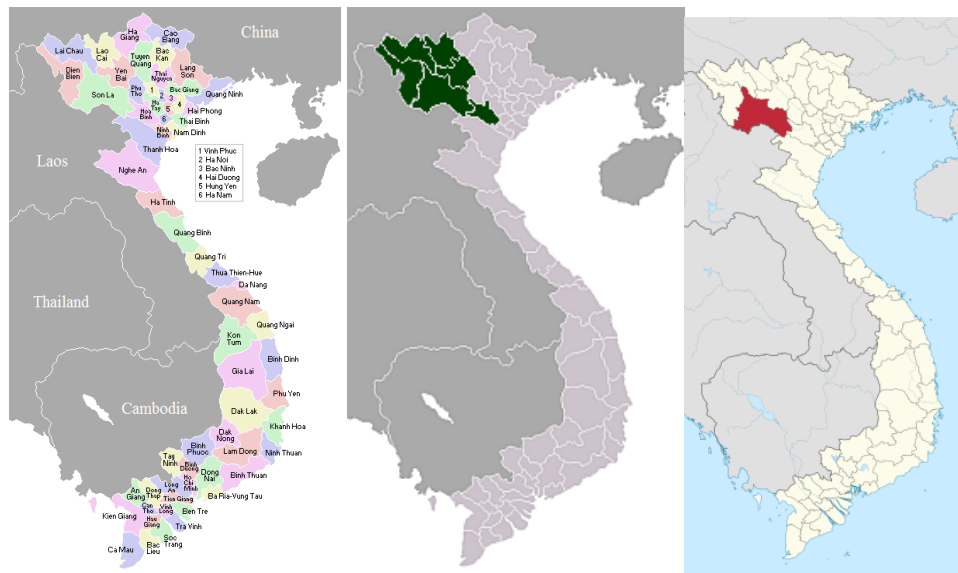
⁵¹ Ultisols, have markers of clay translocation, but they also have markers of intensive leaching. Without applications of fertilizer, they can be used for shifting cultivation; however, they can be made highly productive if fertilizer is applied (see Juo and Franzluebbbers 2003).

Figure 4.1 Map of Southeast Asian Massif and Himalayan Massif⁵²



⁵² Image source: Michaud, Jean 1997 "Economic Transformation in a Hmong Village of Thailand" *Human Organization* 56(2): 222-232.

Figure 4.2 Political Maps of Vietnam, Tây Bắc (Northwest) Region, and Sơn La Province



(Fifty-eight provinces of Vietnam,⁵³ northwest region,⁵⁴ and Sơn La province,⁵⁵ respectively.)

The main economic activity is agriculture, which employs 87% of the workforce. Per capita GDP was US\$266 in 2005. The elevation of the province ranges from 100 to 1000 m above sea level, with 57% of the land having a slope steeper than 30 degrees. Sơn La has two major watersheds, with 64% of land lying within the Black River (Sông Đà). Approximately a fifth of the province is actively cultivated in lowland and upland areas (254,000 ha, about 18% of the total land area). Out of the cultivated area, 198,000 ha (78%) are planted with upland crops, while only 14,000 ha (6%) are suitable for wet rice. The amount of paddy field is significantly smaller than that of other northwest provinces due to the limited supply of water. Non-paddy products such as dry rice, maize, fruit trees, cassava, sugar cane, and bamboo are important. The total agriculture production of paddy in 2005 was

⁵³ Image source: Vietnam's 58 provinces- http://en.wikipedia.org/wiki/Provinces_of_Vietnam.

⁵⁴ Image source: Northwest region- [http://en.wikipedia.org/wiki/Northwest_\(Vietnam\)](http://en.wikipedia.org/wiki/Northwest_(Vietnam)).

⁵⁵ Image source: http://en.wikipedia.org/wiki/S%C6%A1n_La_Province

128,000mton. If divided equally among the population, the average is 85kg of milled rice per person, about half the national average (168 kg/person).

The northwest region is well suited for maize production, which is widely grown in areas in the same place as paddy before the rains fill the streams. Maize production is an important cash crop in the province and averages 288,000mtons, which is 57% of the total production in the northwest region. Only the Hmông eat a significant amount of maize. Other important cash crops in the western portion of the province include tea, coffee, tea, cotton, soybeans, and plums.⁵⁶

Sơn La Province is composed of ten districts and Sơn La town (figure 4.3). Phông Lái commune is located on the western border of Sơn La Province in Thuận Châu district (figure 4.4). Phông Lái is on National Highway 6, thirteen kilometers from Thuận Châu's district center town and fifty kilometers from Sơn La provincial town. By motorbike the journey takes roughly 20 minutes and 1 hour respectively.⁵⁷ Phông Lái commune has a tropical climate with an elevation of 850m above sea level and a total precipitation of 447cm. Its geographic location exposes it to strong winds blowing in from Laos, and cold misty winters with temperatures dropping to 0°C and hot dry summers with temperatures averaging 25°C.

⁵⁶ Cardamom and Thao Qua are commonly grown farther north along the Chinese and Vietnamese border (personal comm. Jean Michaud).

⁵⁷ This rate of travel has been possible only since 2008. The road conditions before would have been substantially restricted in the winter due to washouts, mudslides and wet clay soils that limit mobility to off-road four-wheel-drive vehicles.

Figure 4.3 Sơn La Province Map⁵⁸

⁵⁸ http://www.threeland.com/images/maps/province_map/SonLa_province_adminastrative_map.jpg

Figure 4.4 Thuận Châu Administrative Map⁵⁹



Phông Lái is adjacent to Fadin mountain pass, the highest point along National Highway 6. At 500m above sea level, Phông Lái is situated along steep ridges and valleys. 1000 hectares of forest can be found in the highest hills and in important watersheds. Agriculture occurs along valleys and adjacent hills. Very primary forest remains today, however, some of the more valuable trees include blue stained sapwood (*Pinus khasya royle*) and Hoa (*Chuknasia tabularis*), which are preferred timber trees. However, most of the forest today is secondary growth.

⁵⁹ http://www.threeland.com/images/maps/province_map/SonLa_province_adminastrative_map.jpg

In this chapter, I describe the ethnic diversity of Sơn La; however, ethnicity is highly complex, and in writing this chapter I struggled with how to present ethnic differences within and between ethnic groups.⁶⁰ I have attempted to describe each ethnic group and provide important context between the groups studied here. However, to describe differences and similarities is difficult in Vietnam due to political discourse that seeks to homogenize each ethnic group and suppress variation within each group. As a result, it is hard to present accurate and unbiased data that reflect that groups are under-going rapid socio-economic and political transition.

From my observations, Kinh, Thái, and Hmông in Phông Lái were distinctive in many ways. Kinh were clustered around major roads, held the oldest and largest businesses in the commune, and most homes are also likely to be selling something. Kinh homes were large multistoried structures. One home was under construction for an entire year and would be four stories tall. Kinh were the most educated and were more often to have employment outside of farming. Only Kinh for instance were teachers in Phông Lái. None of the Kinh I spoke with could speak any other languages. However, I heard a few did speak Thái.

The Thái community spoke Vietnamese well but had little interest in finding economic activities outside of agriculture. Like Kinh, they were settled in the lowlands. They tended to be the lowest educated of the three groups and preferred to drop out of school once they married. None of the Thái I spoke with knew how to speak Hmông language. Thái stood out for their stilt homes and distinctive garb frequently worn by

⁶⁰ Ethnic group identity is complex due to confusion in identities, languages and classification systems set up by French colonialists. The northern region is home to more than 30 different ethnic groups, and subgroups. Many of these were misclassified in the French literature (see Michaud 2000 for an excellent historical account of highland ethnic groups).

women but never by men. Thái also were known for their traditional weaving, but in the home where I resided, none of the daughters knew or had interest in learning to weave. Most of the Thái and Hmông girls and boys tended to wear Kinh style clothing and idolize Kinh popular culture. Thái were well known for having lavish feasts to celebrate weddings and funerals that would last upto three days.

Hmông tended to be more isolated in their village activities, preferring to keep to themselves, as a result many older Hmông were less proficient in speaking Vietnamese. However, the younger generation was interested in school. One house with ten children were well aware that their future was not likely to be tied to agriculture. Hmông homes and clothing were another aspect that was distinctive. Homes were single level and built on the ground, similar to traditional Kinh homes. Like Thái, Hmông women were likely to wear distinctive clothing. Many Hmông were interested in adopting new technology and were thinking about the next agricultural innovation. Hmông were settled in the foothills and hills. Hmông demonstrated an interest in making good investments that would lead to a profitable return.

It is not my intention to represent these ethnic groups as static and timeless; rather I acknowledge them as historically contingent, locally varied, and never static. Vietnam is very diverse, so that every village will have a uniquely situated and historically heterogeneous existence. Bonnin (2011: 96) and Sowerine (2004: 292) struggled with these same issues on their dissertations in northern Vietnam. As my research shows, there are similarities and differences within each ethnic village and among ethnic villages. Within each village, there are examples of mixed economies; some smallholders grow more subsistence crops and others are more market oriented, households have exchange

systems that mix market and nonmarket activities. My findings are intended to be place-based; they are not meant to be representative of larger ethnic groups' natural resource management schemes. Ethnicity is a highly contentious and ambiguous concept constructed from social, historical, political and environmental factors (Bonnin 2011; Michaud and Forsyth 2011a; Sowerine 2004).

The northwest highland region of Vietnam is surprisingly complex ethno-linguistically. In Phởng Lái there are three major languages families: Viet-Mường, the national language spoken by Kinh, Tai-kadai, spoken by Thái, and Hmông-Yao, spoken by Hmông (see table 4.1).

Table 4.1 Demographic Data for Kinh, Thái, and Hmông in Vietnam (% of total population)

Ethnic group	Language family	census 1989 ⁶¹		census 1999 ⁶²		census 2009 ⁶³	
		Number	%	Number	%	Number	%
Kinh	Viet-Mường	56,101,583	87.1	65,795,748	86.2	73,594,427	85.7
Thái	Tai-Kadai	992,809	1.5	1,328,725	1.7	1,550,423	1.8
Hmông ⁶⁴	Hmông-Mien	No data		787,604	1.0	1,068,189	1.2

Upland Ethnic Diversity

Vietnam has until the latter half of the 20th century been divided between upland and lowland ethnic groups. Ethnic movement and spatial classifications have been

⁶¹ http://unstats.un.org/unsd/demographic/products/dyb/1990_round.htm

⁶² http://www.gso.gov.vn/default_en.aspx?tabid=476&idmid=4&ItemID=1841

⁶³ http://www.gso.gov.vn/default_en.aspx?tabid=476&idmid=4&ItemID=10802

⁶⁴ The Socialist Republic of Vietnam is still in its infancy with regard to data collection of the Hmông ethnic group.

significantly altered as a result of several policy changes. There are, however, some basic altitudinal classifications commonly used by researchers and government officials (Bonnin 2011; Condiminas 1990; Khong-Dien 2002; Sowerine 2004).⁶⁵ This ethnic zone describes Hmông living in the highest level, along with Yao, who occupy middle zones along with Thái. Thái are also placed in the lower zone along with Kinh (Donovan, et al. 1997; Van de Walle and Gunewardena 2001). Hmông were described as being “traditionally” seminomadic, swidden practitioners. Thái are classified as sedentary, practicing composite swiddening systems, occupying lowland valleys and low-lying hills (Lam Nguyen Thanh, et al. 2004; Nguyen, et al. 2008; Sikor and Truong 2002). Thái practice wet rice and swidden along the uplands.

In Phỏng Lái, these zones are not entirely correct, but they provide useful description. The Hmông village Năm Giát has the highest elevation and no lowland areas for agriculture. The Thái village Khâu Lay practices composite swiddening, and the Kinh village Đông Quân practices wet rice production in the low-lying valleys. Hmông villages periodically moved between valleys every so often when the soils were severely depleted of nutrients. Năm Giát village has not moved for at least 15 years. In other regions, such as Lào Cai province, Hmông have irrigated wet rice fields along steep mountain watersheds. It is estimated these are centuries old (Donovan et al. 1997). In Phỏng Lái, all three ethnic groups can be found together in the lower zones.

The highlanders occupying northwest Vietnam entered from southern China in a series of migrations (Michaud 1997a). The intensity of migrations has dwindled since the

⁶⁵ The three cultural and ethnic zones are 1) high elevation above 800m, 2) mid-level 300-800m, and 3) less than 300m, lower level along the uplands.

establishment of modern international borders. Small communities of ethnic minorities occupy the highlands, practicing swidden agriculture, and live in remote valleys and uplands in Vietnam, Laos, Thailand, and Burma along the East Asian Massif. They share very little with the lowland communities of these countries. It is only recently that the highlands have been recognized and opened to outside social science researchers due to relaxed socialist government restrictions (Michaud 2009; Turner 2012). At the same time, the region is undergoing rapid development from state, non-government programs, and from new infrastructure such as hydroelectric dams, roads, and electricity due to economic liberalization and market integration. Ethnic minorities have needed to decide how they want to adapt to these changes as new opportunities and challenges arise around them (Kerkvliet 2009; Michaud 2012). The socialist state of Vietnam encourages sedentarization of minorities, a process Scott (2009) has referred to as the last great enclosure.

The highlanders living in northwest Vietnam have economic, political and cosmologies distinct from lowland populations (Michaud, et al. 2002). Hmông live in mono-clanic villages and practice exogamy. Weddings consist of spouses from different patrilineal descent lines (Michaud and Turner 2000; Turner 2012).

People of Phông Lá Commune, Sơn La Province

In Phông Lá there are five ethnic groups: Yao, Thái, Viet (Kinh), Hmông, and Mường.⁶⁶ According to official documents by the Central Planning and House Census Steering Committee, Sơn La province had a population of 1,092, 700, of which Kinh represent 18 percent, Thái 53 percent and Hmông 15 percent (CPHCSC 2010). This

⁶⁶ In 2009 the Socialist Republic of Vietnam refers to Hmông as Mông. Yao are also named the Man, Mien, Dao, Zao, and Dzao (Michaud 2000).

population is spread across the ten districts and Sơn La City with a population of 91,720.

The district where this research was done is located in Thuận Châu's population 147,374. I

now turn to describe the highlands and ethnic groups.

In Sơn La Province prior to the 1891 French conquest, in which military outposts were set up, there were only minimal incursions into the northern uplands. Ethnic minorities experienced very little political, social, or economic change from lowland imperial Vietnamese (Michaud 2000). The highlands remained an isolated frontier and were far enough away they held very little interest to the imperial court in Hue. Tribute to the court occurred very rarely during the Nguyễn Dynasty (1802-1945). Ethnic populations were largely outside the emperor's rule. Since they were politically separate from the lowlands, they were considered lower status and commonly referred to as savage (*tribus sauvages*). The French in the highlands seized on the established differences and applied divide and conquer strategy among ethnic groups. The same strategy would later be used by the Việt Minh to manipulate highland groups for their own political and economic goals (Michaud 2000). The highlands are socially distinct from the lowlands, however they have not been completely isolated from the outside world (Bonnin 2011; Michaud 2000; Scott 2009; Sowerine 2004).

The Hmông

The Hmông (also named Mèo, Miao, H'mong, Mong) residing in Vietnam and throughout the Southeast Asian Massif originate from a larger broad linguistic group called

the Miao in China (Culas and Michaud 2004; Michaud 2006).⁶⁷ The Hmông live in the highlands along the northwest highlands and can be found along the Chinese borderlands between Laos, China, and Vietnam. There are about 1.2 million Hmông living in Vietnam (Turner 2012).⁶⁸ In 1984, the Hmông population was estimated at 400,000 (Vuong 2004), and in 1999 the population was above 750,000 Hmông in Vietnam; by the 2009 census this figure had increased to over a million. The discrepancy in demographic data indicates numbers are not necessarily reliable. In 2009, a Phởng Lái census reported 1534 Hmông living there.

Vietnamese ethnologists identify six Hmông groups in Vietnam based on clan lineages and clothing design (Culas 2010).⁶⁹ Hmông departure from China in the mid-1800s has been speculated to be due to Han encroachment into upland areas, epidemics, ethnic and political conflicts between state and ethnic minorities, increased taxation, and land expropriation by Han (Michaud 1997a). Opium production is another important consideration for why Hmông chose to relocate in Vietnam (Culas and Michaud 2004). The Chinese interest in opium production was motivated by the British and French opium market monopoly in China.⁷⁰ The interest in opium production brought increased conflicts for Hmông and other ethnic minorities. Moving southwest from Yunnan province for new swidden fields was likely a primary motivation (Michaud 2006). Subsequent incursions into the highlands by Chinese led to conflicts over resources, and many chose to head south

⁶⁷ Within the Miao language group, there are four ethnic branches (Hmau, Hmu, Qoxiong and Hmông) that are mutually unintelligible under the larger Miao group in China. Miao is classified under the Miao-Yao (Hmông-Yao) language family (Culas and Michaud 2004).

⁶⁸ In addition to Sơn La, Hmông are found in the provinces of Lào Cai, Hà Giang, Yên Bái, Lai Châu, Cao Bằng, Lạng Sơn, Nghệ An, Thanh Hóa, Hòa Bình, and Bắc Thái.

⁶⁹ The six sub-groups are Hmông Đen (Black Hmông), Hmông Trắng (White Hmông), Hmông Xanh (Green Hmông), Hmông Hoa, Hmông Mèo, and Hmông Đỏ.

⁷⁰ The monopoly of opium by the west was draining Chinese gold, resulting in China's interest to keep more gold in the country by selling opium as well (Michaud 2006).

to Vietnam in a series of waves in the mid-1800s as a result. The path Hmông took out of China followed the Haw “caravaneers” route. Haw were important lowland traders who sold horses, mules, cloth, salt and opium with highlanders prior to the 20th century (Michaud 2006: 163).

Arriving in Vietnam, Hmông established subsistence agriculture, and in some areas established irrigation systems for wet rice production, opium production and coffin wood trade with China provided good income to Hmông.

During the colonial period of Tonkin (1883-1954), several Hmông joined up with nationalists, communists, and French factions. During the battle of Điện Biên Phủ, Hmông fought on both sides of the conflict (Michaud 2000). Hmông on the losing French side had to flee to Laos and South Vietnam. Hmông actively participate in the local and district administration level. Cash cropping in maize has replaced opium. In other areas, cardamom is an important cash crop (Bonnin and Turner 2012). Hmông are adapting to the economic liberalization changes by carefully weighing their options (Michaud 2012b).

As mentioned in Chapter two, French colonial presence in the Tonkin highlands was formalized in 1883 with the signing of the Hue treaty. The *missions de pacification* set up a French policy to control the banditry in the periphery by aligning with the Thái ethnic group. Auguste Pavie, a colonial official, forged an alliance with Đèo Văn Trì, forming the Sip Song Chau Thai, “the twelve tai districts” along the Black River. This increased Thái influence and power, a development that created problems for Hmông due to taxes and pressure to learn Thái language and script in the newly formed French school of the Far East (École française d’Etrême-Orient) (Culas and Michaud 2004). These tensions built

resentment by many non-Christian Hmông who would join with Việt Minh forces (Michaud 2006).

In the battle of Điện Biên Phủ, Hmông fought for and against the French. The Hmông who fought alongside the Việt Minh were rewarded with official recognition and space to live in the newly formed DRV.⁷¹ And until the official ban in 1993, Hmông were encouraged to grow opium for the Việt Minh, and were granted a regular income (Culas and Michaud 2004:69). This official foothold gave Hmông a stronger presence and activity in the newly established republic.

Hmông Social Organization

Hmông social organization is expressed through their kinship structures and their patrilineal clans (Bonnin 2011: 105). Clan names are founded on and organized around an apical ancestor (Tapp 1989). Hmông are occasionally organized by a messianic leader, who can appear during times of political and/or religious unrest within the larger Hmông society (Culas and Michaud 2004). Hmông society revolves around clan lineage more so than Hmông sub-groups (Culas 2010).

Hmông weddings reported by French colonialists around the turn of the 20th century were a big deal, lasting several days. “[Among the Meo] Religious ceremonies that take place either for funeral or a wedding, always include a colossal dinner to which are invited the leaders of the tribe, residents and allied families or friends from neighboring

⁷¹ In the provinces of Cao Bang, Ha Giang, Lào Cai, Chau, Sơn La, Hoa Binh, Thanh Hoa, and Nghe An.

tribes” (Michaud in Press: 9)⁷². Weddings were important reflecting the high value of finding a wife.

Hmông kinship networks remain strong over great distances and over time, allowing clan members to travel and receive hospitality (Bonnin 2011). Only Hmông live in the village of Năm Giắt. Internal village disputes are resolved by Hmông elders or village leaders whenever possible (Bonnin 2011).

Hmông Livelihoods

Hmông households are the main economic unit of agricultural production in the village. Extended households are common, but young married couples prefer to have their own homes. Homes are usually built next to their father’s home. Households work together farming their land. Women often remain close to their extended families and share in the farm workload during peak time. Families provide support in foodstuffs, labor, livestock exchange and transporting the maize harvest (Bonnin 2011).

Hmông hunting skills were renowned for their tracking and use of crossbows, matchlock rifles and blowguns to go after forest prey. Field reports by colonial officials at the turn of the 20th century, colonial reports noted Hmông would hunt small birds, “tiger, tiger cat, wild boar, deer, otter, porcupine, armadillo, snipe, partridge, wild rooster, pheasant, and silver pheasant....During the year 1897 they brought to the Coc Rau post four tigers, a half dozen tiger cats, weasels, deer, a porcupine, and an armadillo” (Michaud in press: 11). Game provided important source of food, medicine and protection. In the same

⁷² Next to nothing has been published concerning the livelihoods of highland indigenous communities in the northern Vietnamese borderlands as they were revealed by French Military observers at the turn of the century. These newly discovered documents have recently been discovered having previously believed to have perished in the 1940s during the French-Indochinese struggles.

year in Linh-ho commune, five people were reported eaten by tigers (ibid: 12). Hunting also provided trade network of smoked and salted fish, tanned hides, and medicine. Today, hunting of small rodents is still done with crossbows and snares, which can be seen in almost every Hmông home hanging on a rafter above the kitchen.

In the highlands the forests were large and teeming with wildlife. Colonial reports of the forest state: "Forests are numerous and cover all the mountains" (ibid). Swiddening was practiced by all ethnic minorities in the highlands, a practice that alarmed colonial officials. "Forests generally cover the peaks; elsewhere indeed the natives through the entire upper area follow a tradition of destroying by fire all kinds of vegetation.... The Méo clears the mountain slope that seems most favorable to the cultivation of upland rice, as wooded as it may be: thus he is a great destroyer of the forests" (ibid). Colonial concerns to forest destruction reflected a desire to harvest primary forest for export as well as an ethnocentric bias preferring intensive agriculture in lowland valleys and plains.

Agriculture is continues to be grown in upland slopes today. Upland crops include dry rice, cassava, beans, and since the 1990s high-yield varietal (HYV) maize seeds that are partially subsidized by the state. Rice seeds are saved but HYV maize are bought each year (Anh, et al. 2005; Gerpacio and Pingali 2007). Maize is sold to the market. Households are earning a good income and the wealthier homes have dump trucks used to haul maize from the fields to larger markets. Income earned from maize goes to buy rice, petro-chemical inputs, seeds, labor, and other social and cultural needs for the household.

Homegardens are important to Hmông and Thái households and consist of fruit trees, bamboo, soya, red peppers, sweet potato, potato, taro, calabash, squash, herbs, spices, hemp, indigo, medicinal plants, and apiculture. Hemp is grown and used to make

clothing and to fasten crossbow strings, and indigo plants are used to dye clothing. These are used for household consumption. Surplus rice and homegarden production is not sold in Phông Lái but shared with extended families or used for cultural activities. Household animal husbandry includes geese, ducks, chickens, swine, water buffalo, cows, goats, dogs, and cats. Buffalo are important for traction, but many households prefer cows, which are better suited to the drier climate. Bovines are a valuable storage of wealth and can be sold to pay off debts and pay for weddings. All livestock has an economic value and is consumed with the exception of cats. Swine, goats, and fowl are valuable for cultural functions such as New Year and important social ceremonial occasions (religious ceremonies, funerals, weddings, illnesses, etc.). Horses have been replaced with motorcycles since the 1990s.

Hmông have a good working knowledge of forest products and can be found throughout the mountain highlands selling orchids, wild vegetables, honey, fruit, and bamboo shoots. Traditional products opium and coffin wood (*Fokienia hodginsii*) have been banned since the 1990s (Bonnin 2011: 111). The shift to other crops has been a struggle to adapt to changes, as evident by the high levels of poverty for Hmông living in the highest elevations in Sơn La province. In Năm Giát village, Hmông have been economically successful in growing maize and have managed to earn respectable profits. Hmông market activity is largely absent in Phông Lái. In Năm Giát, a couple of very small shops sell dry goods and alcohol. However, most Hmông prefer to venture into the town center for shopping.

For the majority of Hmông and Thái living in Phông Lái, dry rice production is the most important household subsistence activity. However, the need for cash requires families to allocate a significant portion of their land to maize production. Cash earned

from trade goes to pay for petro-chemical inputs needed to grow dry rice. Cash is important for Hmông. It covers the labor costs for planting and harvesting rice and maize, buying alcohol, medical fees, school fees, repairing and building homes, and buying, repairing or renting farm equipment. Green revolution technology has increased yields, helping to reduced food insecurity; however, many continue to suffer food shortages during the spring and summer due to inclement weather damaging crops and limited arable land. These problems are common throughout the northwest region (ADB 2002; Boissau, et al. 2004; Bonnin and Turner 2011; Castella, et al. 2004; Jordan, et al. 2011; Vo Tri Chung, et al. 1998).

The Thái

The Thái (1.5 million 2009) form the largest ethnic group in Sơn La and in Phông Lái.⁷³ Thái is the southwestern language of the Tai-Kadai linguistic family (Michaud 2006). The Thái (also named Xuang, Tay, Tai, Nung) live with other Tai-speaking and non-Tai-speaking ethnic groups along the Red, Clear and Black rivers, Ma River and Lam River.⁷⁴ The largest population is in Sơn La. The Thái are classified into subgroups often according to the color of their clothing: White Thái (Thai Khao, Thai Trang), Black Thái (Thai Dam, Thai Den) and Red Thái (Thai Deng, Thai Do) (Condiminas 1990a).⁷⁵ Thái moved into northwest Vietnam between 1000-2000 years ago (Lemoine 1997; Mellac 2011; Michaud

⁷³ The ethnonym Thái is used by Vietnamese ethnographers; however, Tai is also commonly used by external researchers, and Thai refers to the people (Siamese) of Thailand. Speakers of the Thái language group include-Thai (Siamese), Lao, Shan, Lue, Tay, Nung, etc. In the texts I use, authors use multiple terms to describe Thái; they are always clear about which group they are referring to. Here I use Thái, following the Vietnamese tradition.

⁷⁴ This geographical range includes Sơn La, Nghệ An, Thanh Hoa, Lai Châu, Lái Cao, and Hoà Bình.

⁷⁵ The White Thái were based out of Lai Chau, which is where their feudal domain Sip Song Chau Tai. Black Thái were based out of Điện Biên Phủ, and the Red Thái were found on both sides of the border between Thanh Hoa and Nghệ An (Michaud 2006).

2000; Michaud 2006). The 1000 AD time-line is argued to be a result of ethnic Han pressure in China (Michaud 1997b). The identity of Thái is mainly linguistic; however, there are social and culturally distinct features of their identity.

Thái Social and Political Organization

The Thái are a large and diverse ethnic group with many socio-cultural, political, economic features that vary throughout the region. In the village of Khâu Lay, Thái are more or less homogenous. However, in the provincial city of Sơn La, there are many wealthy homes, restaurants, and a large White Thái cultural center. Thái are patrilocal and often practice exogamous marriages. Thái are encouraged to find a spouse of their choosing. In some cases arranged marriages may occur.

Thái social and political organization is quite different from Hmông and Kinh, and has been described as a feudalistic hierarchy structure centered on political units called *muang* (Condominas 1990a; Mellac 2006). The *muang* formed the basis of their social structure as they migrated from China (Mellac 2006). The *muang*, as described in Chapter 2, involved a number of villages, which were ruled by a lord, or *chao*, who granted land rights to village members (see Condominas 1990). During the feudal period of *Sip Song Chau Tai*, the *muang* formed the basis of political units, a complex system that evolved over centuries, becoming formalized by at least the 17th century (Michaud 2000).⁷⁶ Noblemen were responsible for governing political activities in the *muang* feudal system and owned agricultural and forest land.

⁷⁶ The *muang* is a highly complex socio-political structure. *Muang* translates as country and is not scale-based; *muangs* vary in size from villages up to the provincial or national level (for a detailed account of the historical *muang*, see Condominas 1990).

Over centuries the muang grew in strength, the weaker political Sino-Tibetan and Mon-Khmer groups were displaced and other ethnic groups (Khmu and Lolo Hmông, Yao) became absorbed into Thái feudal culture (Michaud 2000; 2006).⁷⁷ Coordination of water management was an important function in the muang since wet rice irrigation was essential to Thái livelihoods (Jimreivat 2002). Non-elites were responsible for cultivating the land and paid tribute to the noblemen. In pre-colonial times, weaker non-Thái ethnic groups were forced to work paddy fields belonging to the Thái noblemen (*tao*) and in some cases were permitted to work their own plots (Mellac 2011). Thái culture was the dominant political force in the northwest highlands, a fact reflected in the present toponyms, found in the region (Michaud 2006). Political dominance was established through taxation and corvée labor.

Dominance of other ethnic groups maintained muang power. Sip Song Chau Tai, a federation controlled by White Thái, spanned across Điện Biên (formerly Muang Thanh), Lai Châu (formerly Muang Lai), and Sơn La provinces (Michaud 2000). The Thái muang were complex entities that were obligated to pay tribute to larger lowland kingdoms in Thailand, Burma, China and Vietnam (Michaud 2006).⁷⁸ Tribute was paid to the court in Hue to Vietnamese emperors throughout the 1800s by special court appointments (Davis 2011). Trade routes through Thái territory were lucrative from caravaneers traveling from China that would reach as far as India and Thailand. Opium was an important commodity driving the transcontinental caravans (World Bank 2009).

⁷⁷ Khmu are also named Khamu (Michaud 2000).

⁷⁸ The Nguyen officialdom struggled to manage the Hung Hoa province as a military territory (1802-1830), necessitating a shift to the higher provincial status from 1831 onwards (Davis 2011: 26).

Colonial records indicate smallholders were content to remain subsistence based. Most ethnic minorities were growing food to meet the demands of the household. “Food crops here are plains and mountain rice, maize, buckwheat, yams and potatoes, some vegetables, sugarcane, and fruit trees in small quantities” (Michaud in press: 14). Subsistence needs were easily met and since there was virtually no trade to speak of, there was no incentive to grow more. One colonial record states “The White Thais and all the Mans [Yao] and Nhangs are farmers, but all are lazy and careless; they are satisfied with a modest return, far from exhausting their land” (ibid). This low yield strategy was also influenced by an interest in minimizing taxes, much to the frustration of colonial officials.

The French utilized a “divide and conquer” strategy in the Tonkin Protectorate to pacify minority groups in the periphery. This belief was based on the idea that separating Kinh and ethnic minorities was the best strategy for peaceful colonial administration. French colonials were interested in loosely controlling the *montagnards* and their opium production. In 1891, military outposts were set up across the northwest highlands, creating a barrier between the civilian-controlled lowlands (Michaud 2000). In the Black River basin, French military officials initiated a standard policy of “collaboration” to work with local Thái officials in each *muang* (Le Failler 2011).⁷⁹ As mentioned earlier, the French aligned with the Đèo clan of Lai Châu in the Black River basin, by signing the Pavie Treaty in 1887. The Đèo clan was officially recognized as the regional leader, an arrangement that lasted until 1954. The Thái were given autonomy in the Black River watershed, which remained outside the French military administration, which lasted until the 1930s in

⁷⁹ This “Big Bosses” [grands caïds] policy to win over village notables and national leaders [*chefs nationaux*] was a practice used in Algeria and Madagascar. The French placed a large amount of power in the hands of locals to maintain an equilibrium that would keep local traditions at least partially intact (see Le Failler 2011: 44).

certain areas. The rise of Việt Minh threatened the French colonial stability in Vietnam in the 1930s and led to the formation of the Thái federation.

The French set up a Thái federation, west of the Red River in 1948 (Michaud 2000). This alliance provided Thái with substantial political favors by the French, and in return, the Thái were asked to defend against the rise of the Việt Minh. The rise of Thái institutionalized ethnic supremacy over other ethnic groups in the Federation, who were required to pay high taxes on opium production and learn Thái language and script in schools set up by the French.⁸⁰ The Hmông (many of whom were Christian) and Yao sided with the French west of the Red River (Michaud 2000). East of the Red River, Hmông and Yao were against the French. Highland ethnic groups are therefore highly complex in their political, social, cultural structure, and kinship networks vary substantially in their inter-ethnic clan organization in terms of goals and aspirations. Throughout the 20th century, ethnic groups have fought together and against each other and alongside French, Việt Minh, and American forces.

In 1945 when the Việt Minh proclaimed the independence of the Democratic Republic of Vietnam, “a temporary French—Thái agreement was formed. This treaty was short lived, lasting only until 1948. It was an attempt by the French to hold on to the highlands by creating an independent Thái federation inside the Union française, grouping together the provinces of Lai Châu, Phong Tho, and Sơn La under the presidency of the Tai Đèo Văn Long, a descendant of Đèo Văn Trì” (Culas and Michaud 2004: 69). By *de facto*

⁸⁰ Establishing the federation essentially pacified the northwest highlanders by recognizing customary laws, bilingual education (French and Thái), ancestral land rights, and population policy restricting Kinh settlement in the highlands (Culas and Michaud 2004; Saleminck 2006:36; World Bank 2009:53). In addition to formalizing the ascribed leadership of the White Thái Đèo family, the Thái federation of Tonkin was given legal independence.

inclusion, Hmông and Yao were identified as sub-minorities within the federation, resulting in their exploitation by the dominant Thái (Niollet 1953:43 cited in Culas and Michaud 2004:69). The French Schools of the Far East began teaching Thái script, which sub-minorities were being taxed for the privilege to learn. The rise of Việt Minh further aligned the Thái and French alliance.

The Việt Minh countered the colonial power struggle by following strategies similar to those of the Chinese in the 1930s. To gain support, it provided political autonomy to cooperative ethnic groups for their allegiance; however more than China, Vietnam has relied on the support of ethnic minorities and engaged them politically (Hardy 2003). Some Hmông provided key support to the Việt Minh and aided the August Revolution against France in 1954. In the National Assembly, a few Hmông deputies have held important positions. It has been argued that Việt Minh would not have been successful without carefully making strategic alliances with minority groups marginalized by the French (Mackerras 2001; McAlister 1967; Michaud 2000; Michaud 2009). In 1955 the (then) Democratic Republic of Vietnam established an autonomous state (largely ceremonial) in the Northwest highlands where a large population of ethnic minorities lived (Michaud 2009).

The Democratic Republic of Vietnam established an autonomous region, replacing the French military posts, and continuing a division between the highlands and lowlands for a few years after the 1954 Victory (Michaud 2000). As promised an autonomous region was set up for ethnic minorities for their support of the nationalist movement for independence during the 1930s. The Tây Bắc and Việt Bắc autonomous regions were established in 1955 and lasted for twenty years until Vietnam was unified in 1975 (figure

4.5). During this time, New Economic Zones (NEZ) were introduced in the northwest highlands (Hardy 2000; Hardy 2003). Yet, by 1960, the autonomous zones were stripped of their legal independence, and were under the national government. Socialist rhetoric mandated a unified nation; earlier promises of autonomy were abandoned in all but name. For the marginalized ethnic groups to be convinced of the importance of the socialist state project, they needed to be firmly attached to it. This was done by first establishing the autonomous zone and then by informing them of the importance the northwest “the rearguard” played in national security. Ethnic minorities were pressured into accepting the policies of the new socialist state. The rearguard was expected to supply agriculture goods for the DRV. This would require a great deal more labor than the ethnic minorities had available. The solution offered was migration. Kinh would be relocated into new economic zones, providing labor, and national security, in order to help develop the frontier into a “legible” system of mono-culture agriculture (Hardy 2003). This left little room for minority leaders to challenge the need for more labor, setting the stage for migration to begin. A series of NEZ were established and collectives were organized across the highlands to meet the agriculture needs of the DRV. Integration between minorities and Kinh remained limited during the Second Indochina War.

Thái Livelihoods

Throughout the northwestern highlands Thái livelihoods are firmly entrenched on composite swidden systems (Lam Nguyen Thanh, et al. 2004; Nguyen, et al. 2008). This system relies on wet-rice irrigation and upland swiddening, suitable for upland valleys.

Thái have engaged in trade with lowland populations, serving as intermediaries to highland ethnic groups.

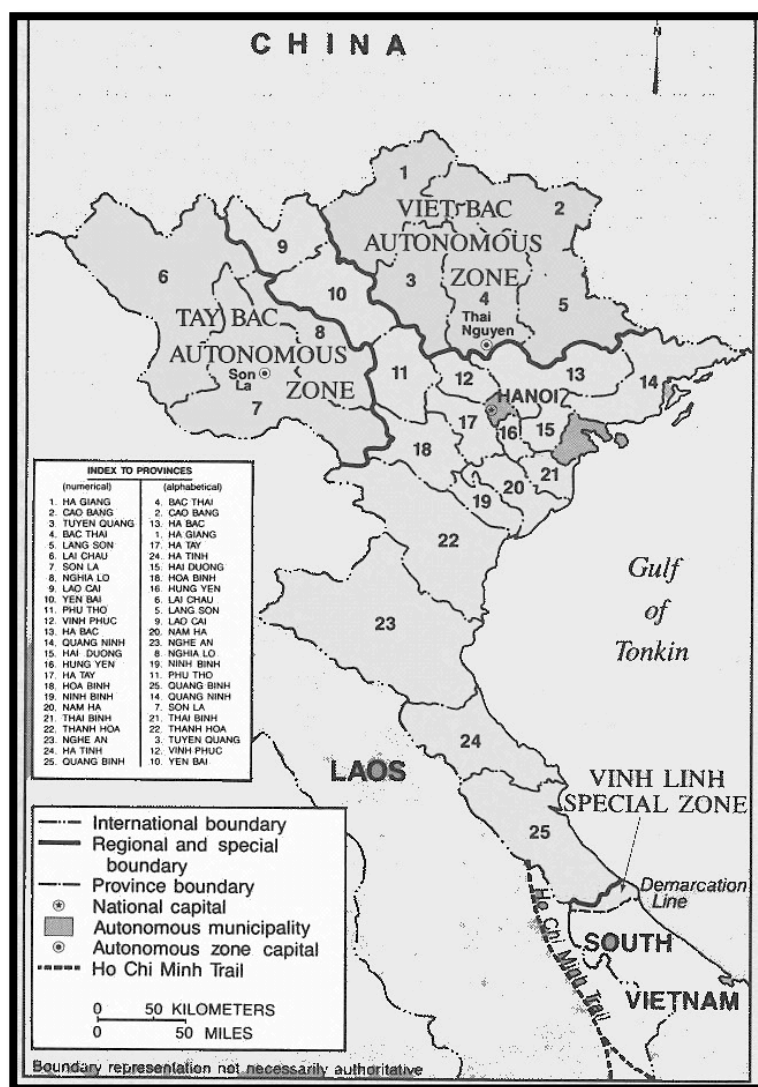
Trade routes brought horses and swords from China and were exchanged for alluvial gold and coffin wood from Vietnam (Barlow 1987). The French explorer and diplomat Pierre Lefèvre-Pontalis, noted in the 1880s, that Thái noblemen were actively involved in trade networks to maintain and build their status throughout the northwest region (Michaud 2006). Trade networks included opium produced by Hmông and Yao, sea salt from the delta, and tea from Yunnan. These trade relations benefitted the Thái middlemen over Hmông and Yao, (McAlister 1967; Michaud 2006).

In Khâu Lay village, Thái are mainly smallholders of maize, paddy, cassava, soybeans, fruit trees, coffee, and dry rice. There are a few large homes that stand out but most homes tend to be similar. The larger homes are found closer to the main road and are near to other Kinh homes. These Thái have more financial resources; for example, one household has farm equipment, another household serves as the secretary for the Communist party at the commune level, and the third household is a trader middleman. While these households have more resources, they do not have as much wealth as some Hmông. For instance some Hmông have large dump trucks, which can be used to transport harvest and lumber. This difference in wealth is a reflection of the limited land in Khâu Lay village (Chapter 5) and the “lavish” Thái celebrations, which they claim drain their savings. As a result, households grow less maize and have less to sell. Rice production is for household consumption and is not sold. Thái culture remains strong, but due to limited land, many households struggle to make ends meet. Thái tend to marry young and drop out of high school. For most Thái, farming remains a core identity.

Kinh Migrants into the Highlands of Sơn La Province

The Kinh ethnic group in Sơn La totals 189,461, of which 85,731 live in rural areas according to the 2009 demographic statistics. Kinh have generally settled in towns and along National Highway 6, and in rural areas they establish the political and economic center. However, Kinh presence in the highlands is relatively recent.

Figure 4.5 Tây Bắc and Việt Bắc Autonomous Regions 1965⁸¹



⁸¹ <http://www.globalsecurity.org/military/world/vietnam/tokin-viet-bac.htm>

In the early 1800s, Sơn La province was part of the larger Hung Hoa province (Davis 2011).⁸² Management of this very large and diverse province was difficult for the Nguyễn court. The northern highlands remained essentially outside the Nguyễn court during the pre-colonial era (Michaud 2000). Mandarins were sent to the highlands in the 15th and 18th centuries, but their presence would have been very limited (Michaud 2006). To get to and maintain some authority in the area, Kinh migration into the region was encouraged to facilitate trade and increase the tax base, but movement was limited until the 1960s with the state-sanctioned relocation program and new economic zones (Hardy 2003).

During the colonial era, Kinh migration remained limited in the region. The defeat of the French in 1954 brought about a new interest in the highlands. The need to establish border control required moving Kinh from the over-populated delta region to the highlands (Hardy 2003). The highlands were viewed as a frontier that was largely empty of people but rich in resources to be extracted. Resettlement and land clearing in the highlands, which were traditionally ethnic minority areas, became a high priority for the Democratic Republic of Vietnam (Khong Dien 2002). The initial phase of the migration program emphasized land clearing, but by 1971, the program was officially designated the NEZ program (Lundberg 2004). From 1960 to 1975, the Kinh population in the northern highlands increased by one million and would clear 450,000 hectares of land in the first five years for agriculture (Khong Dien 2002: 81; Lundberg 2004: 54). The decision to move Kinh to the highlands was vital to the new socialist government for three reasons: 1) the highlands were perceived as being comparatively empty and the reallocation of land was

⁸² In addition to Sơn La, Hung Hoa included Điện Biên, Yên Châu, Lái Châu, Lào Cai, and Hà Giang. Nguyễn rulers replaced military protectorates (1802-1820) with more secure administrative provinces in 1820 (Davis 2011).

not suitable in the overcrowded Red River delta; 2) the highlands were undeveloped and needed developing; 3) Kinh would provide national security and defense along borderland areas (Hardy 2003: 110).

The added demographic pressure added stress on highland communities and natural resources (Michaud 2006). Many Kinh were ill equipped to adjust to challenge of the highland social and environment conditions, resulting in a high abandonment of the resettlement program (Khong Dien 2002: 82). As much as 50% of Kinh would leave the NEZ in the highlands by the 1980s (De Koninck 1996; Hardy 2001; Lundberg 2004). In Phông Lái, Kinh would leave their homes in the middle of the night and make their way back illegally to the lowland province of Hoa Binh.⁸³ Households that remain have managed to succeed, but many are not happy about living in the highlands. The quality of life in the lowlands is commonly stated to be ideal for many Kinh. The geography of the highlands prevented the widespread adoption of wet rice agriculture in many areas. As a result, many Kinh would adopt upland swidden agriculture practices used by ethnic minorities (McElwee 2008; World Bank 2009). Ironically, the rate of swidden agriculture increased due to Kinh highland immigration “at the same time as the government spent considerable economic resources in trying to stop the minorities’ shifting cultivation through sedentarisation and Fixed Cultivation Programme (SFCP)” (Lundberg 2004: 55).⁸⁴

⁸³ These households would often illegally extract lumber from the forest using the collective’s livestock to move lumber from the forest to be sold to a middleman. With money, households could afford to relocate to a better life.

⁸⁴ The SFCP program has required a tremendous amount of labor and access to water. Modernization would create a utopia of monoculture. According to one slogan, “a tomorrow [in which] Tây Bắc’s forested hills and grassy expanses will be flattened and immense fields of rice, fields of corn will be opened up” (Scott 2009:76). The geographic realities of the highlands didn’t exactly mesh with the propaganda. Kinh who resettled into the highlands had to adjust their agriculture to suit the landscape rather than changing the land. And yet, changes were noticeable. Across the highlands, the forests have largely been cleared and replaced with fields of corn, and in the lowlands with access to water there are fields of wet rice.

Kinh from Thái Bình Province were dropped off along Highway 6 across Sơn La Province starting in the 1960s (Rambo 2005; Sikor and Tuong Vi 2005). Initially, peasants were not prepared to hear from government officials about the need to move since the colonial French had been pressuring inhabitants in the Red River Delta to move for some time (Hardy 2003:254). While this migration policy was driven primarily by a deep sense of duty to the country, the program was poorly funded and many would find ways to return back to the lowlands. Those that stayed were convinced their sacrifice was meant to be for the long-term good. The goal was to extract resources from the highlands, a feat that would require a tremendous amount of labor, the one resource the Kinh had in surplus. Kinh population from 1960-1989 has increased substantially in the highlands due to steady fecundity and migration from overpopulated lowlands. Over the following three decades Sơn La Province has seen a Kinh population increase by 327%, and nearby Hòa Bình Province has grown by 1937% (Rambo 2005).

Several Kinh were assigned to Phông Lái commune, one of several NEZs that would be linked with collectivized agriculture. The NEZs set up political institutions (socialist party cells, People's Committees and mass organizations) and economic institutions (cooperative production system, state enterprises) of the new socialist state in the northern highlands (Friederichsen and Neef 2008; Hardy 2000). Ethnic minority leaders were recruited into the political and economic institutions. National goals were broadly applied and in some cases, cooperatives were required to supply labor for home construction of newlyweds in accordance with Black Thái culture (Sikor 1999:77-99).

Prime land suitable for wet-rice was divided up between Thái and Kinh.⁸⁵ Due to the dry conditions in Phổng Lái commune, land was mainly cultivated extensively. In addition to the dry and hot climate, the terrain was hilly, which made for a difficult life. However, the biggest limitation to highlands colonization and deforestation was malaria. Using imported DDT, the DRV controlled malaria in many parts of the North (Hardy 2003:253).

The Kinh that migrated in the uplands in the 1960s, were following a policy that required their loyalty to the state. Many felt it was their duty to serve the country and followed without question; however, for many there was little choice in the resettlement. Moving into the highlands was very much like a frontier for many Kinh (Lundberg 2004; McElwee 2008). The work was hard, and new homes and roads needed to be built. Also, many suffered loneliness and isolation from the rugged conditions. Many ethnic minorities resented Kinh encroaching on their land and limited resources. Kinh relied on the generosity and help from ethnic groups, and yet many considered them culturally “backwards.” Kinh were dependent on ethnic minorities for adapting agriculture to the highlands (Lundberg 2004; McElwee 2008). In the minds of most Kinh, the highlands are an unfavorable geography, prone to disease and a harsh climate (Jamieson 1993).

In the aftermath of *đổi mới*, Kinh migration has been opened up to allow spontaneous movement. Kinh are moving to seek better economic opportunities for individuals and households (Hardy 2000). Upland migration continued throughout the 1980s and 1990s, but in the late 1990s the reasons for migrating shifted from an opportunity to improve livelihoods to more of a necessity (Lundberg 2004). Lowland rural

⁸⁵ Whenever, I would ask about land allotments, no one had much to say. Prior to the arrival of the Kinh, the Thái living in the Khâu Lay village had moved out due to the limited water. And they did not want to share the land with more people. So the most of the Thái came in to Phổng Lái at the same time as the Kinh. This may explain why there is no mention of contention over land resources.

development has largely failed to grow economically and the high population work force has stagnated.

Kinh Upland Livelihoods

In the post-*đổi mới* era, Kinh livelihoods have expanded into economic trade networks. Kinh have kin relations and social networks that enable many to seize on new economic opportunities (Bonnin and Turner 2011; Turner and Michaud 2009). In *Phổng Lái* commune and across the province of *Sơn La*, Kinh are important businessmen. Businesses involve commodity chain networks, with Kinh serving as wholesalers for tea, maize, coffee, cassava, rice, soybeans and illegal lumber. The largest trade networks extend from the communal level into the capital city of Hanoi, and smaller networks lie anywhere in between. In my study, I focused on Kinh who continue to derive their livelihoods from agrarian activities. Agrarian activities included livestock and cultivation, but often their real economic success was largely derived from other sources of income or employment. They tended to be more educated, more connected and did not rely very much on farm income. Often Kinh owned businesses that provided higher incomes such as from selling livestock, rice wine, and other value-added products, or they had a business or career that provided their main income (fieldwork 2009). Kinh economic expansion into highland trade networks allows them to reap higher profits from controlling highland economies (Bonnin 2011; World Bank 2009).

Up to this point, I have provided a simple overview of ethnic groups in *Phổng Lái* commune as well as discussing larger cultural trends across the region. In the next section I

will discuss some challenges of implementing highland development policy in Sơn La province.

Environmental Effects of Socialist Policies

The Socialist construction period from 1945-1980s made profound changes to the highland social and ecological landscape. After independence the DRV established a migration program that would move lowland villagers into collectives in the highlands (Hardy 2002). In 1968, ethnic minority groups were pressured to abandon swidden farming in part to open up land to newcomers and to bring them under state control. However, the implementation of sedentarization policy (*định canh định cư*) was not uniform. Groups located farther from main roads proved harder to integrate. And many groups in the higher levels of the mountain were hard to reach due to poor road conditions and limited government staff.

The goal of promoting economic integration between highlands and lowlands and the ensuing problems this created is most evident through the process of stripping the forests of hardwoods for economic gain. As discussed in Chapter 2, forest exploitation by State Forest Enterprises (SFEs) was a major economic activity in NEZs. Once SFEs were set up, they quickly stripped away valuable hardwoods at unsustainable rates, benefitting domestic lumber consumption and export earnings (Cam Hoang 2009; McElwee 2003). Instead of bringing development to the minorities, the state succeeded in exploiting natural resources and blaming deforestation and the ensuing environmental fallout on the ethnic

minorities, due to their reliance on swidden agriculture. And yet deforestation is a result of several factors and cannot be tied to one root cause.

Deforestation in the highlands has been brought about through warfare, SFEs, and land clearing for agricultural production. By the 1990s primary forest cover dropped to 14% (down from 95% in 1943) and degraded land totaled 65% (Vo, et al. 1998b). To control deforestation, swidden agriculture was banned in 1968 under the FCFS, which targeted ethnic groups such as Hmông and Yao. The goal was to protect forests by suppressing “backward” shifting agriculture practices. Complex farming practices such as composite agriculture (swidden and irrigated lowland agricultural systems) were being targeted under the FCFS program. It was believed that modern technology-driven practices could be introduced only by changing backward traditional cultural practices. FCFS policy would also reduce threats to national security by restricting ethnic minority movement. Incentives in the form of cash, production subsidies, agriculture extension services, and land titles were given out to encourage minorities to join the program (Friederichsen and Neef 2008). However, after 30 years the results of the FCFS program are far from clear. The Asian Development Bank determined 3.8 million people had been settled by 1998 (ADB 2002). This statistic is challenged by McElwee (2004a:199), who states that only 600,000 minorities have been resettled in permanent villages across Vietnam, and of those nearly all continue to practice swiddening.

Ironically, the socialist development project led to the stratification of ethnic minority groups and between ethnic groups and Kinh, the exact opposite of the national unity and equality touted by officials (McElwee 2004) (see Appendix D). The northern uplands are significantly behind delta regions in development, with poverty rates as high as

95% in rural district areas, and have the highest Gini co-efficient, 0.35 (ADB 2002; Minot, et al. 2003) (see Appendix E). Ideals of socialist progress by the government have established criteria for culture and ethnicity in the highlands from a Kinh-centric frame of reference (e.g. banning swidden in forest areas, resettlement, and dam construction) (Hirsch, et al. 1992; Hirsch and Thinh 1996; Masina 2006; World Bank 2009).⁸⁶ This Kinh lowland perspective has tended to establish rural development policies and activities that lowered the level of participation in highland rural development activities by ethnic minorities, resulting in higher rates of poverty, and altering the cultural and natural landscape in the process.

The other significant cost to Kinh migration was the impacts to the environment from agriculture expansion. According to an official report, deforestation was linked to 1) clearing to meet targets, 2) neglected cultivation, and 3) soil degradation and erosion was a substantial cause of forest destruction (NAV31974 see Hardy 2003:fn 69). A government study concluded that land cultivation, unsuitable crop choice, an emphasis on cereal production, and the growth of wet rice further diminished highland natural resources (State Scientific Committee 1990). In addition to severe environmental damage, the influx of Kinh migrants added population pressure to the region (Jamieson, et al. 1998). When they failed to grow grain crops successfully after a few years, the Soviet Union agreed to purchase tea from the region. Through the initial phases of setting up the collective, Kinh had to adapt to the new environment by growing new crops and relying less on rice. The high hopes of a socialist utopia stand in stark contrast to the reality of highland ecological conditions. A propaganda slogan from the 1960s era decreed, "With the strength of the

⁸⁶ For more information on Socialist development policies see: Scott 2009, Michuad 2000; Michaud and Forsyth 2011; McElwee 2004; Turner 2010; Turner 2013.

people, even stones turn into rice” (Động 1978:6 cited in Hardy 2003:255). Ironically, today, many Kinh are no longer directly tied to growing food for a living. They have continued to rely on education and diversifying their economy.

Post-Đổi Mới Era

In the wake of đổi mới, the rate of environmental change in the highland landscape has accelerated.⁸⁷ The economic renovation in Vietnam took place in 1986 following the 6th Congress of the Communist Party, and established significant changes in the lives of highland ethnic minorities. The state presence in terms of services was reduced and replaced with market-based services.

In 1981, Decree 100 was issued, marking a significant step toward ending collective agriculture and the allocation of property rights to households. Surplus production beyond the quota could be sold. In Sơn La the decree was carried out in 1982, marking a change in land use patterns and lessening state control over land. Wet rice agricultural land was removed from state control and reallocated to households. As state and cooperative control diminished, upland fields and forestland were freed up for use (Sikor 1999: 119-123). Thuận Châu district officials were unable to prevent upland cultivation and forest clearing. By the late 1980s, a large portion of forestland was being cultivated. Contestations over land was largely resolved by clearing more land since officials were unable to remedy most disputes. Forestland provided a buffer for dispute resolution, a practice that was widely accepted by government officials at the village level (Rambo and Vien 2001). The rapid

⁸⁷ Following China, Vietnam made a radical shift away from a socialist -based economy toward the market economy. Concerns over trade, religion, and cultural expression were considered less important; however, national security issues remain a significant concern, as does the practice of cultural integration (Michaud 2009:35).

spread of upland cultivation and access to forests reveals their importance as a resource to ethnic minority groups, and the acceptance of officials to permit upland expansion.

In the last 20 years, highlanders have been blamed by the state and media for the deterioration of the environment. They have been blamed for most if not all of the deforestation, soil erosion, and pollution of watersheds in the highlands (Hall, et al. 2011; McElwee 2004b; Neef, et al. 2006; Sikor, et al. 2011). A good portion of this blame is directly tied to swidden agriculture, which the state considers an inefficient and dangerous practice (Hill 1985; Nguyen 1995; Nguyen 2008; Nguyen, et al. 2008; Roome and Fisiy 2009; Sowerine 2004; Sprenger 2006; World Bank 2009; Ziegler, et al. 2004). The state has attempted to manage swidden agriculture by moving populations out of critical watersheds, and encouraging green technologies that lead to sedentarization and economic dependency (Kempf and Quy 1999). Fallow periods have been reduced to three years or less, with most fields remaining in active cultivation. Organic matter has become so severely depleted in the highlands, that under the current conditions it is estimated to take 15 years in fallow to fully recover the nitrogen level back into the soil (Nguyen, et al. 2008). The result is that natural vegetation will become harder and harder to regenerate, threatening the sustainability of highland agriculture.

In Vietnam concerns over deforestation and environmental deterioration often target the blame on ethnic minorities for their poorly understood swidden practices. Yet there is rarely mention of Kinh migration that had had significant impacts from policies establishing NEZs in the 60s and 70s, which led to the introduction of intensive cash crops such as tea, coffee, maize, and rubber tree plantations as well as timber extraction. The introduction of industrial crops led to dramatic changes in the landscape and added

pressure on fragile natural resources. In the 1980s, sweeping economic renovation policies further increased natural resource exploitation and pressure on the fragile highland ecosystem as smallholders produced goods for the market. The result has been lower groundwater tables, more erratic flooding, and inconsistent steam flows in the highlands (Clement 2008; Saint-Macary, et al. 2010; Wezel, et al. 2002b).

In the era of post-*đổi mới*, more services have been privatized, yet at the same time, the highlands have undergone significant development under the state. One of the biggest development policies is Program 135, initiated in 1998 that targeted the central and northern highlands.⁸⁸ The previous program, FSFC, was woven into program 135 (ADB 2002:12). In addition, several other national and international programs have been initiated targeting institutional reform (Friederichsen and Neef 2008). Poverty reduction and sustainable development in the highlands have become an important target in Vietnam since the 1990s, and the UN reported 345 foreign-funded projects in the highlands (UNDP 2000: 36). The success of these projects has been mixed. One reason is government power is still largely unchecked in Vietnam. Attempts at encouraging institutional change have not yielded any noticeable improvements. In one example, the German development agency (GTZ) collaborated to promote agricultural extension services using “Participatory Agriculture Extension Methodology” (PAEM) (Friederichsen and Neef 2008). The intention was to provide agriculture services and technology as specified by villages. Even though the provincial government supported the program and has been implementing the

⁸⁸ Program 135 was established in phase 1(1998-2005) Phase 2 (2005-2010) was designed to improve ethnic minorities living in the highlands by providing new schools, roads, increase market oriented agriculture development, improving the socio-economic life of ethnic groups, eliminate hunger and reduce poverty to below 30%. (For more information see <http://www.un.org/esa/socdev/egms/docs/2009/Ghana/Quan.pdf>.)

recommended methodology since 2001, there is little evidence at the commune and village level to suggest any progress in the form of development projects.

The lack of traction for most development projects at the local level in the northwestern highlands is due to a systemic failure of government bureaucracy to engage in participatory activities with local communities (Hall, et al. 2011; Hirsch and Thinh 1996; Jamieson, et al. 1998; Michaud and Forsyth 2011b; Nguyen Duy Linh, et al. 2006; To Xuan Phuc 2007; Turner and Michaud 2009). Extension workers are not inclined to travel to remote villages, due to several factors including seasonal road conditions, wear and tear of personal vehicles and gasoline costs, low pay for extension work, and few incentives to encourage extension visits, and job recruitment and performance is not an important part of their job security (Friederichsen and Neef 2008). It is common practice in Vietnam for government officials to moonlight whenever possible.⁸⁹ Most extension positions allow work to be supplemented by private employers such as seed companies, which directs their interests to working with smallholders who are more commercially motivated. As a result, extension services have made few inroads with new technology to the more remote villages, creating an information divide between smallholders with good access and those with poor access. When I met with the extension agent for Phông Lái, it was clear he was poorly educated in agriculture and had been given the position because of his father's rank in the communist party. He was unaware of erosion problems in the commune and kept no records of extension services he had been sharing with village leaders. In another case, I was visiting with the Hmông leader when an extension agent came by discussing a new

⁸⁹ For example, government workers are expected to work Mondays and Fridays. The rest of the week can be used to work in other jobs. However, when asked how much money they earn, government employees refer to their official salary. Professors make approximately 100USD a month. They can earn much more working for NGOs and private companies.

bovine breed on the market. But when pressed for details about the breed, the extension agent knew nothing about its characteristics. In the commune, water buffaloes were popular for smallholders with paddy fields, but other cows were more suitable to the dry conditions and required less grass than buffaloes. The extension agent was seemingly unfamiliar with these conditions. Previous extension services had failed to produce marketable products, resulting in smallholders being wary about new crop products being promoted by the government.⁹⁰

When I toured the Northwest University of Forestry and Agriculture in Thuận Châu, I saw only a few plants growing there and no trees. The university could have many different varieties of crops and fruit trees growing there, but only about 10 per cent of the land was being actively cultivated. This is another example of the systemic failure of the government and university to meet highland development needs and sustainability goals in production. Development projects that attempt participatory approaches from villages are unsuccessful and have resulted in officials not acting on the needs of villages; in many cases officials are seeking opportunities to increase their personal wealth by making commercial sales on the side. Confronting superiors is generally not done in Vietnam when a mistake is made or there is a poor job performance. Maintaining development funding is the main priority rather than complying with the projects' development and participatory goals. Once NGO funding has been completed, complicated or inappropriate aspects of the project can be jettisoned (Neef 2005; Nguyen Duy Linh, et al. 2006). These examples seek to highlight the complexity of highland development outcomes and priorities at the local level.

⁹⁰ Government programs initially targeted fruit production as an alternative to opium production and sedentarization of highly mobile ethnic groups (i.e. Hmông and Yao). This program failed due to the stunted growth of the trees in the highlands.

Another important change in the highland landscape is from advances in agriculture. Agriculture is becoming increasingly more commercialized, through better access to HYV seeds, fertilizers, and market demand for silage, resulting in smallholders generating higher yields. The challenge is managing the balance between subsistence and market production. Across the northwest highlands, smallholders have expanded cultivation into hills and forest area, where the soil fertility is noticeably stressed due to the reduced fallow periods (Lestrelin, et al. 2012; Neef, et al. 2006; Saint-Macary, et al. 2010).

In 1990s upland maize production supplanted dry rice across Sơn La Province. This agriculture change has been described as the most significant development and cause of landscape change in the 20th century (Dao The Anh, et al. 2005; Wezel, et al. 2002b; Yanagisawa 2004). Hybrid maize dramatically increased production due to applications of fertilizer. The crop success spread rapidly across the region and succeeded in integrating smallholders into the market economy. Smallholders purchase HVY seeds every year. From 1998 to 2002 maize production increased 80% for a total of 175,000m tons across Sơn La Province (Friederichsen and Neef 2008; Trần 2005: 216). Maize can yield 5 to 6 tons per hectare, which translates to 10-15m VND (about 600-900USD). This large sum of money permits households to make large purchases such as motorbikes after one season or saving up money to buy trucks, which a few Hmông families have done. Trucks permit Hmông to serve as middlemen to other Hmông with land in remote areas. Once maize is harvested, it is sold and transported to the lowlands for livestock silage. As Vietnam increases its affluence, meat consumption has accelerated, driving up the demand for highland maize. The maize industry has connected the lowlands with the highlands economy and facilitated

both public-funded research and development for hybrid maize seeds and private seed companies and middlemen trading commodities (Dao The Anh, et al. 2005).

The significance of maize production in the last decade has led to rapid economic development in which Hmông are earning more income than Thái due to better roads that provide year-round access to vehicles necessary for transporting maize harvests. In 2009, a new gravel road was added in the commune, improving travel greatly and especially during the rainy season. Concrete floors, lumbered walls, tile roofs, ability to pay for high school and college education, and vehicles demonstrate increases in wealth. Part of the Hmông success lies in the fact they have more land per capita, and their soils have less intensive use on average compared with Thái villages. In some ways, Hmông are doing very well from state interventions in which they have been given a space to settle and land to invest in. Compared with Thái, they have more land, possibly higher-quality land that is yielding good harvests, resulting in higher earnings. Maize production has yielded economic success, and both Thái and Hmông are benefitting from the cash crop; however, the success must be tempered by the unsustainability of hill agriculture subject to severe erosion, and if left unchecked, will lead to farm failures.

The economic benefits from maize production have led to the abandonment of fallow fields, and upland encroachment into forest areas, especially around centrally located villages (Neef et al. 2006). As soil is used more intensively, more fertilizer is being applied. I spoke with a local Kinh trader about fertilizer sales. She stated that in the last five years (2003-2008) fertilizer sales steadily increased. The cost of fertilizer is high enough that many smallholders I spoke with chose not to use it for their non-maize crops.

However, smallholders report that as their crop yields become stagnate, they are adding more fertilizer (Saint-Macary, et al. 2010; Wezel, et al. 2002b).

The other noticeable result has been socio-economic differentiation between Kinh and other ethnic groups and within ethnic groups. Policy outcomes vary considerably between groups. In Phông Lái, Kinh are noticeably better off by their material goods, compared to other villages. As I visited each house in the three villages, there were noticeable albeit subtle differences in accumulated wealth and income. What stands out are the few very large homes that tower above the rest of the homes. The slow but growing accumulation of household wealth reflects the increase in market penetration and cash crop production in the highlands (Castella, et al. 2004; Fatoux, et al. 2002; Sikor 2012; Sikor and Tuong Vi 2005).

Conclusion

This chapter discussed the cultural integration of ethnic highlands from lowland interactions. My focus has been to explain how new agricultural technology and policy changed the cultural and natural landscape. The major change in highlands has been the history of conflict and changing livelihoods due to policies controlling access to natural resources. One of the biggest changes has been the intensification of agriculture production. With access to improved seeds and fertilizers, agriculture productivity has increased substantially. In Phông Lái, Hmông, Thái, and Kinh have all made changes in their livelihoods to adapt to the new economic, social, and environmental conditions.

Relocating lowland Kinh into the highlands has had profound effects, which are highly complex. Kinh resettled on the good land in the valleys, established infrastructure, Vietnamese language schools, and medical centers, built hydroelectric dams, and suppressed cultural practices deemed backwards and primitive. Ethnic groups have adjusted according to their culture values and traditions. As population pressure increased, land use intensified in the lowland valleys and along upland slopes into forested areas by Hmông and Thái. Today there is no more land left for expanding up the slopes. Kinh agriculture has broadened to include wet rice and/or maize agriculture, livestock production, and horticulture (tea, coffee, fruit), and Kinh have opened small businesses in their homes.

Colonial records from military reports indicate ethnic minorities were primarily engaged in subsistence-oriented agriculture around the turn of the 20th century. Subsistence agriculture strategies provided households with a lifestyle that offered enough food to just cover the householders caloric needs and kept taxes to a minimum. Households in the highlands it seems had little incentive to work the land any harder than required. It is therefore interesting to realize the tenacity of smallholders to endure in the highlands. The changes that occurred more recently reflect the introduction of new technology, higher population pressure, and access to medical facilities, education, and a market economy all of which have managed to intensify agriculture production in the region. The agriculture technology gave highland ethnic groups the capability to grow more and the market economy gave smallholders and incentive to grow more. It is hard to determine which factor played a greater role in the transition.

Kinh migration was intended to extend their “modern” culture to upland ethnic minority groups, provide security in the highlands, and modernize the highland economy. The results over the last several decades are mixed. For Hmông, the results appear positive. They have embraced new agricultural technology and have managed to earn enough to save money. It is also likely that Hmông have been able to succeed given land tenure. Thái have suffered more under the new conditions. While they have embraced new technology, they have less land on average and are less able to save money. The future of highland agriculture remains bleak due to the intensive land use and mono-cropping of maize cultivation. With limited land, more individuals will seek employment in urban areas. The other challenge for highland minorities will be to maintain their cultural values on their own terms rather than through the state’s value-based system.

CHAPTER 5

CROSS-CULTURAL COMPARISON OF AGRICULTURE INVESTMENT STRATEGIES

Introduction

This chapter compares investment rates in land among highland ethnic groups in Vietnam to assess cultural influences on investment activities. The liberal paradigm (linking property rights with investments) predicts that smallholders given property rights will make long-term sustainable investments in their land, yet ignores the cultural norms regarding land use and/or cultural variation in land tenure and decision-making. Culture, defined here as a system of shared beliefs, knowledge, values, and customs, is important in understanding economic activities and development outcomes. Economists in the neoclassical tradition have had little interest in anthropology or cultural issues in the last half of the 20th century as their economic ideology became the dominant force in capitalism. Studies in economic anthropology have revealed a variety of diverse economies that challenge neoclassical assumptions about market fundamentalism, and the inevitability of economic development is false (Hart 2000). Ultimately, in my cross-cultural investigation of investment activities, I found evidence for and against the influence of culture in explaining cross-cultural investment rates. In the highlands, cultural differences are striking between ethnic Kinh majority, and Thái and Hmông minorities. When investment rates were categorized in short-term, long-term, and household variables, the results were mixed. In partial support of classical economics, I found no significant

differences in short-term investment rates among Kinh, Thái and Hmông groups. In long-term and household investment rates, there are significant differences, suggesting that culture is important.

With the promulgation of the 1993 Land Law a new land tenure policy allowed households to buy, sell, and trade “land-use certificates” for the first time since the rise of the communist government in 1954. The 1993 land law devolved land rights from communal property collectives to households by handing out red book certificates. In each red book certificate (RBC) land was divided into three main categories, each with a different tenure: allocation of agricultural land is for 20 years, forestland for 50 years, and household property for a lifetime. The liberal paradigm predicts that smallholders will make long-term investments on their land because they have tenure security. The liberal economic paradigm includes a range of economic theories that remain prominent in contemporary economics and in the last few decades have become increasingly refined in their theory and analyses. The paradigm has been successful using a comprehensive and coherent framework to represent and explain the behavior of individuals, institutions and markets using the rational utilitarian decision-making model (Throsby 2001:2). Yet such formal reductionist mathematical modeling of human behavior strips away important context and implies that culture has no measurable influence on economic behavior or outcomes. However, after a series of failures from economically-oriented development projects, the cultural aspects of development on local communities and local knowledge systems began to be reevaluated (Escobar 1991: 659). Recently economists have begun to see the importance of culture effecting economic outcomes. This requires a narrow approach which defines culture as relatively static or at least very slow to change, and as a

result, economists are starting to look at the role of culture in economic development (Carling 1992; Fukuyama 1995; Guiso, et al. 2006: 23; Papageorgiou and Turnbull 2005).

Classical economists used cultural explanations to explain economic processes as Adam Smith did in his *A Theory of Moral Sentiments* (Smith and Hanley 2009). John Stuart Mill argued moral constraints are more important than individual pursuits (Mill 1956). Max Weber argued that religion vis-à-vis the Protestant Reformation was essential to the success of capitalism because the pursuit of wealth was now considered a duty (Weber 2001). A new economic system based on free wage earners with the intended goal of making a profit was established. Karl Polanyi agreed with Weber that religion plays a role in establishing markets but differed in that he saw religion as constraining the excesses of the markets. The economy combines non-economic and economic institutions that together make up its whole (Polanyi and Pearson 1977). Religion and social institutions as much as machinery were seen to help workers reduce the hardship of their labors. In the late 20th century these influential views were never considered by economists. Many economists moved more toward mathematical calculations and therefore avoided complex cultural and economic interactions altogether (Guiso, et al. 2006). Culture was largely dismissed by economists as irrelevant and generally considered to be an outcome of economic forces. However, a large body of work on the topic of economic institutions beginning in the late 1990s led economists to consider the importance of culture again. Using Weber's argument, David Landes (1998) linked culture to beliefs and values to economic outcomes of national economies. Cultural factors such as thrift, hard work, tolerance, and honesty influence economic success when contrasted with xenophobia, religious intolerance, and bureaucratic corruption that inhibit its growth. Economists have begun to look at the

importance of trust, history as well as legal origins, to mathematically analyze the importance of social and cultural institutions (Knack and Keefer 1996; La Porta, et al. 1999; Tabellini 2010). History is deemed important to economists because it establishes the framework of the current economic institutions that created and protect property rights (North 1981; Tabellini 2010). Because culture is often important in economic development outcomes it remains difficult to measure the links between the two. The exogenous source of variation in institutional change in property rights among three culturally diverse groups will be used to assess if there is a caused effect based on culture differences in land investments or how it varies vis-à-vis ethnicity.

By using ethnography and quantifiable data, anthropology is especially good at conducting small-scale analyses that will help elucidate how culture and environment lead to innovative ways that are often lost at larger scales. Testing the liberal paradigm in post-socialist Vietnam provides an unusual opportunity to examine how important culture is in determining investment practices.

This chapter examines land distribution, farming strategies, and long-term investment practices across Kinh, Thái and Hmông communities and asks the following question: Are there discernible cultural differences in how ethnic groups make property investments? According to the liberal paradigm, individual actors use rational behavior to maximize personal gain. To test one prediction of the liberal economic paradigm, I test the following null hypothesis, H_0 : *Differences in short-term, long-term, and household investment rates between Kinh, Thái and Hmông will not vary significantly.* Each village varies culturally in their language, beliefs, agriculture and homes. Culture is both implicit and explicit to each village and cannot be entirely isolated or discarded. Each ethnic village shares similar

but distinctive biophysical conditions that shape the distribution of natural resources and may therefore influence its investment strategies. Cultural norms and preferences will be analyzed using ANOVA statistical comparisons. Slight differences in topography, access to water and land holdings reflect cultural and historical processes and offer some basis for explanation of the investment differences between each village. However, village differences are as much a reflection of the topography as they are culturally, which is to say, it cannot be deduced if topography or culture offers the greater explanation in the analysis.

Theoretical Framework

This section considers the importance of soil conservation as it relates to formal land title and induced agriculture intensification in the literature. It is well known in the literature that healthy environments are critical to the livelihoods, health, earning capacity, security, household quality and energy supplies of households (Bebbington 1999; Brocklesby and Hinshelwood 2001; Netting 1974; Netting 1993a). Yet there are many disagreements concerning aspects of land use and the environment. I consider the importance of possessing formal property rights and making soil conservation investments before moving on to the induced intensification thesis, which examines the external and internal processes that smallholders face as they adapt to increases in land pressure.

Formalization of Property Theories

Many economists have argued that government policies that provide property rights, formal credit, mechanisms for land transactions, and secure land tenure will provide

an ideal environment for advancing rural development (Deininger and Feder 2001). De Soto (2002; 2000) has argued that formalization of property rights is essential to development, investments, and poverty reduction because households are able to convert assets into capital. Early support for codified property laws (formalization) was shown in Thailand by Feder and Onchan (1987). They claimed smallholders made greater investments than did forest squatters. However, consensus on the property rights remains controversial.

Empirical studies of property rights reveal a wide range of results that obfuscate the role of formalization and property investment (Bromley 2009). Feder and Onchan (1987:311-12) provide no empirical evidence in support of their claim of tenure security and farm investments. Instead of measuring land title and investments, their study focused more on financial institutions between the two groups. They conclude that forest squatters on state lands did not have access to formal credit due to the lack formal land titles. Feder and Onchan's (1987) study was addressing questions related to financial market behavior rather than smallholder behavior and yet this study influenced several studies concerned with formalization of land title and investment practices in Sub-Saharan Africa, which revealed farming investments are not directly connected to land title (Bromley 2009). In one report, the World Bank concluded that providing increased tenure security does not necessarily require formalization of individual titles, but rather simple measures can be taken that would lower costs and establish investments (Deininger 2003). However, when governments lack good institutions necessary for efficient transactions involving property and titles, then land tenure may only serve to benefit the wealthy. Property rights are not necessary for investments to occur and can be a burden to governments creating more

problems and costs for land transactions. Netting's (1993a) argument in *Smallholders, Householders* is summarized nicely by de Janvry et al. (2001:13):

“...intensification of land use can occur without formal property rights. ...In many situations, titling may increase transaction costs in the circulation of land, create new sources of conflicts if formal land rights are assigned without due recognition of customary arrangements...and not add anything to efficiency in resource use.”

Summarizing these findings on property rights, Bromley (2009:24) inverts the association of property rights and investments; a lack of tenure security does not necessarily preclude investments, but may in fact encourage investment in order to increase or establish security in a legal case. Investments can in themselves be used to increase and obtain security. Moreover, land title does not necessarily lead to greater investments in land. Issues relating to legal pluralism, with *de jure* and *de facto* land tenure laws can lead to institutional inefficiency and high enforcement costs (Meinzen-Dick and Pradham 2003; Platteau 1996). Land titling is a significant factor for farmers in the US (Soule, et al. 2000) and in the Philippines (Shively 2001) to invest more in soil conservation on land they have title for than on rented land. Lutz et al. (1994) and Holden et al. (1998) conclude that land title is important but does not guarantee soil conservation will result.

This is because soil conservation adoption involves utility tradeoffs by smallholders. If opportunity costs are relatively low in terms of land and labor to limit erosion, investments proceed; however, if cash crops are lucrative, then making a tradeoff is unlikely and/or difficult. Additionally, conservation practices that increase soil erosion do not facilitate short-term investment strategies, since they may be more suitable for medium to long-term investment strategies (Lutz, et al. 1994). Limitations in access to credit markets, secure land tenure, and short-planning horizons further hamper long-term

investments for soil conservation by poor smallholders due to risk of failure in consumption needs in the future (Pender and Fafchamps 2006; Shively 2001). In general, poor households are likely to avoid soil conservation due to a perceived higher risk of financial failure. Dercon (1996) and Rosensweig and Wolpin (1971) demonstrate that livestock investments tend to increase in accordance with increases in wealth.

Many investments require higher labor initially, but can lead to higher production yields, which is part of the induced intensification thesis discussed below (and chapter 1). Research by Shively (2001) showed how farmers in Philippines invested in irrigation in lowland areas led to increased labor demand and increased capital investment, which helped reduce upland land use and forest clearing. The induced intensification process has also been linked with improved opportunities for non-agricultural employment that may reduce the rate of deforestation and farm expansion due to the higher labor costs (Dove 1991; Pichon 1997; Southgate 1990).

The size and degree of the wealth of a farm influences investment activity. Large farms are more likely than small farms to adopt new technologies (English 1971; OECD 2005) and are more likely to favor new technologies when capital markets are “imperfect” and risk preferences are diverse (Hann and Hart 2009). Shively (1995) shows that long-term investments in risky perennial crops (such as coffee) vary according to farm size. Additionally, increases in farm size, commercialization, and land accumulation have been linked to wealthier smallholders (Barham et al. 1995).

Field Site and Background

In 1961 Phông Lái commune, located in Thuận Châu District of the Northwestern Province Sơn La, was officially created by Kinh who were relocated from the northern plains of Vietnam and directed to create a new economic zone (NEZ). The commune is 360km due west of Hanoi and is on the far western portion of the province. The surrounding landscape of Phông Lái commune consists of mainly dryland farming amidst limestone karst outcrops (Figure 5.1). The major crops include wet and dry rice, maize, coffee and tea. Currently, Phông Lái Commune consists of 23 villages and approximately 6700 people that are Kinh, Thái and Hmông ethnicities. The three villages were selected based on their close proximity to each other, their ethnic differences and their similar agrarian activities. Năm Giắt village consists of 83 White Hmông households, consisting entirely of hilly land, and is 6km outside the commune center. Khâu Lay village consists of 64 Black Thái households with a mixture of lowland and upland area and is 2km outside of town. Đông Quân village has 70 Kinh households with mainly lowland agriculture land and some upland forest land, and is located at the commune center.

From 1966 Đông Quân village formed a cooperative. By 1972, all the ethnic groups were organized into the Phông Lái cooperative. However, due to conflicts over land distribution and misunderstandings over labor, the cooperative was dissolved in 1974 into smaller village cooperatives. Communal lands belonging to the cooperatives were poorly taken care of and were degraded, and by 1981, the cooperative was finally dissolved.

Upland and lowland parcels were allocated to groups of households based on family size. Unused land was considered an open access resource and could be cultivated by any

household. In 1990, under the 1988 Land Law and Resolution 10, landowners were given temporary land certificates based on the amount of cultivated land. Land was now a limited resource and landowners were to grow and sell their produce on the open market. In 1999, according to the 1993 Land Law, all farmland was allocated, and in 2000, all forest land was allocated to villagers. The only land that remained communal was shrub land and the 2000m² lake created in the early 1960s. By 1997, land had become a valuable resource, and several people have made profitable exchanges from buying and selling land (especially government officials who knew ahead of time about official land sales). Đông Quân village sold off some of its farmland and relocated closer to town and along the main road by buying land from Khâu Lay village. After this sale of land, the village leader of Khâu Lay prohibited villagers from selling any more land to outsiders to protect them from losing more land in the future.

Figure 5.1 Limestone Karst Landscape and Agriculture Fields in Phông Lái Commune 2009 (Photograph by author.)



According to the 1993 Land Law, houses were to be allocated land for forest use, agricultural use and/or living in the form of a red book certificate (RBC). Forestland was assigned to land with slopes steeper than 30° and has a 50-year land use tenure. Forestland was assigned to households and villages mainly for protection from deforestation and also for the sustainable collection of firewood and other natural resources. Perennial crops such as coffee, tea, and fruit trees are permitted in forestland. Agricultural land is technically assigned for 20 years and has no significant land use restrictions other than being prohibited on slopes in excess of 30°. Household property has lifetime tenure for the household head. Property rights are given to households with RBCs, which map out the size and type of land as well as the tenure. The RBC is the official property title and can be bought, sold, traded, transferred or used to get a bank loan.

Every household interviewed possessed land and earned at least part of its living directly from farming practices. While every household has land, households vary widely in the type of RBC in their possession. Within the villages, most households possess RBCs. A few do not for various reasons but mainly due to a backlog of government paperwork. Throughout the Northwest highlands, land that has slopes greater than 30° should have been assigned forestland to grow perennial crops but was being used to grow annual crops instead. Smallholders were using a more flexible land use system that recognized and sanctioned upland use for agricultural productivity based on prior land use activity. With the new land tenure system in the highlands, government officials intended perennial crop production to replace the highland cultural practice of swidden agriculture on upland slopes, which is considered environmentally destructive. However, contrary to national government policy, annual crop production in the uplands has actually increased and

intensified because land not in use can be claimed by other households. Forestlands have been cultivated as agriculture lands. Local officials intent on maximizing agriculture production have put pressure on all agriculture lands including uplands that are under cultivation to be in production. This contradiction took a long time for me to understand. The government provides a great deal of local interpretation in how policies are implemented. So while perennial crops and soil conservation are important according to national policy objectives, there is also the highland reality that higher agricultural production trumps conservation. The low quality of the uplands makes long-term investments in agroforestry risky and expensive so that most smallholders grow high-yield varietal (HYV) crops that are proving economically productive.

Investments by farmers are still rather modest. Many investments are made improve the conditions of their home. The most valuable crops such as fruit trees and coffee are grown near the home. Most fence construction was therefore done around homes to protect gardens, and agro-forestry fields, and to keep animals safeguarded. Occasionally, fences were constructed in the lowlands and in the hills, but these were less commonly done due to the highly fragmented parcels of land. Less common long-term investments included irrigation, terracing, contouring, forestry, and mulch. Some of these investments were not widely applied due to the extreme environmental conditions. Irrigation systems and possible only in areas with streams. Many of the streams are becoming highly seasonal due to decreasing forest cover. As a result, terracing occurred in areas where there was land along streams and never in upland areas. Low lying land is very limited in the commune. This left all farmland in the uplands no means for controlling

erosion. Plots were carved up very steep hills as far as the eye could see, and many had large rocks that were reported to be growing a little each year.

Water is a scarce resource in the highlands of Vietnam. Conserving water is important in every household. Every home has a system for collecting rainfall and storing it in cisterns. Homes without cisterns rely on family members for water. Another source for water is fish ponds. Pond construction is another useful investment for the Hmông and Thái households with enough land and resources. Fishponds provide a good source of protein and provide a valuable water resource to both the household and livestock. Shallow ponds, however, can dry out or get too low and kill off the fish if they are not deep enough, as was the case for ponds without access to running water.

Methods and Data

Field research for this project was carried out in upland areas with three ethnic villages undergoing agrarian change. The empirical data used in this chapter are the product of my 10-month dissertation fieldwork on smallholder land investments in Northwest Vietnam in 2009. During fieldwork, communication occurred in Vietnamese and in English and was facilitated by a translator. Semi-structured interviews, formal interviews, and direct observation were the main methods of data collection.

To determine the factors influencing farm investments, I contrasted the average amount of expenditure on investments in land by each of the three ethnic groups using Analysis of Variance (ANOVA). Investments in property, such as soil conservation practices

and new farm buildings, were evaluated in terms of time, labor and cost. Data from randomly selected households (N=92) were collected using a survey from the three villages in the center of the commune. Analyzing village investment choices provides insight into Kinh, Thái, and Hmông smallholder decision-making strategies that can be extrapolated on a broader regional scale and tested against predictions from the liberal paradigm.

Investment practices were divided into three categories: long-term, short-term, and household. The rates were calculated as follows:

- Long-Term Rate = Long-Term Investment Total / (Long-Term + Short-Term + Household Investment Totals)
- Short-Term Rate = Short-Term Investment Total / (Long-Term + Short-Term + Household Investment Totals)
- Household Rate = Household Investment Total / (Long-Term + Short-Term + Household Investment Totals)

Household economic data were collected using a formal survey to discern how each family made investment choices on its property. Each household had access to property either through their parents or through a RBC. Each RBC contains household property, and most have a combination of forest and agriculture lands. HH data measured income and expenditures relating to farming and household structural needs. Whether a person is working as a construction worker or field hand, the average wage for day labor in the commune is 20,000 Vietnamese Đồng (VND). This figure was used as measurement of labor cost in calculating investment costs. Total investments are expressed mathematically in the following equation: **Total Investment = [number of people*number of days (20,000 VND)] + material cost**. For example, if five people build a fence using materials from the forest, for a total of five days, the total cost would be: $[5*5(.02)] + 0 = 0.5\text{million VND}$. Investments were divided into three categories to measure how important long-term investments in land were to smallholders. Since nearly all smallholders have household

property in the form of a RBC (N=71), investments specific to the home improvement were evaluated and compared against investments specific to farmland. By analyzing village investment choices, whether for long-term, short-term or household, this research provides insight into Kinh, Thái and Hmông smallholder decision-making strategies (Table 5.1).

Long-term investments variables were derived from observations from the farming communities and were chosen for their long-term soil conservation amendments and for their overall enhancement of the farm operations. Irrigation systems require a lot of maintenance by the community. However, because most farmers have lands on the steep hills, contour farming may have little cost, but it is an important practice in conserving soil. Manure and mulch provide organic matter necessary for soil moisture retention and long-term fertility. Forestry and agroforestry were chosen for their ability to conserve sloping land soil through their root systems.

Table 5.1 Investment Variables

Investment Category	Investment Variables
Short-term	<i>Chemical fertilizer (NPK) application, herbicide, and pesticide use</i>
Long-term	<i>Irrigation systems, fence and terrace construction, contour farming, manure and mulch application to fields, agroforestry, and forestry systems</i>
Household	<i>Cistern construction, housing structures (home use and/or livestock), and pond construction</i>

Short-term investments included the chemical application of nitrogen, phosphorus and potassium (NPK) fertilizer, herbicide, and pesticide use. These applications are very effective for plant health in the short run, but they have no long-term soil benefit and

adversely influence the soil, leading to higher rates of erosion and requiring more application of the chemical product over time.

Household investments improved the living conditions of the homes and are extended over a two-year period. Investments included cisterns and buildings for livestock or grain storage. Hmông and Thái homes are made from lumber with tile roofs, which are often smaller and less expensive to build than multistoried brick and mortar Kinh homes. These modern homes are larger than the previous bamboo-walled and thatch-roofed homes. Hmông homes are one story and Thái homes are elevated on large supporting poles. The floors of Hmông homes are either cement or earthen. The latest trend for the Thái community was changing the tile roofs with tin and adding glass windows. New home construction for Kinh uses brick and mortar, is much more expensive, and requires specialized labor. While the home is considered “separate” from the farm for purposes of investment categories, the home is part of the ecological system. The home interacts with the environment, providing water and nutrients via waste back to the soil, garden, livestock or the pond. Good investments in the home greatly enhance the well-being of families and provide nutrients back into the environment. However, these investment practices were specific to their housing RBC land and were placed into the household investment category. While many farmers would use their land around their homes to farm, nearly all farmers had farm and forest lands far away from their homes.

Red Book Certificates

Red book certificates given to households were divided into three categories, forest, agriculture and household (Table 5.2). Some households had all three or some

combination of the three, and in very few cases households had no RBC. Forestland certificates and holdings are lower for Kinh and higher for Thái and Hmông villages. The majority of Hmông households possess more forest RBCs than any other type of land certificate. Forest RBCs were also common in the Thái village, but less than half of Kinh households. Forest RBCs allocate forestland to households with the implied responsibility of managing the forest growth. For each hectare of land, households are given 100,000 VND a year, which is the equivalent of \$6 USD in 2009. Forest resources are very important to Thái and Hmông households because they provide firewood, fodder, lumber, medicine and food. The main use of the forest by Thái and Hmông villagers is firewood. On average, households reported using 10kg of wood a day, necessitating a trip to the forest every three days to collect 30kg of wood. In the market, 10kg of wood generally sells for 10,000VND (about \$0.60 USD). The forest also provides valuable medicines, food and lumber for the community. Forest protection continues to be a problem due to illegal logging operations. Some of the logging is sanctioned by the government but requires a series of approvals and fees beginning at the village level all the way up the chain of command to the District headquarters in Thuận Châu.

Table 5.2 Cross-cultural Access to and Knowledge of Property Rights

Type of Red book in HH possession	Hmông (N=32)	Thái (N=34)	Kinh (N=26)
Forest	26 (81%)	23 (68%)	12 (46%)
Agriculture	23 (72%)	28 (82%)	17 (65%)
House	28 (88%)	27 (79%)	10 (38%)
No Red book certificate	3 (9%)	6 (18%)	12 (46%)
Understands property rights	9 (28%)	8 (24%)	18 (69%)
Confused about length of tenure	20 (63%)	9 (26%)	7 (27%)

Fewer Hmông households report having an Agriculture RBC, a reflection of the fact that the village land consists of rolling hills and no flat land. Since rolling hills are of little economic and social value to Kinh and Thái, Hmông have been until recently beedn relatively unfettered with bureaucracy or sharing by either group for access to dry upland areas. Traditionally the Thái controlled the lowlands, leaving upland areas to Hmông. Kinh worked more closely with Thái who shared similar interest in the lowland areas. This similarity meant Kinh and Thái would divide paddy fields leaving less land for both villages, and in turn Hmông were left with more hill land. In both villages, smallholders prefer low-lying areas to cultivate wet rice. As a result of sharing the flat land with Kinh, there is on average less prime agricultural land available to Thái villagers. The Thái village has access to rice paddy fields, but due to limited space and population pressures, it must also rely on farming in upland areas adjacent to the lowlands to survive. As a result, the Thái village has less land overall and more dispersed parcels than the Hmông village. For Kinh, agriculture land is no longer an integral part of their livelihood. Many Kinh sold their agriculture lands to move to town and purchased Thái land. Kinh who continue to farm do so only in the lowlands. Many have opted to sell their land and move along busy roads and to use their homes to create small businesses. Agriculture land remains essential to both Hmông and Thái livelihoods, but for Kinh, the importance of agricultural land is declining. While nearly all households have RBCs, some do not due to slow bureaucratic processes. A few Thái and Hmông households did not have any type of RBC but were working and living on their father's land. Many Kinh households lack household RBC due to a recent purchase of property creating a backlog of paperwork. For ethnic minorities without a household RBC, getting a certificate is not a high priority, because of the hassle, expense and uncertainty.

Household property tenure is given for the life of the owner and in most cases, provides land for a garden, livestock or another home. Within each village community, everyone was familiar with who owned the land, and in this way possessing an official RBC is not essential. If one wants an official bank loan, then having a RBC is more crucial.

Knowledge of Property Rights

To determine how well villagers understood their property rights, households were asked to describe their rights and responsibilities to their land. Responses were additive, with only one response permitted. Correct responses concerning property rights were low in Hmông (n=9) and Thái (n=8) villages. For both Hmông and Thái villages, property rights were poorly understood, with many claiming their property rights were not bound by use or tenure. In contrast, the majority of the Kinh village (n=18) reported clearly understanding property rights. In the Kinh village, the main misunderstanding over property rights concerns tenure of their RBCs in their possession.

Results

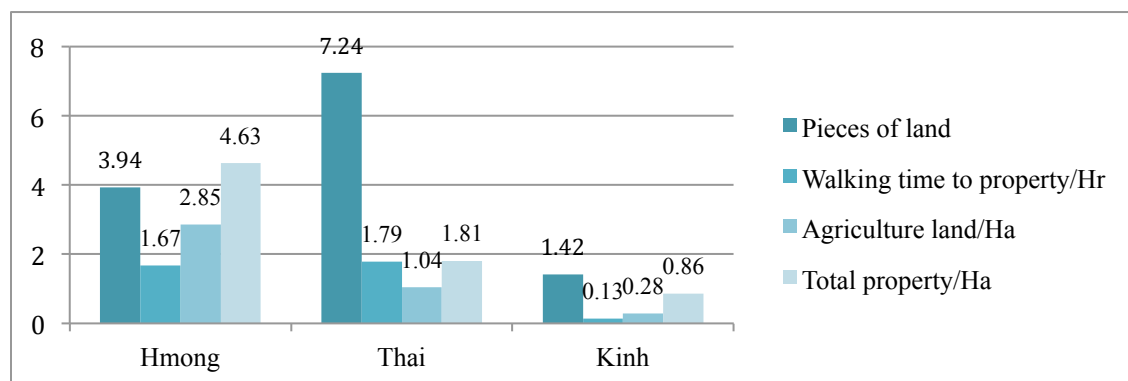
After conducting open-ended and semi-structured interviews on farming practices and land rights, I drafted and tested a formal questionnaire prior to conducting a random survey of the three ethnic communities. The results of the household economic survey are compiled into long-term, short-term and household investment categories, totals, and rates

according to each village. Investment values are calculated from the total sum of each investment variable. The total investment figure provides the value for determining investment rates for each category. The investment rates are tested to estimate investment practices at the population level for each ethnic group in the commune.

Cross-cultural Comparison of Agriculture Property

The quality and location of farmland varies in each village (Figure 5.2). Hmông have the largest average hectarage of agriculture land (2.85) divided into four pieces of land per household, with an average walking time of 1.67 hours to get to all of their property. Thái, with a third less agriculture land (1.04ha), average more pieces of land (7.24), and have a walking time of 1.79hr. In contrast, Kinh have less agriculture land (0.28ha), fewer pieces of land (1.42) and a much shorter walking time to their land (0.13hr).

Figure 5.2 Cross-cultural Comparison of Mean Land Holdings and Distance to Land



Due to the highly heterogeneous landscape, land was originally allocated by the government to allow families equal access to the limited amount of good farmland. Since low-lying farmland is in short supply, it has been equally divided among households in the Thái village. Because land farther away from the village is less valuable, land has been

divided to provide Thái households similar access to lowland and upland parcels. As a result land is divided into rather small parcels that are spread out across the landscape.

Cross-cultural Comparison of Household, Short-term, and Long-term Investments

Cross-cultural comparison of village long-term, short-term, household investment activity is summarized in Table 4.3 below. The number of each investment category and how many households reported making each investment are listed.

Long-term investments

Of the eight long-term investments, manure application, agro-forestry, and fences have the highest frequency for all three ethnic groups. Manure was commonly applied to fields in the lowlands and around homes. Of the three groups, Kinh farm less than the others and use the least amount of manure. Agro-forestry as an investment category is highest in the Hmông village, which possesses the largest amount of land and is also the hilliest. Often, agro-forestry consists of trees around homes, but it is not uncommon to see a few trees remaining in fields. Trees are important for providing shade and holding the soil in place during the year. Fences were important for protecting crops from free-roaming livestock and for keeping livestock penned up. Without access to flowing water, investing in a terrace system was not economically feasible. Mulch was not practiced by anyone except one Hmông and a few Thái households. Mulch is useful for keeping moisture in the soil, preventing weeds from sprouting and more importantly for helping to prevent erosion. Upland fields are widely scattered across the dry landscape, making the application of mulch and other kinds of investments challenging.

Table 5.3 Cross-cultural Comparison of Household, Short-term, and Long-term Investments

Investment	Hmông (N=32)	Thái (N=34)	Kinh (N=26)
<i><u>Long-term Investments</u></i>			
Irrigation	0	3 (9%)	5 (19%)
Terrace	1 (3%)	0	1 (4%)
Contour rows	9 (28%)	2 (6%)	0
Manure Application	18 (56%)	29 (85%)	10 (38%)
Agroforestry	28 (88%)	11 (32%)	9 (35%)
Forestry	1 (3%)	0	0
Mulch application	1 (3%)	1 (3)	0
Fence	5 (16%)	12 (35%)	13 (50%)
<i><u>Short-term Investments</u></i>			
NPK fertilizer	32 (100%)	33 (97%)	14 (54%)
Pesticides	6 (18%)	16 (47%)	6 (23%)
Herbicide	26 (82%)	27 (79%)	8 (31%)
<i><u>Household Investments</u></i>			
Well/cistern	21 (66%)	15 (44%)	22 (85%)
Structural	28 (88%)	21 (62%)	24 (92%)
Pond	24 (75%)	21 (62%)	1 (4%)

Short-term Investments

Every smallholder interviewed used chemical applications of one sort or another. Inorganic fertilizers (NPK) are the most commonly applied fertilizer in the highlands by all three villages. Herbicide was the second most common application reported after

fertilizers. Pesticide use was somewhat less used by the Hmông village but was more commonly used in the Thái village. Kinh as a group rely less on crops and more on livestock and therefore have lower NPK, herbicide and pesticide use.

Household investments

Household investments included building a cistern, home improvement or storage structure, and fishponds. The property with the home has the longest land tenure, and for that reason it is not surprising that so many of the investments have been undertaken in this category. The most common investment reported is structural improvements and/or new buildings. All three villages invest in improving their homes, building livestock pens and/or building new homes. Cisterns were also important and many homes invested in them, but not all had managed to make these investments. Large brick and mortar cisterns were designed to hold water for household needs and were commonly designed to function as a terrace beside the kitchen. This area was used every day for preparing food, processing harvest yields, washing clothes and bathing. The location allowed the collection of rainwater from the roof. Some homes that had cisterns also had access to running water, but most did not. Many Kinh villagers do not have land suitable for fish ponds. Total investments of each investment category are calculated based on the number of people, the number of days and the materials costs to complete each investment. The next section lists the total investment costs for each village.

Cross-cultural Comparison of Long-term, Short-term, and Household Investment

Totals

For each investment, the total cost was calculated and listed in Table 5.4 below. Investment totals were determined by how many people multiplied by the number of days necessary to complete the investment (see equation above). Table 5.4 below shows long-term, short-term and household investment totals for each village in millions of Vietnamese Dong. For irrigation, Hmông do not invest at all. The Thái village invests 2.08 million VND, double what Kinh are investing. Terracing costs were zero for Thái and Hmông and very low for Kinh (0.42 mVND). Manure costs were highest for Hmông (0.418) and about half for Thái and Kinh villages (0.254) and (0.270) respectively. Agro-forestry investment cost is the highest investment for all three villages. In the past year, the average Hmông household invested 9.97 million. The Thái and Kinh village averages ranged from 2.35 to 5.53million VND. Agro-forestry during 2009 included bamboo, coffee, tea, and fruit trees. Kinh strategies indicate a general shift away from annual to perennial crops due to severe weather conditions in the drought-prone region.

Short-term investment totals for the Hmông village are 10.09mil VND. Thái and Kinh have similar average NPK investment rates, 1.83 and 1.35mil VND. Considering the agriculture property differences between Kinh (.21ha) and Thái (1ha), the NPK investment rate amount suggests the Thái are using on average less NPK fertilizer than Kinh households. Pesticide use remains low for Kinh (.08), Thái (.17) and Hmông (.08). Herbicide is used by all the villages and its use tends to increases with acreage, but its use remains relatively low.

Total household investments are important for all three villages and reveal cultural differences between the villages. Cistern investments are important for their water storage capacity and intermittent rainfall in the region before the monsoon period. The Kinh 9.54, Thái 3.33 and Hmông village invested an average of 12.0 million VND. Hmông homes are built on the ground and have large work areas that extend out from the cistern, increasing the functionality and possibly the cost of the investment. Thái stilt houses are elevated and Thái prefer to construct terraces that extend out at the same height as the home. Not all Thái homes (n=15) have invested in cisterns and Thái must borrow water from their extended families or gather water from ponds.

Structural investments are important in all three villages. Kinh have recently begun investing in large new homes in the town center. The average Kinh investment totals (209.46) are considerably higher than Thái (17.89) and Hmông (38.79). Pond construction was highest on average in the Thái village, reflecting environmental factors and natural capital that is more restricted with Kinh and Hmông. Thái villagers have access to a stream and can raise fish in their ponds in relative confidence. Kinh lack the land needed to make a pond and Hmông have the land but do not have good access to a stream. Investment totals for household, short-term, and long-term categories are compiled in Table 5.5. Household investment totals are the highest for all three villages, indicating more time and money are being allocated to this category. Household investment mean totals for each village are Kinh 219.12, Thái 22.68, and Hmông 50.87 million VND. Short-term investment totals drop down to 1.58 for Kinh for, 2.55 for Thái, and 5.58 million VND for the Hmông villages. Short-term rates are specific to the amount and kind of land owned and the crop raised that year. Prices vary according to the market, and therefore this investment will vary

Table 5.4 Cross-cultural Comparison of Village mean Investment Totals (mil VND)

Long-term	Hmông	Thái	Kinh
Irrigation	0	2.08	1.11
Terrace	0	0	0.42
Contour rows	0.09	0.01	0
Manure	0.42	0.25	0.27
Agro-forestry	9.97	2.35	5.53
Forestry	0.10	0	0
Mulch	0	0	0
Fence	0.14	0.49	4.81
LT Total	10.71	5.18	12.13
Short-term			
NPK fertilizer	4.65	1.83	1.35
Pesticide	0.08	0.17	0.08
Herbicide	0.86	0.56	0.15
ST Total	5.59	2.56	1.58
Household			
Cistern	12.00	3.33	9.54
Structural	38.79	17.89	209.46
Pond	0.08	1.46	0.12
HH Total	50.87	22.68	219.12

depending on the current price. Long-term investment totals for each village increase a little. The long-term mean totals are 10.71, 5.18 and 12.13 million VND for Kinh, Thái, and Hmông respectively. Investment mean totals are then changed into rates to compare amount of investment.

Cross-cultural Comparison of Investment Activities Using ANOVAs

To analyze the cross-cultural investment differences, I ran three separate analyses of variance (ANOVAs) on the long-term, short-term, and household rates using ethnicity (Kinh, Thái, and Hmông) as the explanatory variable in each case with an $\alpha = 0.05$. Table 5.5 lists investment rate means for each village. For example: Hmông LT Rate = LT Investment Total / (LT + ST + HH Investment Totals) = $10.71 / (10.71 + 5.59 + 50.87) = 0.2027$. For each village, HH, ST and LT rate mean sums total 100%.

The investment rates were generated from investment totals and used to compare differences in means using ANOVA. There are very similar rates between Thái, and Hmông in all three investment categories. The Kinh village invests more in the household and less in the short-term categories compared with the other villages. Overall, villages allocate anywhere from 65%-83% of their resources into households, and the remainder of their resources is divided up into the short-term and long-term investments.

Table 5.5 Cross-cultural Comparison of Household, Short-term, and Long-term Investments (million VND) and Rates (out of 100)

	Hmông	Thái	Kinh
HH Investment Rate Mean	0.6504	0.6838	0.8319
ST Investment Rate Mean	0.1469	0.1730	0.0615
LT Investment Rate Mean	0.2027	0.1432	0.1066
Investment Total Rate Sum	1.0000	1.0000	1.0000

Cross-cultural Comparison for Long-term, Short-term, and Household Investment Rates

For the short-term investment rates, the p-value of the test is > 0.05 , so there are no significant differences in average short-term investment rates among the groups (see Table 4.6 below). For long-term and household investment rates, however, the p-value of the tests is significant ($p < 0.020$ and $p < .015$ respectively). The cross-cultural ANOVA did find important differences in long-term investment activities. The long-term investment rate makes up approximately 10% for Kinh, 14% for Thái, and 20% for Hmông. For short-term investment, village rates are 6% for Kinh, 17 %for Thái, and 15% for Hmông. Thái, and Hmông villages have similar short-term investment rates and both farm extensively in the uplands and rely on NPK fertilizer to do so.

Household investment rates are similarly high for Thái, and Hmông villages (68% and 65% respectively), but Kinh have the highest average rate (83%). All three of the villages are allocating the majority of their investments into the household category. Smallholders are farming their land and then investing the remaining resources into their homes with new ponds, buildings and water storage systems.

Table 5.6 Test of Differences among Ethnicities in Long-term, Short-term, and Household Spending Rates (Analysis of Variance)

Rate type	Hmông (mean)	Thái (mean)	Kinh (mean)	Mean Square	F	P-value
Long term	.2027	0.143	0.107	0.069	4.09 0	0.020*
Short term	.1469	0.173	0.061	0.097	2.69 0	0.073
Household	.6504	0.684	0.832	0.261	4.39	0.015*

*significant

Long-term investments are the most important for the Hmông village; all three villages tended to make long-term investments beside their homes. It is around the home that expensive long-term investments tend to be made through planting crops such as coffee, tea, and fruit trees. These are not made along the steep hills but along the flat lands around the home. Investments in farmland tend to be predominately in short-term investments.

To determine where the differences are, I compared the mean rates of investment in each pair of ethnicities using SPSS post-hoc least significant difference (LSD) test. The 95% Confidence Interval for the difference gives us a range of possible values that the difference between the pairs of ethnicities could fall into (with 95% confidence). For long-term investment rates, the interval for Kinh–Hmông contains a negative number (see Table 5.7 below). This means that on average Kinh have a significantly lower long-term investment

rate than the Hmông village. Looking at household investment rates, the intervals for both Kinh –Thái and Kinh—Hmông contain only positive numbers, meaning that on average Kinh have a significantly higher household investment rate than either the Thái or the Hmông villages. Additionally, ethnic minority groups are allocating nearly half of their investment rates into their homes. Since short-term investment rates were not significant with ANOVA, no post-hoc test is needed.

For long-term investment rates, the mean difference -0.0961 between Kinh and Hmông falls within a 95% Confidence Interval. The negative mean values indicate Kinh village has a significantly lower short-term investment rate than the Hmông village. Hmông are investing more in farming than Kinh, which is expected since they have more land. Thái have more land than Kinh; however, the mean difference are in short-term investment rates is not significant.

Table 5.7 Test of Differences between Ethnicities in Short Term and Household Spending Rates (using 95% Confidence Interval)

Rate type	Kinh - Thái Mean	P-value	Kinh - Thái 95%CI	Kinh - Hmông Mean	P-value	Kinh - Hmông 95%CI	Thái - Hmông Mean	P-value	Thái - Hmông 95%CI
Long-term	-.037	.560	-.1209 .0477	-.0961	.023	-.1815 -.0106	-.0595	.560	-.1392 .0202
Short-term*									
Household	0.148	.022	.1481 .0636	0.181	.006	.1815 .0644	0.033	0.580	-.0860 .1528

*not significant

For household investments, the positive mean values 0.148 for Kinh—Thái and 0.181 for Kinh—Hmông in household investment rates fall within the 95% Confidence Interval. Kinh have significantly higher household investment rates than do the respective Thái, and Hmông villages. The higher household investment activity signals an important

change of livelihood strategies. Investing more resources in the home shifts resources away from important farmland investments. The Kinh village is investing in its households in several ways: 1) new Kinh homes are much larger, up to four stories tall, allowing the lower story to be used for commercial activities; 2) most Kinh homes have relocated to the commune center and along roads heading to the commune center. The shift to larger homes that are centrally located is movement away from farming toward a diversified economy.

The investment mean difference between Thái—Hmông is not considered statistically important because 95% Confidence Interval range includes the value zero. Because the Confidence Interval includes the value zero, the actual difference between the groups may in fact be zero. Hmông and Thái have similar livelihood strategies and investment practices.

Discussion

This chapter examined predictions of the liberal paradigm by comparing land investments between three ethnic villages. The three villages are topographically different enough from each other resulting in different types of agriculture. Are these differences a reflection of culture/ethnicity or topography? According to the liberal paradigm, secure private property rights allow smallholders to make long-term sustainable investments (De Soto 2000; Harvey 2006; Johnson, et al. 2002). The liberal economic theory argues that private property rights provide the actor the potential for developing capital more efficiently than state ownership (Barro 1991). In microeconomics, the individual rationally

chooses to maximize his/her opportunities and minimize his/her costs in all situations (Carling 1992; Scott 2000a). Accordingly, culture or ethnicity should have no significant bearing on the individual's investment choice. The results of the ANOVA provide a mixed assessment of the liberal paradigm that provides some support while challenging its assumptions on the influence of culture. On the one hand the results of the ANOVA suggest culture influences long-term and household investment strategies. On the other hand when I analyzed short-term investment rates cross-culturally, I found no significant differences in short-term investment rates supporting the rational choice model within the liberal paradigm. The negative difference in the long-term investment rates between the Kinh—Hmông interval reveals Hmông on average invest at a higher rate, suggesting a difference that is culturally or environmentally linked. In the household investment rate category, the Kinh village invests on average significantly more than Thái, and Hmông villages. These findings challenge the rational choice model and suggest culture is important and can influence economic behavior. Differences in investment rates can be largely explained through cultural norms and behavior between Kinh and other traditional ethnic minorities. Kinh are culturally distinct from the highland ethnic groups. But how different are Thái and Hmông from each other? They both farm upland slopes. Traditionally, Hmông have not had access to the highland valleys, however it is likely any agricultural variation is best explained through differences in topography. Hmông are earning more income and may be more inclined to embrace new technologies as a result.

There are discernible investment differences between (lowland) Kinh and traditional highland Thái, and Hmông ethnic groups. Even though Thái, and Hmông are culturally distinct, they are more alike than different and tend to employ similar

investment strategies. The Kinh village stands out culturally from ethnic minorities in three important ways: they practice only lowland farming, they have better access to new information, and have a proclivity to engage in market activities, as demonstrated by the large number of Kinh businesses.⁹¹

Kinh smallholders do not farm in upland areas in part because they have no historical experience of doing so, and more importantly they have no need to do so. Kinh agriculture practices are to grow wet rice wherever there is running water and corn and/or perennial crops such as coffee, tea or fruit trees in dry-land areas. Most Kinh households with forestland leave the forest alone to grow.⁹² They do not use the forestland to grow crops or collect firewood. In contrast, Thái, and Hmông are comfortable farming upland regions, having done so for hundreds of years, and continue to rely on the land for both cultural and economic reasons. The main upland crops include dry and sticky rice, corn, and cassava. Sticky rice is a staple food for Thái and Hmông and is traditionally grown only in upland areas. What has changed for Thái and Hmông now that they have RBCs is that they are intensively farming uplands instead of leaving them in fallow. According to one respondent, “Sau khi có sổ đỏ thì đầu tư nhiều nhất là thời gian. Khoảng thời gian nhiều nhất dành cho canh tác là cày, cấy, làm cỏ. Ví dụ trồng ngô, nếu sau 1 tháng, thấy có nhiều cỏ thì phải nhổ cỏ; lần nhổ cỏ thứ 2 trước khi cây ngô ra bắp. *After the red book [certificate], the biggest investment is time. The time period for most farming is plowing, transplanting, weeding. For example, planting corn, if after one month, they have found many grass weeds; 2nd time weeding before the corn maize*” Smallholders are investing more time than money in their fields and they

⁹¹ Kinh in other areas have farmed in upland areas. In Phòng Lái Kinh wirth forestland did not grow crops on the land.

⁹² However, Kinh are responsible for the vast majority of illegal logging operations.

are farming the land more intensively. The change to more permanent upland farming is replacing forestland and increasing soil erosion in the process. Upland areas with a previous agriculture claim are now used for agricultural purposes. Upland areas in this category are encouraged to be farmed and can be claimed by others if the land is not in use.

Here a respondent describes the need to judiciously apply fertilizers. Nếu thấy đất bạc màu thì mua phân đạm NPK. Phân đạm không bón nhiều để giảm chi phí, một vụ chỉ cần bón phân đạm 1 lần. Nhà tôi phân bón ruộng thì chủ yếu bón phân chuồng. Phân đạm không biết có chất gì, bón được 1-2 năm thì đất bạc màu hết. 1ha khoảng 3-5 tấn phân chuồng. Phân chuồng gia đình lấy từ phân gia súc, không phải mua. *If soils are found [wanting then I need] to purchase NPK fertilizer. Fertilizer, not much fertilizer to reduce costs, a nitrogen fertilizer for just one time [use]. My house is mostly farm fertilizer or manure. Fertilizer [I do] not know what [are the] substances, fertilizers are 1-2 in the best soils. 1ha about 3-5 tons of manure. Manure family comes from cattle dung, not to buy.*” The need to manage soils has become an important part of the farming in the highlands. Since fertilizer is expensive, smallholders prefer to use manure.

What do these differences in farming practices mean for investment rates? Thái, and Hmông have a challenge making long-term investments in the uplands. This is especially true for Thái who have little choice but to farm in the uplands where land is widely dispersed. The significantly higher Hmông long-term investment rate is explained by historical and cultural factors. For centuries, Hmông have relied only on upland farming due to political pressure from Thái who dominate the lowland areas. As a result, Hmông traditionally lived in the highest elevations in the mountains, moving the village when the upland soil became depleted. This pattern kept Hmông from settling down and being

controlled by government bureaucracy until the 1980s. The Hmông have only upland parcels but have been given more land in compensation. Since land quality is relatively similar, the land was allocated in larger sections, making long-term investments at least partially more efficient. With more land, long-term investments such as agroforestry are higher compared to Thái and significantly so compared to Kinh. The Kinh long-term investment rate is lower because there is less lowland land to farm. Kinh are investing far more in the household investment category in part because there is so little land worth investing long-term in the commune. There are no significant differences in average investment rates (long-term, short-term or household) between Thái and Hmông. That is to say, their investment activities are culturally similar. Both ethnic minorities farm predominately in the hills for their livelihoods, while Kinh do not. Farming activity along the steep valley slopes reveals similar investment activities between Thái, and Hmông. Both rely on short-term investments to grow crops and some long-term investments.

The greater the distance, the harder it is for the family to care for the land. Of all the villages, Thái are at the greatest disadvantage in making investments due to their limited access to land and the greater dispersion of land. Even though the Hmông village consists entirely of upland parcels, the village has more concentrated land on average than the Thái village. Compared with the Thái, Hmông can work more efficiently at farming their land. The 1993 Land Law opened the opportunity for Kinh to sell their agricultural land and move into town. Kinh livelihoods are often derived from their property as well as from other employment.

Structural investments in the household for the Thái, and Hmông village are less in part because many are either improving their existing homes or building structures for

their livestock. Those who are building new homes are choosing culturally modern homes smaller and less expensive than Kinh homes. Thái and Hmông homes rely on lumber from the forest and labor from their extended family. Payment is often covered through the sale of livestock rather than bank loans. In Phông Lái commune, Thái, and Hmông homes are single story and made from wood. Kinh homes can be more than three stories tall, made from brick and mortar, and take over a year to construct, relying on hired labor. These large homes rely on bank loans that exceed the credit available to ethnic minorities. From my observations, many of the households are living in squalor and have very few possessions; although Thái have the least wealth, Hmông possessed only marginally more. It is not hard to imagine that all the villagers are eager to improve their homes with more consumer goods.

Kinh have more opportunities for advancement because they are part of the Vietnamese culture. They are quickly aware of new technical information and can better take advantage of opportunities as a result of being in or near the center of the commune and by virtue of speaking the national language fluently. One example of this is that nearly every Kinh household understands their property rights because they are close to the source of information and have a better social network to share information about opportunities.

Thái, and Hmông have fewer opportunities to get access to information since they do not participate in as many government activities. Most Thái, and Hmông farmers rely on each other and the village headmen for farming information instead of attending government meetings in town. They reside outside the commune center and go there mainly for supplies, to visit a market, and to send their children to school. Kinh have

greater interest, access and ease in participating in government programs, giving them better access to crop information and loans. In the past, loans were available to the members of government groups such as youth, women, farmers', and the veteran's unions. In the past, households belonging to more than one union could apply for more loans. Today, this practice is no longer permitted, but in the past, Kinh benefited from having access to more loan opportunities. Today large loans are given to successful (Kinh) families who are good at business and likely to pay back the loans. Never mind that these loans can be large and take years to pay back, depleting resources available to the rest of the commune.

And lastly, Kinh have a cultural proclivity to engage in business that Thái, and Hmông do not share historically. Although Thái have a history of taxing and working as traders, they did not establish businesses to sell goods to each other (See Chapter 4). Kinh business opportunities are argued to be successful to a higher degree because of their distance from their lowland Kinh (Bonnin 2011). In addition to farming, Kinh prefer to engage in the market activities directly from their homes. Large homes are being built to start new businesses along roads and town centers. When the 1993 Land Law passed and was finally implemented in 1999, many Kinh took the opportunity to move closer to the commune center and out of growing crops. Kinh have a long cultural tradition of market activity and have seized the opportunity to enter into the market and diversify their economic activity by opening businesses to sell goods and services.

In contrast, both Thái, and Hmông smallholders are largely excluded from the market. They have less opportunity to get business loans in part because they have less access to financial institutions as a result of the language barrier and they face more

cultural resistance from their communities. By their own cultural norms, their identity continues to be largely tied to the land and farming. The few Thái who do sell goods in the commune do so only in the open-air markets. On any given day, a handful of Thái women will sell produce in small bundles for 1000 VND (~0.05\$). In the Thái village, there is only one small business selling a few goods and a small amount of rice wine. In the Hmông village, there were two small businesses. A few households managed to save up and purchase large dump trucks and earned part-time work as middlemen. Their business involved collecting corn around the village and transporting it to be processed. Another business in the Hmông village involved a banquet hall for Hmông weddings. As of October 2009, there were no restaurants or general stores in either village.

From the lack of knowledge on property rights, one may draw a few conclusions. First, many Thái, and Hmông households do not believe they have any restrictions in their land tenure. Nearly all households who reported mistaken tenure length believed their property was theirs for their lifetime. This suggests limited land tenure is not a significant factor for Thái, and Hmông smallholders. Most smallholders were unconcerned about the actual length of their land tenure and more concerned about getting through the year with enough food to eat. Smallholders often reported their land tenure extended for their lifetime. Those that did understand their property rights seemed to be fixated on the present rather than the future. Thus from my understanding and observations, the future held very little significance for most smallholders in terms of investment decisions.

Across the villages, farmers understand property rights in different ways. The majority of Kinh interviewed demonstrated a clear understanding of their land tenure, but the majority of Hmông were confused about the length of their tenure and Thái were

confused about what their property rights were in general. Of the three ethnic groups, the majority of Thái, and Hmông are the most misinformed about their property rights. For instance, a common statement, *"My RedBook says my land is forever."* This statement reflected the largely belief shared of many Thái and Hmông that their property belonged to them and was secure. However, this fear was articulated by another Thái smallholder, *"I hope the agriculture lands will be redistributed again. I need more land. The bank will only give me a loan for 12 million VND. That is not enough to do anything worthwhile."* Here was the problem. On the one hand, many smallholders were very secure with their land rights, but they may have also been less likely to want a bank loan or make large investments. But the desire for more land by way of redistribution reflected a desire for tenure insecurity, in accordance with traditional Thai land practices. Ironically, this system would encourage him to make more investments, contrary to property rights theory. But with only a small parcel of land, his capital was low and he could not get a decent bank loan. Smallholder ignorance of property rights may be restricting the villages in getting loans and making improvements in their land. In addition to the financial implications of misunderstanding property rights there is a cultural dissonance between the Kinh and ethnic minorities. Thái and Hmông rely predominately on village leaders to provide them with information about their property rights and about what to farm on their lands. Also, the legal system reflects Kinh culture, not Thái or Hmông culture. A Thái neighbor shared her thoughts about ethnic relations in the commune *"When Thái and Hmông do not speak Vietnamese well, they feel intimidated around Kinh. For example, we are not allowed to stand in their homes or businesses to get out of the rain."* These revealing comments indicate a strong disconnect between Kinh and ethnic minorities. Many minorities often leave school early and may not

have a strong command of Vietnamese. A lack of fluency in Vietnamese means ethnic minorities are largely excluded from government services and institutions. Thus perhaps it is not surprising that there is variation in understanding the legality of the property rights.

Conclusion

This chapter compared short-term, long-term, and household investment rates between Kinh, Thái, and Hmông ethnic groups using culture as a factor of analysis. All three villages are located within 8km of each other and share similar biophysical conditions that shape the distribution of natural resources. These differences in topography, access to water and land holdings offer a very good basis for explaining the investment differences between each village, I also argue there are important differences linked with culture. Counter to neoclassical economics, cultural factors regarding land use and land investments are important to consider in highland development in Vietnam. However, there is support for the liberal paradigm when land tenure is considered.

In the context of changing land tenure and market liberalization, the liberal paradigm offers a framework to analyze how ethnic farming communities are making investments on the land. The liberal paradigm predicts smallholders will make long-term investments on their land because they have tenure security. The results of the ANOVA tests on investment practices using ethnicity as the measurement suggest culture is important and challenges the liberal utilitarian assumptions of rational behavior. The Kinh rely less on crop production for income and are therefore less concerned with long-term

investments, but they have better access to financial capital compared to the Thái and Hmông villages. The Thái community relies on crops for their livelihoods, but is considerably poorer and has on average less income to allocate toward long-term investments. For Hmông smallholders who predominately raise crops, long-term investments are more important to them.

Another cultural aspect to consider here is that Kinh do not farm in the uplands, which are classified as forestland. Most Kinh will leave the uplands alone and collect money from the state to grow forest. This is another difference in village resources and cultural use of the resources between Kinh and ethnic minorities.

The household investment results are divided between lowland Kinh and traditional highland Thái and Hmông villages. Culturally, Kinh are investing much more into their homes and have moved into town along the main road. With their new multistoried homes, Kinh can open small businesses and raise livestock. Culturally Kinh are good at doing business and have taken advantage of the new economic opportunities with the liberalization of land. They are described as possessing different “mindset” compared to ethnic minorities. Kinh have largely moved away from farming and have begun to diversify their economic activities. This reflects the difficult environmental conditions of the commune. Kinh have shifted their livelihoods to diversify their economy by selling goods and services to the agrarian community. In contrast, both Thái, and Hmông tend not to enter into economic activities to the same degree as Kinh. For example, instead of seeking profit maximization, Thai and Hmông tended to view “transactions as social relations between people in which one needed to treat and be treated fairly and generously” (World Bank 2009: 219). I experienced this firsthand when I sold most of my goods to my Thái

host family, I told it that I seller should give some money back to the buyer to ensure good feelings. Another reason why market participation by ethnic minorities is limited is that commodities are often sold below market value to Kinh traders since the harvest is unprocessed. Many ethnic groups sell low and buy high in their market transactions compared with Kinh. Another barrier to the market includes language, a problem that keeps many women from participating in the market. With limited Vietnamese there is a restriction on access to information and trade opportunities (see World Bank 2009: 210-220). There is a major cultural divide between Kinh and the ethnic minority groups. The 1993 land law enabled Kinh to sell their farmland and relocate into the commune center, forming an economic center. These opportunities may develop for Thái, and Hmông in the future, but for now they continue to farm.

Farmers in all three villages are applying chemicals on the land. The Kinh have much less land, but are using enough herbicide and pesticide in addition to fertilizers on their fields to offset the land gap. For long-term investment rates, interval differences were significant between Kinh—Hmông. These findings suggest that culture does have real economic outcomes and should be taken into consideration in marginal areas like highland Vietnam. Investment rates were lower for Kinh, but not when compared with the Thái long-term rate. Thái and Kinh have similar long-term investment rates for their land. While Hmông are investing more in long-term investments than Kinh, there is no important mean difference with the Thái village. Land use rights are creating a more diversified economy based on cultural values and opportunities. The results of this study suggest the rate of economic development varies significantly between traditional ethnic minorities and Kinh.

My findings do not support the economic argument made by Deininger and Feder (2001) or DeSoto (2000; 2002). Having a formal land title is not necessary to make long-term investments, lending support to Bromley (2009). More research is needed, but it appears that formal title is not an important factor for making investments to smallholders in Phông Lái commune. This may be due to the limited credit available to them as well as the limited market opportunities. The largest investments go into housing construction, which coincidentally are often new businesses. For smallholders in this study, land is not seen as “privately owned” and household investments have more certainty and prestige.

Overall, smallholders are investing more resources into their house property, which in many cases includes a garden. The liberal paradigm predicts a higher investment with longer land tenure. This suggests smallholders are more secure in their household property than their agriculture property. Vietnam has a history of land redistributions, and smallholders may in fact be hedging their bets by investing in the most secure land (Saint-Macary, et al. 2010). If horticulture investments were done, they were most likely going to be around the household property rather than on agriculture lands. The household property was the most secure property available in both a literal and figurative sense. Horticulture investments and other property located around the house may be appealing since investments can be protected.

The results of this study reveal that geography and culture play a significant role in investment activity, challenging the notion that individuals act “rationally”. Kinh more than ethnic minorities have shifted to meet market demands. They have successfully established businesses from their homes, work as middlemen, and offer services to the community. Thái and Hmông continue to rely on agriculture. Overall the results suggest cultural

attributes are important and have economic implications regarding long-term and household investment activity.

CHAPTER 6

ANALYSIS OF INTRA-VILLAGE LAND INVESTMENT STRATEGIES

Introduction

In the previous chapter I discussed differences between villages. This chapter examines differences within each village. The next chapter investigates investments at the household level across the entire commune.

Vietnam has undergone radical agrarian reforms as it makes the transition from a state-planned to a free-market economy under the guise of socialism. In rural areas, policy reforms led to economic improvements such as access to improved technology and more choices in goods and services. The dismantling of collectivized agriculture and the establishment of household responsibility systems in farming, along with the commercialization of agricultural production, fall under the umbrella of policy reforms, collectively known as *Đổi Mới* [renovation]. Since 1986, *đổi mới* policies have instituted important reforms in land use, designed to move agricultural activities and responsibility toward a market-based economy by handing farm management decisions over to households. As part of the transition, the 1993 Land Law was a significant institutional reform, which established a quasi-private property regime in the form of allocated land use rights. These institutional reforms were intended to: 1) improve household decision-making capacity; 2) improve productivity; and 3) to encourage the conservation of natural

resources (Saint-Macary, et al. 2010). Households were thus allocated long-term land use rights to promote sustainable investment practices.

While, broadly speaking, *đổi mới* policies have raised the standard of living by creating economic growth, the standard of living has increased only marginally in the highlands (Broad 2006; Le Cao Doan 1995). Population pressure has increased in Northwest Vietnam over the last twenty years, including settlement by Kinh, and agriculture policies that encourage upland production have further increased that pressure in the steep upland areas adjacent to lowland valleys. Greater demand for food and silage for livestock has also opened up the steep erosion-prone slopes to maize production (Dao The Anh, et al. 2005). “Soil erosion and landslides have become important issues as they led to reduced soil fertility in the uplands, sedimentation of lowland water reservoirs, irrigation channels, and paddy fields as well as damaged road infrastructure” (Saint-Macary et al. 2010:1). If the current land use practices continue unchecked, the rate of erosion will threaten the agricultural sustainability of the Northwest region of Vietnam, as well as damage infrastructure and harm the integrity of nearby watersheds, which serve as an important source for drinking water in the lowlands. Long-term investments in soil conservation are important for sustainable land use not only for farmers but also for the wider Northwest region and lowland populations. Analyzing investment practices of highland smallholders is therefore important to the sustainability of the entire region.

Chapter 4 considered investment practices and differences in investments among three villages of differing ethnicity (Kinh, Thái, and Hmông) according to various cultural factors. Differences in investment strategies among highland ethnic minorities and lowland majority Kinh were evident. The lowland Kinh invested more in their homes than in

farming practices, primarily because they rely on income that can be generated from their homes. In contrast, Hmông and Thái villagers rely on farming for their livelihoods and have similar investment practices that include more evenly divided spending between farming and household investments. In this chapter, the focus is within each village. I examined differences in social class within villages to assess class-based differences such as formal land title, wealth, livelihood, income, amount of land, education, livestock holdings that could explain investment practices. Class is a complex attribute of society, one that attempts to capture differences in wealth, access, and political power. Despite its complexity, class is a useful concept since it can provide a gradational measure of how to discern standards of living, indexed by income, wealth, or for instance, the amount of material goods one possesses. Class can be described rather simply using a gradational concept (e.g. lower, middle, upper class) or in a more complex manner via a relational conceptualization that measures life chances (Weberian) and dialectics over resource control and use (Marxism) (Wright 2005). In this study, I define class based on income, land title, farmer type (subsistence/market producer), material wealth, education, family size, agriculture and forestland holdings, and per capita livestock.

The theory of property rights linking property rights with investments largely ignores class related socio-cultural factors. Đổi Mới reforms in the highlands led to a decrease in funds for infrastructure, a decline in health, education, and welfare services, and the depletion of natural resources (IDA 2007; Kerkvliet and Porter 1995; Seldon 1993). The effect of these outcomes has led to a highly economically and socially stratified country where there is widespread poverty across the highland areas. With three-fourths of the population living in rural areas, comprising about 90% of the poor, *sustainable* rural

development and agriculture are important to the success of Vietnam's economy (World Bank 2007).

By focusing on the differences in investment types and rates within Hmông, Thái and Kinh villages, this chapter examines land distribution, farming strategies, and long-term investment practices across Kinh, Thái, and Hmông communities and addresses the following question: *Do class-related variables influence smallholder investment rates?*

According to classical economics, individual actors operate using rational behavior to maximize personal gain. The following hypothesis is tested: *Wealthy households with agriculture and forestland title will invest a greater portion of their wealth into long-term investments while poorer households will primarily make short-term investments.* The logic being that with more income, households will be more likely to make long-term investments and enjoy a return sometime in the future, compared with less well-off households.

Social Class and Investments in Land

I define class by combining concepts from Weber and Marx. For Weber, Social class broadly encompasses a “multidimensional schema of stratification” that determines one's life chances by opening opportunities necessary for success. Differences in social class are classified into lower, middle, and upper class. Social class stratification provides a means of investigating differences in society based on objective measurements of economic inequality, rather than relying on subjective measurements of status such as ethnicity,

citizenship, power, or institutional forms of discrimination (Wright 2005:2). In capitalist societies, class plays a central role in stratification due to the continual transformations in technology and economics. Weber's concept of class as market-determined life chances is based on his work in *Economy and Society* (1978). Weber writes:

We may speak of "class" when (1) a number of people have in common a specific causal component of their life chances, insofar as (2) this component is represented exclusively by economic interests in the possession of goods and opportunities for income, and (3) is represented under the conditions of the commodity or labor markets (Weber 1978; cited in Wright 2005:4).

Weber's concern with life chances can be briefly summarized as how the quality and quantity of goods and resources in one's possession affects one's opportunities for income and market exchanges.

For Marx, class structures and changes in those structures were essential to understanding capitalism and modes of production. Class divisions and struggles are part of the nature of capitalism. Class structures are formed around work and labor, and ownership or possession of property and the means of production (Marx and Engels 1993[1848]). Economic factors shaping class formation were deemed more important in the formation of industrial societies rather than in earlier agrarian societies. Marx outlined two main classes –the bourgeoisie and proletariat in capitalism –but recognized a broad array of other classes including landlords, petty bourgeoisie, and peasants among various others (Giddens 1971). Bourgeoisie or capitalists are the owners of capital, purchasing and exploiting labor to gain wealth through using more capital investments. Expansion of wealth and commerce necessitated greater market freedom. Landlords were considered at one time to be a dominant and powerful class owning the means of production and organization. These resources would later be converted into landed capital, which differs

from industrial capital, and was used to accumulate capital. Land and possibly labor was employed by landowners as a means to expand capital. Marx predicted the outcome of peasant would be displacement and dispossession of their property (Marx 1992).

Class then for me combines the benefits and limitations described by Weber and the concepts of class struggle described by Marx. In Phỏng Lái, class differences are very subtle, yet it is widely acknowledged by the government, community, and households that stratification exists. For instance, in Khâu Lay village, Thái leaders are not randomly chosen. This reflects their traditional stratified society. I asked a Thái smallholder if he could become the leader and he said could never be considered. Being part of the leadership means these families have access to forest preserves that exclude other Thái community members. In this study, I considered wealth, education, income to be a part of what defines and makes class.

Rural communities are often stratified in terms of wealth and natural resources, which can influence their investment activities and land use. Research has shown poor farmers have more incentive to make long-term sustainable investments such as soil conservation than wealthier farmers (Brocheux and Hemery 2009 cited in Shively 2001). Since not all long-term investments require high investment costs, have binding subsistence constraints, or credit failures that might preclude households from making the investments. Holden et al. (2010) argues that poverty and cash flow constraints decrease rates of time preference and thereby reduce incentives for sustainable management of natural resources in poor households. However, (Barbier and Lopez 1999 Cited in Shivley 2001) counter, arguing household resource investments in natural resources are ambiguous. They suggest that when households are linked with credit constraints,

smallholders will likely increase the rate of resource degradation rather than make in long-term investments.

Since natural resources are critical to the sustainability of smallholders they are therefore especially vulnerable to environmental degradation (Cavendish 2000; Dasgupta, et al. 2004; Hart 1982; Hart 2000; Hart and James 1999; Kepe 1999). Poor smallholders may be induced to exploit resources for short-term gains over long-term sustainability (Fernandez 2010; Grassi and Hart 2010; Smith and Schneider 1948). Over-use of natural resources can create a “downward spiral” of land degradation and chronic poverty (Bank 1992; Cleaver and Schreiber 1994; Dasgupta and Maler 1994; Mink 1993; Prakash 1997; World Commission on Environment and Development 1987).

Background

A more thorough background is detailed in chapters two and three. The Northwest mountains of Vietnam can be divided into three ethnoagricultural zones, which have distinctive cultural landscapes (Trần 2003). Low lying areas along the valley bottoms have better access to water and markets, and warmer temperatures, and are predominately occupied by Kinh and Thái who grow irrigated rice in village collective perimeters (Jordan, et al. 2011). The middle or intermediate zone is often inhabited by Yao and Thái who rely on composite agriculture systems (Lam, et al. 2004) which combine irrigated rice fields and intensive crops in lowland areas and upland rain fed crops (dry rice, maize, cassava) interspersed with fallow fields. The upper level is more difficult to access, water is scarce,

and there are cooler temperatures, which impedes agricultural production. Residents of this zone are commonly Hmông who arrived more recently in Vietnam compared to other ethnicities. Agriculture is done along steep slopes and relies on dry rice, maize, and livestock. Where water access is available, landscapes are terraced. In the 1960s, the Vietnamese revolution changed the distribution and placement of many ethnic groups through resettlement programs and production cooperatives which concentrated people in the lower and middle areas (Jordan, et al. 2011). The state promoted the development of irrigated rice, tea, and maize production systems through its cooperatives to reduce swidden agriculture.

The 1993 Land Law sparked a rush for available farmland. Households sold and exchanged land either to get out of farming or to expand their holdings. Soon all available land was claimed and smallholders began working the lands more intensively. Many Kinh families took advantage of the effects of the 1993 Land Law by buying property from the Thái village that was along the main road and near the commune center. After some of the Thái village parcels were sold, the Thái village leader banned further parcels from being sold to protect the remaining village farmland. Government policy determined the value of agriculture land based on the profit gained from agricultural production – a very low value⁹³ (Dang Hung Vo 2009). While market forces changed to improve land management, the process has created more than 30,000 official disputes and complaints over property rights filed at the Ministry of Natural Resources and Environment between 2003-2006 (Dang Hung Vo 2009). These complaints are mainly along the peri-urban boundary, and in large urban centers with new commercial and industrial development. The pressure to

⁹³For cases when agriculture land is converted to non-agricultural uses, an additional 20-50 percent of the value is to be applied when converted to residential property.

access land and to make a living is increasing dramatically due to the expansion of city growth and other development that is taking up land that could potentially be used for farming. Smallholders are thus encouraged to fully exploit upland slopes for intensive agricultural production or risk losing unused land to other households. Shifting agriculture continues in remote forested areas that are difficult to access and hard to monitor by the government. Hmông land that is closer to the village is used intensively and is rarely left fallow.

Methods and Data

The empirical data used in this chapter are the product of my 10-month dissertation fieldwork on smallholder land investments in Northwest Vietnam in 2009. During fieldwork, communication occurred in Vietnamese and in English and was facilitated by a translator. Semi-structured interviews, formal interviews, and direct observation were the main methods of data collection.

In each village, Kinh (N=26), Thái (N=34), and Hmông (N=32) households were randomly selected to participate in a formal survey to discern how each family made investment choices on their property. Each household had access to property either through the head's parents or through a red book certificate (RBC). Each RBC contains household property and most have a combination of forest and agricultural lands. Household data measured income and expenditures relating to the farming and household structural needs. Whether working as a construction worker or field hand, the average wage for day labor in the commune is 20,000 VND (\$1US). This figure was used as a

measurement of labor cost in calculating investment costs. Total investments are expressed mathematically in the following equation:

$$\text{Total Investment} = [\text{number of people} \times \text{number of days (20,000 VND)}] + \text{material cost.}$$

For example, if five people build a fence using materials from the forest, for a total of five days, the total cost would be: $[5 \times 5(.02)] + 0 = 0.5 \text{ million VND}$. Investments were divided into three categories: short-term, long-term, and household (Table 6.1). As most smallholders have household in addition to farming property, investments specific to the home improvement were evaluated and compared against investments specific to farmland. The rates were calculated as follows:

- **Short-Term Rate** = Short-Term Investment Total / (Long-Term + Short-Term + Household Investment Totals)
- **Long-Term Rate** = Long-Term Investment Total / (Long-Term + Short-Term + Household Investment Totals)
- **Household Rate** = Household Investment Total / (Long-Term + Short-Term + Household Investment Totals)
- **Farming Rate** = Short-Term Investment Total + Long-Term Investment Total / (Long-Term + Short-Term + Household Investment Totals)

Table 6.1 Agricultural Investment Variables and Definitions

Investment Category*	Investment Variables
Short-term	<i>Chemical fertilizer (NPK) application, herbicide, and pesticide use</i>
Long-term	<i>Irrigation systems, fence and terrace construction, contour farming, manure and mulch application to fields, agroforestry, and forestry systems</i>
Household	<i>Cistern construction, housing structures (home use and/or livestock), and pond construction</i>
Farming Investment	<i>Short-term + Long-term investments</i>

*Investment categories are designed to isolate which investments promote sustainable operation of the farm from an ecological perspective. All three categories can be linked with production. Household investments

provide a long-term investment do not contribute to the health of the soil. Farming investment category, combines short-term and long-term investments in soil to contrast with household investments.

Because the ethnic groups vary significantly historically, linguistically, and culturally, village samples are analyzed independently. To determine the factors influencing farm investments, the average amount spent on investments in land within each of the three villages is contrasted using Analysis of Variance (ANOVA). The socio-economic factors of each village are explored to assess their effect on smallholder decision-making strategies, which are further extrapolated to regional scale and tested against predictions from the theory of property rights.

Results

Village mean investment total and mean investment rate statistics are compiled in Table 5.2. In all three villages, household investment totals have the largest range and the highest standard deviation of the three categories. Short-term and Long-term investment totals have smaller ranges, but the standard deviation for all categories is the same or higher than the mean. Investment rates display the percentage of investment in each category based on the total investment amount reported in each household.

Hmông (Năm Giết) Village Investment Descriptive Statistics

Hmông village household investment totals have the largest range and the highest standard deviation of the three categories (Table 6.2). Long-term investments are nearly

double the investment amount of short-term investments. However, the rate difference is accounts for only 20% compared to 15% for short-term investments.

Table 6.2 Village Investment Category Totals and Rates

Village	N	Investment totals and rates: mean (SD)			
		Short-term	Long-term	Household	Farming
Năm Giắt (Hmông)					
Total, mVND	32	5.6 (5.1)	10.7 (9.2)	50.9 (78.1)	
Rate	32	0.15 (0.18)	0.20 (0.13)	0.65 (0.13)	0.35 (0.22)
Khâu Lay (Thái)					
Total, mVND	34	2.6 (2.8)	5.2 (11.8)	22.7 (21.4)	
Rate	34	0.17 (0.20)	0.14 (0.12)	0.68 (0.24)	32 (0.24)
Đông Quân (Kinh)					
Total, mVND	26	1.6 (2.7)	12.1 (14.1)	148.8 (142.0)	
Rate	26	0.07 (0.18)	0.06 (0.14)	0.82 (0.27)	0.17 (0.27)

Thái (Khâu Lay) Village Investment Totals Descriptive Statistics

Thái village mean investment totals and mean investment rate statistics are compiled in table 6.2. Short-term investment totals have the smallest range and the lowest standard deviation of the three categories. Long-term and Household investment totals have larger ranges.

Kinh (Đông Quân) Village Investment Totals Descriptive Statistics

Kinh village mean investment totals and mean investment rate statistics are compiled in table 6.2. Short-term investment totals have the smallest range and the lowest standard deviation of the three categories. Long-term and Household investment totals have larger ranges.

Table 6.3 Test of Overall Differences Between Spending Rates Across Ethnic Groups (T-tests)

Rate Difference Type	Overall Mean Difference	Overall SD	Df	T-statistic	Overall <i>P</i> -value
Long-term-Short-term	0.021	0.216	91	0.936	0.352
Long Term-Household	-0.561	0.356	91	-15.108	0.000*
Short-term-Household	-0.582	0.430	91	-12.989	0.000*
Household- Farming	0.428	0.484	91	8.492	0.000*

*Significant at $\alpha < 0.05$

To test for differences between investment rates across all three villages, a series of intervals (listed below in Table 6.3) were compared using t-tests. The results of the overall t-test indicate the average long-term investment and short-term rates do not differ significantly (P -value= 0.352). Average long-term and short-term investment rates were similar. Average household investments are higher than both long-term investment and short-term rates (for both P -value< 0.0001) and even farming investment rates (P -value<0.0001). The following set of analyses examined class variables at the village level. T-tests within each ethnic group are described in table 6.4.

The Kinh, Thái, and Hmông villages all show average short-term and long-term investment rates are significantly lower than household investment rates, and when short-term and long-term rates are combined, household rates are also significantly higher than farming rates. Put another way, villages appear to be homogenous in terms of how smallholders are investing resources, as is clear from the histogram in Figure 6.1. It is also true that household investments are naturally higher in cost on average compared to other categories. Measuring these categories again at a later date could lead to a shift in

investment activity. The current investment activity elucidates the significance of the household category to the community.

Table 6.4 Test of Differences between Spending Rates, and Differences Between Spending Rates within Villages

Village	Df	LT-Household	ST-Household	Household-Farming
Năm Giắt (Hmông)				
SD (t-statistic)	31	-4.448 (-8.096)	-0.503 (-8.096)	0.301 (3.852)
p-value		0.000*	0.000*	0.001*
Khâu Lay (Thái)				
SD (t-stat)	33	-0.541 (-9.719)	-0.511 (-6.936)	0.368 (4.425)
p-value		0.000*	0.000*	0.000*
Đông Quân (Kinh)				
SD (t-stat)	25	-0.725 (-9.375)	-0.770 (-8.940)	0.664 (7.289)
p-value		0.000*	0.000*	0.000*

*Significant at $\alpha < 0.05$

Figure 6.1 Histograms of Mean Spending Distributions by Ethnicity

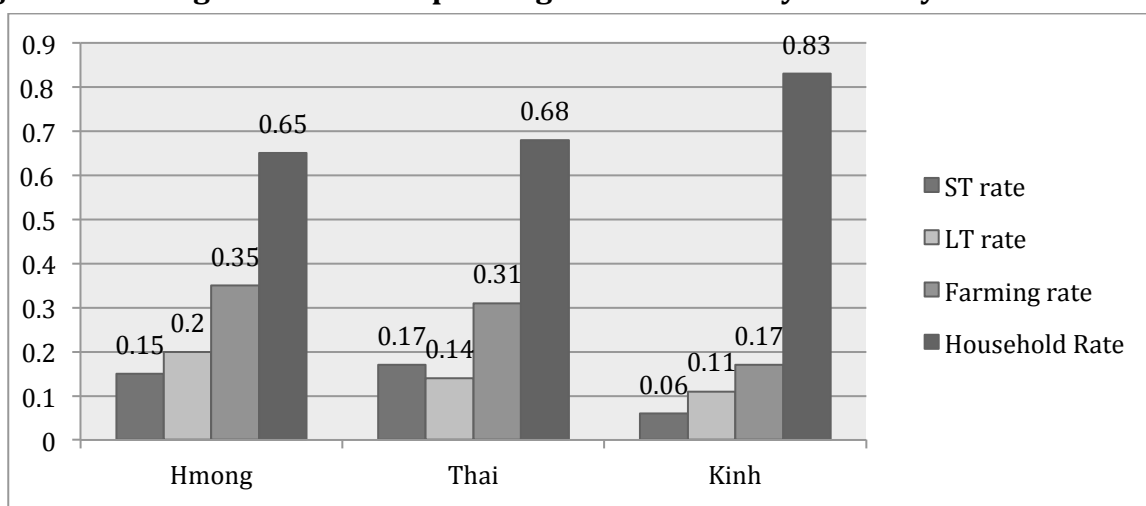


Figure 6.2 (Appendix F) below is a scatterplot displaying investment practices according to ethnicity. The y-axis displays household investments, the x-axis short-term investments and the diagonal line represents long-term investment values. Most of the symbols are plotted in the top left corner representing a high investment in household

category. Values plotted in the middle represent households that have a more balanced distribution of their investment resources. Nearly all Kinh households are clustered around the household category.

To test (H_1) if class variables (amount of land and income) are associated with significantly higher soil conservation investment⁹⁴ rates within each ethnic village, I constructed two multivariate linear regression models. For the multivariate linear regression models, the dependent continuous variable analyzed is Soil Conservation Investment Totals (which are derived from long-term investment totals) because the units are monetary values rather than a rate (percentage). Household income is defined as the total sum of all market value of all subsistence and market production as well as income from employment, business, or government pension.

Participants reported income from all their activities in the past year. Income scores were added together in a common currency of Vietnamese Dong for each household. Following Tilman et al. and Clay et al. (1998; 2002) soil conservation investments are broadly defined as capital investments that enhance soil fertility and help reduce soil erosion. I define eight soil conservation investments: irrigation systems, landscape terracing, contour farming rows, manure application, perennial crops or agroforestry, forestry, mulch, and building a fence. Participants were asked to recall all the soil conservation investment activities for the past year. Investments are calculated in millions of Vietnamese Dong. Income scores represent households rather than individuals. Figure 6.3 summarizes soil conservation investment data for the three ethnic villages. Long-term

⁹⁴ Soil conservation Investment is used here instead of long-term investment rates, however, both variables are similar in concept. Soil conservation investments include irrigation, terrace, contour cropping, manure, agroforestry, forest, mulch, and fences.

total mean (Millions of DVN) for each ethnic group are as follows: for Kinh 12.1, Thái 5.2, and Hmông 10.7.⁹⁵ The frequency of distribution is presented with the mean, standard deviation, maximum, and minimum values. Mean soil conservation investment values for 2009 range from 5.18mVND (\$259) to 12.13mVND (\$607).

Figure 6.2 Summaries of Ethnic Village Annual Soil Conservation Investment

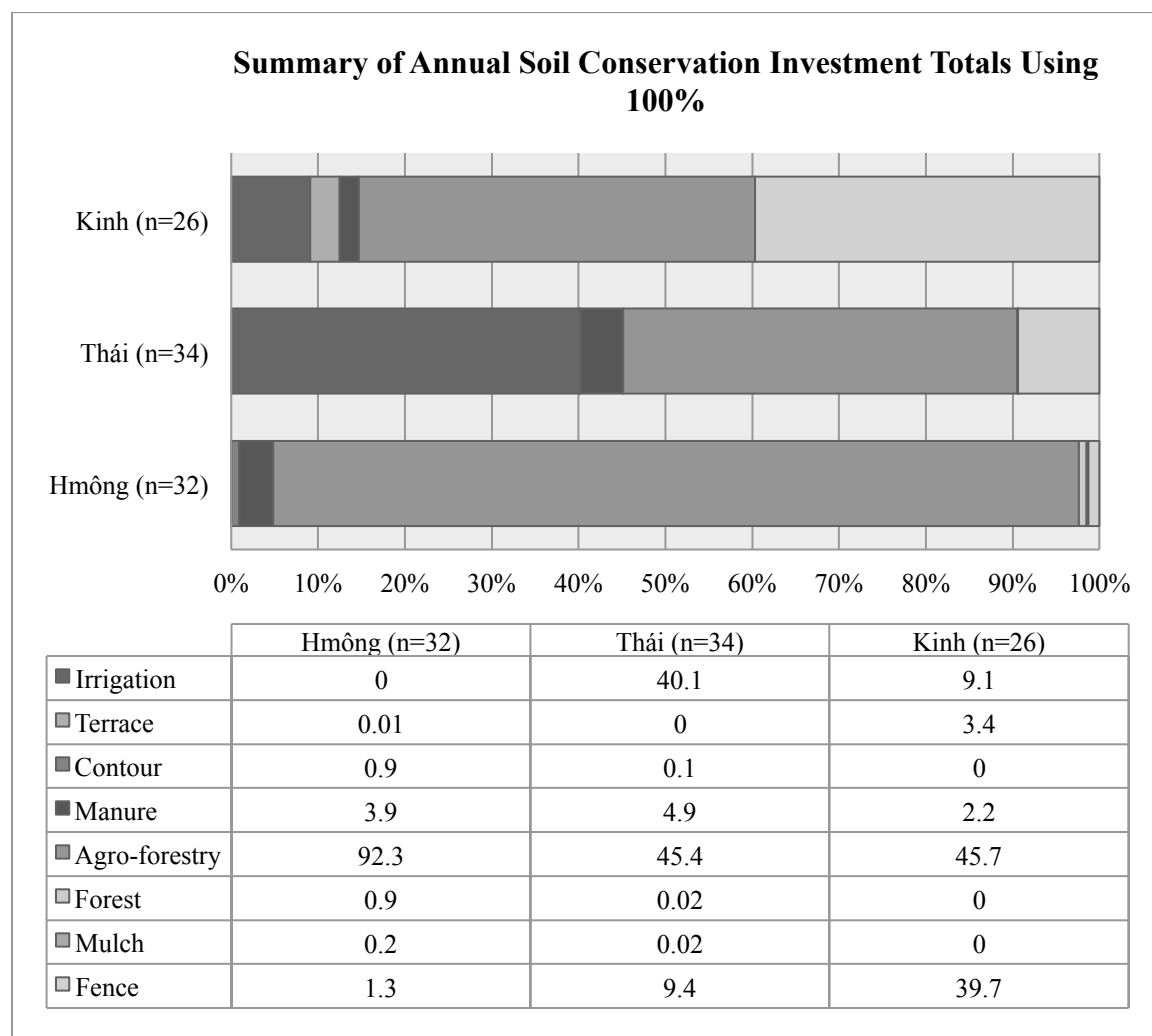


Table 6.5 summarizes the class scores (explanatory variables of socioeconomic status) for the three ethnic villages. Gross income scores for the whole sample range from

⁹⁵ Standard Deviation (and minimum and Maximum values) are: Kinh 14.2 (0-56.2), Thái 11.8 (0-7Total6.4), and Hmông 9.2 (.04-41.1). All values are in millions of Dong VN. In 2009, 1 million dong= \$60 USD.

12 mVND (\$720) to 434 mVND (\$21,700). The mean gross incomes for each village varies considerably. Hmông village is 99,018,800VND (\$4951), Thái 46,373,500VND (\$2319) and Kinh 121,545,300VND (\$6077). Income was standardized along a scale of 0-10⁹⁶. The number of subsistence farmers in each village reveals that all households sampled in the Hmông and Thái village rely on farming, which is contrasted in the Kinh village. Mean highest household education in each of the three villages is middle school (4.46) for Hmông and Thái (4.17) but increases to high school (5.35) for Kinh. Head of household education was often much less with many only attending school for a couple of years before farming full time. In 2007, the commune built a high school, prior to then the nearest high school was in the district center of Thuận Châu located 10 km away.

Table 6.5 also lists amount of forest and agricultural lands possessed by each household according to each village. Mean property values in hectares indicate Hmông have the highest score of 4.58, the average in the Thái village is 1.78 and in the Kinh village the mean is the lowest with less than one hectare (0.72). The amount of agricultural and forest property ranges from zero to 9 ha. Many households with forestland choose to grow annual crops and so it was included with agriculture property. Possession of a red book (land title including one or more of following agriculture, forest and household) is common for most households (Hmông 0.94, Thái 0.88, and Kinh 0.96). Subsistence farmer dummy variable reveals all farmers who grow and rely on food for their main livelihood strategy was 100 percent for Hmông and Thái households and 57 percent of Kinh households.

The per-capita livestock score (LSpc) was calculated by estimating total market value of the livestock divided by the household size. These scores range from 0 to 23mVND

⁹⁶ Standard income = (Income*10)/434

Table 6.5 Descriptive Statistics of Class related Variables based on 9 months of Field Research

Ethnic Village	Variable	N	Mean	Std. Dev.	Min.	Max.
Hmông	Ag-Forest land/Ha	32	4.5806	1.7146	1	7.8
	Income (mVND)	32	99.0188	51.3278	14.7	247
	Standard income	32	2.2814	.182668	.3387	5.6912
	Livestock/person	32	6.1837	3.5979	.2	13.2
	Family size	32	5.5	1.6064	3	10
	Education	32	3.36 (primary)	1.402	0(illiterate)	6 (college)
	Highest Hh Ed.	32	4.46 (m.s.)	1.57	0 (illiterate)	6 (college)
	LongTerm total	32	10.7116	9.1691	.04	41.1
	LogLTtotal	32	1.8842	1.3197	-3.2189	3.7160
	Red book	32	.9375	.2459	0	1
	Subsis. farmer	32	1	0	1	1
	Bank Loan (mVND)	32	9.694	18.385	0	100
Thái	Ag-Forest land/Ha	34	1.7855	1.7915	.2	9
	Income (mVND)	34	46.3735	34.4207	12	187
	Standard income	34	1.06852	.793104	.2765	4.087
	Livestock/person	34	3.7629	2.8638	.0256	11.5
	Family size	34	5.8235	1.8663	3	10
	Family workers	34	2.94	1.252	2	7
	Education	34	2.88 (kindergarten)	1.684	0 (illiterate)	6
	Highest Hh Ed.	34	4.1765 (m.s.)	1.0289	1	6 (college)
	SoilCons total	34	5.1782	11.8359	0	67.4
	LogSCtotal	33	.5027	1.5969	-2.5257	4.2106
	Red book	34	.8824	.3270	0	1
	Subsistence farmer	34	1	0	1	1
	Bank Loans (mVND)	34	10.367	1.167	0	30
Kinh	Ag-Forest land/Ha	26	.72223	1.3390	0	3.4
	Income (mVND)	26	121.5423	82.8107	48	434
	Std. Income	26	2.8005	1.9081	1.1060	10
	Livestock/person	26	6.3553	6.1541	0	23.5
	Family size	26	4	1.058	2	7
	Education	26	2.2 (Kindergarten)	0.8334	0 (illiterate)	6 (college)
	Highest HH Ed.	26	5.35 (h.s)	.80	4 (m.s.)	6 (college)
	SoilCons total	26	12.1284	14.1576	0	56.24
	LogSCtotal	18	2.3542	1.3390	-1.2730	4.0296
	Red Book	26	.9615	.1961	0	1
	Subsistence farmer	26	.5769	.5038	0	1
	Bank Loans (mVND)	26	29.077	51.989	0	250

in the Kinh village. Mean scores are close between the Hmông and Kinh (~6) but are much lower for the Thái 3.76. Long-term total scores combine the monetary value of the total amount of cash spent towards long-term investments. The range is from 0 to 67.4mVND. Soil Conservation total scores for Hmông average 10.71mVND, the Thái have a lower average of 5.18mVND, and the Kinh average 12.12mVND. The variable logSCtotal is the natural log of soil conservation (SCtotal).⁹⁷

Table 6.6 presents the results of a multiple linear regression model in which log soil conservation total investments is predicted by each village dummy variable Hmông, Thái, and Kinh. The distribution of the log soil conservation total has a skewness of -.81, $P < .0035$ and the Kurtosis of 3.17, $P < .4975$ ⁹⁸ indicating a skew that is negative, but the tails close enough to a normal curve. The joint measurement has a significant p -value of $< .0183$ confirming the curve is not a normal distribution. To correct for this, the estimated model parameters (variance-covariance estimates) were run using the `vce(robust)` in STATA version 12. The robust estimate option provides asymptotically unbiased results—without assuming homoskedasticity and normality of the random error terms—is useful for small sample sizes (Huber 1967; White 1980; Williams 2000; Wooldridge 2002). Because soil conservation investments are converted to their natural logarithm, the coefficients can be read as percent change in the dependent variable.

Using the natural log permits regression coefficients to be read as percent change rather than as change per unit. For smaller co-efficient values, a simple multiplication of 100 will give the percent change in DV. However this method does not work as well for

⁹⁷ Random non-responses ($n=9$) to the long-term investment category are dropped because there is no natural log for a zero value.

⁹⁸ A normal distribution should have a 0 value for skew and kurtosis should have a value of 3.

larger coefficient values. For larger coefficient values the percent increase in the independent variable (IV) is determined using Allison's suggested calculation which accounts for all coefficient changes regardless of size (Allison 1999:154).⁹⁹

Table 6.6 Linear Regression Model Prediction of Log Soil Conservation Investments by Ethnicity Dummy Variables

Linear Regression						
N=83				F (2, 80) = 11.38		
				Prob> F = 0.0000		
				R-squared = 0.2326		
				Root MSE = 1.4408		
Ln_SCtotal	Coefficient	Robust std. err.	T	P>(t)	[95% confidence Interval]	
Kinh	(omitted)*					
Thái	-1.851452	.418745	-4.42	0.000	-2.684781	-1.018124
Hmông	-.9708326	.417921	-1.20	0.232	-1.246666	.3066517
_cons	2.156093	.151509	7.54	0.000	1.732499	2.975962

*Note: Kinh omitted because of collinearity.

From the model, we see that being Thái lowers long-term investments (respectively -84.3% $p<.0001$), but being Hmông is not significantly less when compared with the Kinh village.

Table 6.6 presents a refined linear regression model in which log soil conservation investments are predicted by Kinh, Thái, Hmông and subsistence dummy variables and family size and Agriculture-Forest property. I controlled for household variables including land title, highest HH education, and the subsistence farmer dummy variable, but adding these values reduced the fit of the model (increased the AIC, Akaike Information Criterion). In the optimized model (lowest AIC), Thái ethnicity is no longer a significant predictor for lower of long-term investments due to the influence of the independent variable AgForestland. All four independent variables predict greater long-term investments: 1) Having more livestock predicts a 7.8 percent greater long-term investment; 2) Possessing

⁹⁹ Percent change of co-efficient in DV is formulated: $Y=100[natural\ log^x(b)-1]$ (Allison 1999: 155).

more agriculture and forest property predicts 38.4 percent greater soil conservation investment; 3) as does higher income (39%); 4) Households with small families will invest greater in long-term investments. Each additional family member added, is predicted to have a 28.2 percent decrease in soil conservation investments. As previously mentioned the most important independent variable is AgForest_land. When households have access to property either farming and/or forestry ethnicity no longer plays a significant role in predicting soil conservation investments.

Table 6.7 Multiple Regression Model Predicting Log Soil Conservation Investment Totals Household Variables and Ethnicity Dummy Variables

Linear Regression					
N=83				F (6, 76) = 17.66	
				Prob> F = 0.0000	
				R-squared = 0.4629	
				Root MSE = 1.2367	
Ln_SCtotal	Coefficient	Robust std. err.	T	P>(t)	[95% confidence Interval]
Kinh	(omitted)*				
Thái	-.9694	.5177	-1.87	0.065	-2.0006 .0618
Hmông	-1.1278	.6311	-1.79	0.078	-2.3847 .1292
Pc_Livestock	.0751	.0328	2.29	0.025	.0097 .1405
AgForest_land	.3249	.1306	2.49	0.015	.0648 .5849
Family_size	-.3309	.1032	-3.21	0.002	-.5364 -.1255
Std_income	.3295	.1318	2.50	0.015	-.0671 .5920
_cons	2.1278	.5766	3.69	0.000	.9795 3.2761

*Note: Kinh omitted because of collinearity. Mean variable inflation factor (VIF)= 2.18; Aikake Information Criterion (AIC)= 279.08 and Bayesian Information Criterion (BIC)= 292.17. Several IVs not used in model based on higher AIC values include land title, highest HH education, and subsistence farmer.

The change in *p*-values for ethnicities from the first and second linear regression models reveals the importance of possessing agriculture and/or forestland. Land title is not important in this model for making long-term investments. When AgForest_land is added to the regression model, ethnicity is no longer a determining factor. In addition, productive land holdings, per capita livestock, small family size, and income provide useful predictors to understanding soil conservation (long-term) investment behavior. Several other

independent variables were added but were removed from the model because they lowered the fit of the model (increased AIC). Independent variables removed included: highest household education, number of parcels, subsistence farming dummy, time to walk to parcels, size of house, hired workers, and possession of land title (red book certificate). These factors may influence class formation but they did not influence long-term investment activity within the villages.

Within villages, smaller households, with more livestock, income and agricultural and/or forestlands are predicted to make soil conservation investments. Soil conservation investments are not linked to ethnicity, formal land title, education, or livelihood.

Discussion

The data on intra-village investments reveals similar patterns across all three villages. All villages on average are likely to invest more in their households than in farm related activities. There were no significant differences between average long-term and average short-term investments, and household investments are on average higher than long-term, short-term, and farming investments for all three ethnic communities. The fact that class related factors such as material wealth, income, bank loans, education, formal property, and amount of livestock had no discernible importance regarding investment practices across all three ethnicities is somewhat surprising. Using a linear regression model helped elucidate three class related factors: per capita livestock, family size, income and agriculture and/or forestland.

In this chapter, farm investment rate was introduced to assess how important investments in land are overall compared with household investments. For all three ethnic communities, smallholders tended to invest more in their homes than in their fields. This investment pattern suggests two conclusions. First, land may not be very valuable or worth investing in, especially in upland slopes where preventing erosion is most critical. If long-term investments in the land are not seen as important, then only a minimal amount of resources will be invested. Second, investing in homes is therefore culturally important to maintain within the communities. Household investments are a form of material wealth and become important for social status. The category “farm investment rate” combines short-term and long-term investments to allow a comparison between farmland and household investments. Since the average household investments for all three villages are significantly higher than farming investments, the data suggests farmers have applied what they perceive as “enough” resources into their farmland. The remaining economic resources are being added into their homes. Smallholders appear to be investing at the minimum to cover their farming needs necessary to sustain their farm economically and environmentally. Any profits earned are saved up and used to invest more in their homes and raising a family. Land, livestock, technology, and homes have a high rate of transmission that will be passed down to the next generation. Careful control over resources through property rights is creating inequalities in the communities and may affect investment activities in the future. For now, household investment activity suggests the farmers can generate enough income to strike a balance between operating their farms and raising a family. Investment patterns suggest that upland soils are not very valuable due to the steep slope, small size of the parcels and difficulty in accessing the land. Hence,

smallholders are favoring profits by exploiting the uplands and by making short-term investments. Upland soils are a third of the value of lowland soils and no one was willing to sell or trade their lands with other farmers. One retired farmer said the commune government officials pressured him to sell back his land for the benefit of other farmers. Because the upland soils are small and dispersed, long-term investments like terraces or other mechanisms to alleviate erosion are laborious and expensive. Hmông and Thái farmers grow only annual High Yielding Variety (HYV) crops, which are designed to thrive when chemical fertilizer is applied. Kinh tend to only bother farming annual crops in the lowlands and do not farm in the uplands. Perennial crops tend to be grown on good land, often near the home. Household property is widely considered more valuable than upland soils because it can be better safeguarded from theft. Upland soils, on the other hand, are limited in their long-term investment potential. Farmers can only apply short-term investments and time into their upland slopes, there is very little else they can do except invest in perennial crops and agroforestry systems. They cannot build terraces on upland slopes because there is no water available for irrigation. Examining the investment variation within each village reveals most of the investment rates are predominately in the lower end of the spectrum.

Using the linear regression model provides clarity in discerning which factors are contributing to soil conservation investments. Households that have smaller families are more likely to make soil conservation investments. Presumably, as the family increases in size, more resources are diverted away from long-term soil enhancements. The greatest predictor for soil protection is linked to subsistence farming. Farmers who rely entirely on growing food for their livelihoods are making long-term investments. And not surprisingly,

farmers with more agricultural and forestland will invest more in protecting their soil over the long run. Since many farmers use forestland as agricultural land, both agricultural and forestland were combined as one unit. The results of the linear regression model provide a clear understanding for why other class related factors were not useful. Farming requires little education and generates little wealth, so that the peasantry is essentially very similar in their class standing and in their investment activity.

Conclusion

Classical and neoclassical economics predicts long-term sustainable investment activity will be ideal when property rights are secure. In cases where long-term investment practices have a low adoption economists look for problems such as a slow return on investments, insecure tenure, labor shortages, and poor credit systems (Daniel 1992; Murray 1980). Other problems can include low rates of profitability, short planning horizons, high rates of discount and constraints in borrowing (Brocheux 1995; Little 1999; Reardon and Vosti 1992; Schech and Haggis 2000). Since natural resources are critical to the sustainability of smallholders they are especially vulnerable to environmental degradation (Cavendish 2000; Dasgupta, et al. 2004; Hart 1982; Hart 2000; Hart and James 1999; Kepe 1999).

Rural communities are often stratified in terms of wealth and natural resources, which can influence their investment activities and land use. Research by economists has shown that poor farmers have more incentive to make long-term sustainable investments

such as soil conservation than wealthier farmers (Brocheux and Hemery 2009 cited in Shively 2001). Since not all long-term investments necessarily require high investment costs, binding subsistence constraints, or credit failures that might preclude households from making the investments. As Holden et al. (2010) argue, poverty and cash flow constraints reduce long-term interest for investments and thereby reduce incentives for sustainable management of natural resources in poor households. However, (Barbier and Lopez 1999 Cited in Shivley 2001) argue household resource investments in natural resources are not clear and suggest poor households with credit constraints will likely increase the rate of resource degradation rather than invest in soil conservation and long-term investments.

To examine smallholder investment activities, this chapter analyzed short-term, long-term, “farming” and household investment rates within each Kinh, Thái, and Hmông ethnic village using class as a factor of analysis. The data show strikingly similar results within all three ethnic villages suggesting there is very little class variation effecting investment activity. When analyzing differences in class all three villages invested more in their households than in their farmland. These similar investment results lend support to the rational actor model of economic theory. In highland Vietnam, smallholders are somewhat limited in access to credit and tend to have short-term investment preferences. Living in a precarious environment makes long-term investments risky. As a result, smallholders within each ethnicity are risk averse, preferring to follow similar investments practices that favor short-term annual crop production over perennial crop production. It is predicted that poverty would influence investment activity either increasing or

decreasing long-term investments. In this case, all villagers measured along class lines chose to invest more in their homes than in their farmland.

The linear regression model provides useful information about class activity within and between the ethnicities. Counter to economic models, class related variables including possession of formal land title, income, material wealth, education, did not predict smallholder long-term investment activity. Smallholders, who rely entirely on natural resources for their livelihoods, have small families, and possess agriculture and forestland are predicted to make long-term investments. It can be argued that the low quality of land, limited access to sufficient loans, and the fact that smallholders do not have private property rights does not necessarily raise any serious challenge to economic models predicting investment activities. This research suggests that possession of property rights does not significantly affect investment rates in the highlands. Smallholders invested in their property as though land title did not matter; those who possessed land title believed they had their land for a lifetime and were not put off by the 20year land title. Income did not significantly influence long-term investment rates either. It is possible that long-term investments are not linked with economic costs as much as they are related to time and labor costs. Poor farmers would be willing to spend more time improving their fields than wealthier smallholders. A larger family contributes a lot of labor that can be used for long-term investments that require labor, they may appear to hamper investments with economic costs.

Smallholders, regardless of class factors, chose to invest minimally in their fields and spent significantly more in their homes. As reported in chapter 5, investments regarding land use and land investments reveal long-term investments are not as crucial to

smallholders as suggested by the theory of property rights. Reasons for investing more in homes and less in farmland appear not to be linked specifically to class, stratification, or inequality. The different investment scores outlined in this chapter do not vary in how farmers approach land management. Most smallholders are investing a lot of resources back into the soil. The regression model does show that soil conservation investments are most likely to come from subsistence farmers with small families and more agriculture and forestland. In the end, it appears that the smallholder, who is more likely to invest in soil conservation investments than a wealthier farmer or households with a more diversified economy.

What is somewhat surprising is the fact that smallholders across the board are investing more in their homes than in their farmland. It is possible that time is not accounted for accurately in the investment matrix. How much time and money is put in to the land by each household? It is likely that some farmers must spend more time farming than other farmers. This could be due to environmental factors such as parcel distance and upland versus lowland location, which might adversely affect their soil conservation (however, this was not found to be significant independent variable). While farmers are clearly working hard at farming, some more than others, they are investing the bulk of their income into their homes. For Hmông and Thái smallholders, farming is their main livelihood, and therefore it is necessary to invest some of their resources back into the land; they are choosing to invest only the minimum amount. Soil erosion is a serious problem in the commune and in the near future, erosion will become very grave. Currently, all the farms in the commune are still very productive, so no one was at all concerned with land degradation in the future. It may be that they are investing only the minimum amount and

preferring instead to enjoy increasing material wealth and status through investing in their homes. Smallholders have cultural preferences in developing their homes for social entertainment. The home is where guests and relatives are entertained, both living and dead. Any extra resources remaining from farming are being allocated into furnishing new homes. Farmers are essentially investing in petro-chemical applications and doing the bare minimum in long-term investments.

In the context of changing land tenure and market liberalization, the theory of property rights offers a framework to analyze how ethnic farming communities are making investments on the land. The theory of property rights predicts smallholders will make long-term investments on their land because they have tenure security. The results of the ANOVA tests on investment practices using class and ethnicity as the measurement suggest class is not important in support of liberal utilitarian assumptions. For Hmông and Thái smallholders who predominately raise crops, farming investments (long-term + short-term investments) are slightly higher than Kinh who are less concerned with farming and more with creating new homes for businesses. Overall, smallholders are investing more resources into their house property, which happens to be the most secure property (for life) and therefore suggests smallholders are more secure in their household property than their agricultural property. Vietnam has a history of land redistributions and smallholders may in fact be hedging their bets by investing in the most secure land (Saint-Macary, et al. 2010). Another cultural aspect to consider here, Kinh villagers have no little familiarity or interest in farming upland slopes. The rise of Kinh is linked to their cultural adaptation and specialization in lowland wet rice irrigation. In the dry highland province of Son La, there is very little land or water for wet rice systems and as a result, there has been little use for

occupying the highland regions from an agricultural perspective for most Kinh. Land is very limited in the highlands and has necessitated the exploitation of upland slopes by Hmông and Thái. Uplands are considered lower about 1/3 the value of flat land, and this may explain why there is little incentive to grow anything other than annual crops using a short-term investment strategy. Upland crops such as dry rice, corn and cassava makeup the majority of planted upland area. Within these crops there would be some trees remaining in the field, but crops such as fruit trees, coffee and tea are mainly grown around the households.

As a group, Kinh have a long tradition of selling goods in the market and have gravitated towards moving their homes along busy roads and converting their homes into businesses to participate in the market. The Kinh are generating enough income from business activities to slowly decrease their reliance on crop production as a source of income. Both Thái, and Hmông tend not to enter into economic activities to the same degree as Kinh. They are largely excluded from the market due to cultural restrictions by their communities and in part by economic constraints barring them from opening businesses (Chapter 4). Ethnic minorities do not seek to maximize profit and resent Kinh for doing so and those with limited language skills in Vietnamese are less confident in their interactions with Kinh and are therefore less likely to attempt getting a bank loan. Kinh traders often buy commodities below farm gate prices since the harvest is unprocessed (World Bank 2009: 210-220). The Thái and Hmông cultural identity here is tightly bound to an agrarian livelihood. There is a noticeable class divide between Kinh and the ethnic minority groups and yet all three ethnicities regardless of class invest identically. The 1993 land law granted Kinh the ability to sell their farmland and relocate into the commune

center forming an economic center. These opportunities may develop for Thái and Hmông in the future, but for now they continue to farm upland slopes intensively.

Land use rights are creating a more diversified economy based on cultural values and opportunities. The rate of economic development varies significantly between traditional ethnic minorities and Kinh. The establishment of RBC has given the villages the opportunity to invest in their land and to participate in the market. *Đổi mới* brought the market to the smallholders, but it did not bring the smallholders to the market.

Social Class and Stratification

Nearly all societies have degrees of inequality through processes of social stratification based on levels of inequality in material wealth (Howard 1993). However, stratification in small-scale farming societies tends to be reduced due to the limited specialization and the low yields of food production that can be appropriated. As economically defensible resources become scarce, such as intensively worked land, inequalities begin to take form (Smith, et al. 2010). Social stratification in communities can lead to forms of institutionalized inequality in communities when land and water becomes scarce enough to cover the costs of protecting these resources by excluding others. Property rights are formed to defend and protect limiting resources and in the process create social inequality. In intensive agriculture systems, this scarcity leads to technological and ecological innovations (Boserup 1981; Goody 1976; Shenk, et al. 2010). For the present, the differences in wealth and power in these Vietnamese three communities suggest social class factors are in their infancy and may become more pronounced in the future. For the present, class differences are minimal and have no discernible influence

over investment rate activity. As agricultural production intensifies and the population grows, so too will specialization of labor and stratification in society, in the future, social class may become more pronounced and influence investment rate activities. Weber's theory of class formation and Marx's historical dialects help explain why class-based factors are marginalized in the rural highlands of Northwest Vietnam. Smallholders in each village were very similar; they had homes, land, and families. Differences in wealth are beginning to develop; in general the differences are not influencing investment strategies. Differences related to material wealth vary, within villages but are currently not influencing investment decisions.

CHAPTER 7

CONCLUSION: PROPERTY RIGHTS AND CONSERVATION INVESTMENTS IN SMALL-SCALE FARMING

In the introductory section of this chapter I will present my principal findings, followed by some implications of my results for anthropology and interdisciplinary inquiry. The chapter closes with a discussion about the limitations of my study and possibilities for future research.

Principle Findings of This Dissertation

The cultural models of success for ethnic minority smallholders in Phông Lái are more concerned with survival and the continuity of farming than with maximization of profits in the short term. Economic survival leaves little room for choice in farming practices. Smallholders for the most part are struggling to exist in the market economy, some more than others and Thái more so than Kinh and Hmông. Every smallholder has had to take into account the demands of the market in his or his land-use decisions. In addition to the market, political pressure has suppressed the widespread use of swidden systems. New technology in the form of high yielding maize seeds, petro-chemicals, and new agriculture techniques has led to widespread upland maize cultivation across the region

(Dao The Anh, et al. 2005). Land previously used for subsistence dry rice is now combined and alternated with maize. The continued use of intensive upland production is not sustainable, and yet I believe the agrarian livelihoods of the indigenous minorities will continue to persist indefinitely.

This dissertation examines one small but crucial aspect in the theoretical foundation of capitalism, which claims private property rights are necessary for long-term investment and therefore in the case of farming lead to sustainable land management (Carruthers and Ariovich 2004; De Soto 2000; Earle 2000; Johnson, et al. 2002; Papageorgiou and Turnbull 2005; Weber 2002). Economists argue that creating a land market ensures individuals will have the most efficient access to land and ensures maximum economic growth. I tested one of the fundamental predictions of property rights—secure property rights lead to long-term and sustainable investments—by measuring short-term, long-term and household investment rates across Kinh, Thái, and Hmông villages in Phỏng Lái commune. I used statistical comparisons to analyze investments using ANOVA and multivariate regression at three demographic levels: 1) among the three ethnic villages, and 2) within each ethnic village. Analysis of investment activities allowed me to assess the differences in three ethnic villages. Analysis within the villages accounted for socio-economic variation within each ethnic village, and measuring investment rates at the household level provided socio-economic data across the commune.

Cross-cultural Village Analysis

Investment rates among the Đông Quân (Kinh), Khâu Lay (Thái), and Năm Giết (Hmông), villages revealed culture variation (Chapter 4). An ANOVA test found that Hmông

invest in more long-term investments than Kinh ($p < 0.05$). Another difference was in the household investments category. Kinh invested significantly more on average in household investment rate than either Thái ($p < 0.05$) or Hmông ($p < 0.01$) villages. These findings are not entirely surprising. Hmông rely entirely on crop production and have more land than Kinh villagers. As a result they can be expected to invest more in the long-term investment rate category. Kinh prefer to invest more in their households, rather than farming, because their homes can be converted into businesses. Kinh homes are larger on average and more expensive to build. Thái and Hmông homes are also important investments overall, compared to farming investments, but their homes are considerably more modest in size and function.

Intra-village Investment Analysis

Investments within villages revealed class differences (Chapter 5). ANOVA tests found significant variation ($p < 0.01$) within each village and between each investment rate category. Kinh, Thái, and Hmông intra-village class results were similar: in all three cases household rates were on average higher than short-term, long-term and farming rates (short-term rates + long-term rates). For all three villages, the household investment rate was significantly higher and long-term investments were the lowest rate. These results suggest that on average households may be able to invest more (either short-term or long-term) in their lands, but they choose to invest more in their homes. It also suggests that there are cross-cultural similarities regarding home value and prestige.

In an attempt to elucidate which smallholders are most likely to make long-term investments, I performed multiple regression models. The model predicted that culture and

socio-economic variables influence long-term investment rates. Being Thái lowered long-term investments by 84% ($p < 0.001$). Other important independent variables for predicting soil conservation investments (these are the same variables as long-term investments) were per capita livestock, income, and household size. Each additional unit in the model predicts long-term investment activity. Thus, households with additional hectares increase soil conservation investments by 38%, greater income (measured on a scale 1-10) increases the potential by a 39% increase, and more livestock predicts an 8% increase. However, each additional family member lowers the prediction of soil conservation investments by 28%. Other class-related variables did not add to the stability or predictability of the model and were therefore not included. Unfortunately, long-term and soil conservation investments remain a very low priority for most villagers, especially those with large families and less land.

Long-term and Household Investments

At all three levels of analysis, there has been a recurring theme, that people place greater value in household rather than agricultural investments. Houses demonstrate wealth and success as a reflection of their ancestors, and are a source of pride to kin and the entire community. Ethnic minorities build homes relatively cheaply. For instance, while visiting a wealthy Thái home, I noticed that some visitors were there to collect a debt from the previous year. I was told they were there to collect a cow as payment for the loan used to build a small stilt home across the way. The cow was to be sold for 10 million dong (~\$600USD in 2009). The labor required to build the home was acquired through social capital and shared meals. Ethnic minorities rely on helping each other to build homes. For

even a home that costs as low as 600USD to build, smallholders were putting much less of their resources into the land. In contrast, Kinh households could take more than a year to build and required specialized labor. Such homes could cost hundreds of millions in dong to build. Home materials cost real money; even if lumber is taken from the forest, there is the matter of logging permits and bribes necessary for every government official from the village leader up to the district level. Each official is given at least \$500,000 dong (~\$30USD). At a minimum, there is village leader, head of the commune, and department of forestry at the district level who require payment in addition to the permit itself. In contrast, long-term investments may require only labor and very little material cost. *Landesque capital* does require tremendous labor. And for this reason, Thái villagers are expected to provide corvée labor as part of their village membership. In the uplands, I saw only the most basic investments being made. Long-term investments are made where land is valuable. This land is always flat. Land around the household is given more manure due to its proximity to the resource. In some ways, these might be considered the “real long-term investments” because household land is granted for life. Investments made in and around the household were secure.

Some have suggested that the history and practice of reallocating agricultural property prevents smallholders from making long-term investments (Saint-Macary, et al. 2010). If true this may help explain why uplands plots are mainly given short-term investments for annual production and also why households commonly have long-term investments for their perennial crops. Many Thái and Hmông smallholders demonstrated confusion over their land tenure. Many thought their land tenure was forever. This confusion over land tenure does not preclude the fear that land could be reassigned to

account for demographic shifts. One smallholder wondered if the land would be reassigned in the future, since his family had grown and he needed more property. Smallholders are investing a lot more in their households, lending support to the idea that tenure security is important.

The Link between Class and Long-term Investments

Overall the poorest farmers were limited in the amount of long-term investments due to the risk and uncertainty associated with peasant economies, and smallholders with more expendable resources invested more (Cashdan 1990). The fact that long-term investments are critical to maintaining the health of the soil and the quality of the food is important in understanding why long-term investments were on average the lowest rate. Part of the explanation for this can be linked to two important factors: 1) long-term investments are not necessarily expensive or costly since labor is cheap compared to short-term and household rates; 2) upland slopes in many cases are scattered, making long-term investments problematic. Thus, it is not hard to understand why long-term investments appear to be less of a priority to households overall. Even among the wealthier households, long-term investments are less important. One study of the steep mountainous region of Yunnan province, China, found that even simple contour farming practices were likely to be continually practiced only when there were government subsidies and payments (Barton, et al. 2004). In line with Cashdan's (1990) findings about Andean peasants, households with more assets tended to have more disposable income to invest more in risky long-term investments, such as coffee, fruit and nut agro-forestry systems. Yet, in all cases, regardless of culture, ethnicity, or socio-economic factors, the evidence from long-term investment

rates suggests only a fraction of resources was allocated to long-term rates. The market pressures to buy new HYV seeds, fertilizers, herbicides, pesticides, and farm equipment leave little revenue to cover other household costs. State extension services need to provide subsidies to smallholders to nudge them in to protecting natural resources. The risk of debt accumulation is relatively high in the highlands, and smallholders have little flexibility in their budgets. The result is that farmers have no choice but to carry on doing what everyone else is doing. Most smallholders are saving their money for weddings, funerals, school, medical bills, purchasing a new roof and/or a new moped. Long-term investments are done where the soil quality is still good. Upland soils are crucial to ethnic minority subsistence, but they are problematic for making long-term investments for several reasons: 1) land is fragmented, 2) upland slopes are very steep, and 3) upland slopes are remote and accessible only by foot. First, fragmented land is so small in some cases; the plots are 1/10 of a hectare. Second, the land is steep enough that soil erosion is unavoidable, rendering long-term investments suspect at best. And third, the remoteness of many upland plots restricts their access and the ability of laborers to reach remote land plots. For instance, it makes no sense to build a terrace if the plot is small and adjacent to other small plots lacking investment. So unfortunately, even if smallholders are interested in investing more in their upland plots, it is far from feasible for them to do so. Thus, once some easy and affordable long-term investments are made and short-term investments are paid for, the remaining income may be saved or spent on other goods and services.

Ethnic Investment Differences

Ethnic differences at the village level suggest smallholders are very different in how they use the land and how they are adapting to the market economy (Table 7.1). The smallholders I worked with are intent on continuing their agrarian livelihoods, yet for each ethnic group this means something different depending on cultural values. Hmông and Thái derive value from working directly on the land. The same can be said of Kinh. Economic pressures are affecting each ethnic group differently. Some Hmông are adapting reasonably well under the socialist-controlled economy. They have been given legitimate land tenure and are profiting from high maize yields. A few households have managed to save enough money to purchase trucks and are working as middlemen for other Hmông. Many Hmông are planning how best to adapt to the market economy and considering how best to plan for the future. This holds true for many Thái villagers as well. They are striving to hold on to their livelihoods. But Thái are well known for their elaborate festivals, which they admit cost them a lot of money. The big difference between Hmông and Thái agricultural practice has to do with the land. Thái and Hmông practice swidden farming, but every Thái household also has a paddy field. In the Hmông village two small stores sell dry goods. In the Thái village there is one very small store. This stands in contrast with Kinh. Kinh value farming, but in general it is clear that farming is hard in the highlands and many have chosen to diversify their incomes through specializing in the sale of value-added goods. Many Kinh grow crops, but far more have begun to raise livestock and sell value-added goods from their homes and in the market. Meat, fish, fruit and tofu are the most profitable products sold by Kinh. Produce is often sold by Thái and some Kinh. During my fieldwork, I did not see Hmông selling goods in the central market place of Phỏng Lái. On big market

days Thái sellers will come in from other villages and town to sell a wide range of products including textiles, clothing, watches, toys, fish, meat, fresh produce and tools. But in Phông Lái, Thái households tend to sell only produce. Locally, vegetables and herbs sell for 1,000dong (¢5US). Such a low value reflects the redundancy of products being sold; however, spending the morning or day in the market was a sort of privilege, since it reflects the household extra labor.

Table 7.1 Comparisons of Ethnic Groups Livelihood and Economic Activity

Ethnic Group	Land Type	Livelihood	Economic activity
Thái	Upland/Lowland	Farming	Low two small vendors, one small grain trader, a few vendors in farmers' market
Hmông	Upland	Farming	Medium two small vendors, a few medium grain traders
Kinh	Upland, Lowland	Barter/livestock	High Many vendors, larger grain traders, many in farmers' market

In general, Kinh appear to be thriving in the open economy. They have shifted away from relying solely on crop production to focus on value-added agricultural goods such as tofu, soy milk, rice wine, poultry and swine production and are opening small businesses such as dry goods, general stores, and restaurants. This shift in economic livelihoods reflects a cultural preference and familiarity for shop-keeping (ADB 2002; AFP 2009; Akram-Lodhi 2005; Baulch and Masset 2003; Cam Hoang 2009; McElwee 2004a). This shift to economic diversification is also acknowledgement that farming is both difficult and precarious in the highland periphery. Another strategy being adopted by Kinh is pursuing

education. Many Kinh choose to send their children off to study at the district high school and possibly on to college.

Overall, farming remains an important identity for the commune and region as a whole. This is especially true for Thái and Hmông minorities in Phỏng Lái commune, who have a strong identity with the land. For them, land is the basis of their livelihoods. In contrast, Kinh smallholders are far less tied to the land for their livelihoods; they have found ways to make a living from their homes.

Familiarity with the market economy is an important difference between Kinh and ethnic minorities. The formal economy remains a strange concept and practice for many Thái and Hmông smallholders. The goals for Thái and Hmông are primarily to make enough income to ensure reproduction in the household. Success for Hmông and Thái communities is based on moral, jural, and embedded social values (Polanyi 2001[1944]; Sahlin 1972). Being a smallholder is an essential part of the community, as is making enough income to ensure reproduction in the household. All households share an agrarian past and continue to have a strong tie with agriculture today. However, as the next generation grows, I speculate that land pressure will increase to the point many will no longer have access to land to farm. Thái and Hmông are less comfortable and inclined to open home-businesses in their villages, but they also have less access to enough surplus capital to open a shop, and being a farmer is an important identity. Every household would purchase more land if it could and each household would refuse to sell its land. I asked many smallholders if they wanted a bank loan, and many feared getting a bank loan because of the risk of forfeiting and losing their property. I asked if they had ever known anyone to lose his land to the bank, and no one had, but the fear was too strong for anyone to take the risk. The other

problem was that banks were unwilling to risk sizable loans to smallholders. This restricted them to loans that were too small (12-19million Đông, enough to buy a couple of young cows) to make any significant changes.

Prior to đổi mới, Phổng Lái commune was driven by a moral imperative. Everyone worked the land to the benefit of society and the nation. The American War helped motivate everyone to work hard. Post-đổi mới, self-interest began to take hold and the pursuit of economic gain began to dominate Kinh goals.

Overall it is clear that through multiple regime changes and the effects of local globalization, smallholders remain strong in their traditional livelihoods. Ethnic minorities demonstrate their flexibility and durability through these powerful institutional transformations. Cultural values persist in the periphery of Vietnam, despite the rapid changes in the economy, new technologies, and society at large.

Smallholder Perceptions of Erosion

Part of this study investigated the link between land tenure and long-term investments in land as part of classical and neoclassical economics, which holds that given private property, owners would be inclined to make long-term investments as a matter of necessity and practicality. However, the results are somewhat complicated by the geographical and cultural realities of highland Vietnam. Long-term investments are done mainly on more productive lands around the home. Since lowland areas are limited, uplands have an important production role in Phổng Lái and across northwest Vietnam. For the most part, investments along the steep and often highly fragmented and scattered upland slopes are limited to short-term investments. While many households make long-term investments, they are usually the lowest rate compared to short-term and household

investments. Thus long-term investments were somewhat limited due to the geography. Smallholders chose long-term investments on the most stable and healthy soils, where they would see a real payoff. This was always around their homes and on flat lands. Upland slopes are inherently unstable, and farmers have little recourse but to maintain the land as best they can by adding chemical fertilizer.

Overall there was a lack of concern for soil conservation in the commune by government officials and smallholders alike. While many stated they were aware of soil erosion, just as many would deny it was even occurring. Recognizing soil erosion is a complex process that occurs gradually; I asked smallholders if the rocks were growing. I had heard a smallholder describe how not so long ago there were almost no rocks visible. Now nearly every hill slope had visible rock outcrops. This question proved fruitful, and many who stated their land was not eroding, agreed the rocks were growing. When asked how they could prevent erosion, the reply was often, "I add just inorganic fertilizer." When pressed further to explain why, they would state other methods might work, but fertilizer was the only practical option they had. Discussions about soil erosion prevention had been discussed by extension agents, but the specific solutions were vague and there was no paper. The lack of extension paperwork and the admission by the local extension agent revealed that top-down advice by the government was not applicable to the needs of the commune and was not taken seriously. The role of the extension agent, like many positions in the government, reflected more a handshake and a nod to well-connected people than a position of merit. The conclusion I was left with was that the government was not taking erosion very seriously.

Addressing this observation with the head of the farmer's union, I was told there was evidence of terrace work around the commune. The terracing was not lateral but vertical. I had never before seen or heard of this kind of terracing. Instead of the hill slope being modified into a stairway terrace structure, the small plots were given a half-meter barrier to allow vegetation to grow at the base of the plot. The plot beneath the first plot was cut deeper into the hill slope, so that the plot above was substantially higher, about a meter or so. In this way, there was a break between the plots; its actual influence in soil conservation would be minimal at best. However, he was certain this helped reduce the soil erosion rate.

When asked to describe soils, smallholders described them in various stages of degradation. The most common refrain was that the soil had changed color, and was now notably drier and lighter. This is due to the fact, the organic matter was be depleted and soil structure was unstable and friable. However, smallholders underestimate the extent of erosion, and they tended to underestimate the negative effects of erosion on soils. A study in Yên Châu district, in Sơn La, reported smallholders believed rocks in the soil were commonly believed to help reduce the rate of erosion, suggesting a misunderstanding of erosion processes (Clemens, et al. 2010). Smallholders described how after a few seasons of cultivation soil would become dry and change color, making it less productive. Eventually soils would be shifted away from maize and dry rice to low-production yields such as cassava to allow the soil to rest. In Northwest Vietnam, soil erosion has been shown to increase with longer and steeper slopes (Clemens et al. 2010), and from increased land-use intensity (shorter fallow periods and permanent cropping) (Kono and Rambo 2004). Exposed soils in Sơn La Province are susceptible to compaction from rain. If the topsoil

layer seals, precipitation is reduced, increasing run-off and soil erosion rates; the loss of organic matter and clay particles further reduces soil fertility (Clemens et al. 2010).

Research in Northern Vietnam suggests long-term intensive use of limestone soils does not decrease its fertility. Long-term fallow is important for overall soil fertility (Clemens et al. 2010).¹⁰⁰

Economic Anthropology

By exploring how Vietnamese smallholders' investments in land have been shaped by the complexity of political, social, and environmental transformations, this dissertation adds to the literature describing the exchanges between property rights and investments among smallholders and bodies of knowledge that result from those interactions.

In the last thirty years, neoliberalism (Reaganomics, globalization, neoconservatism) has taken hold in the Western world as an important ideology of development; though controversial, this project has gone on to dominate the international order since World War II (Escobar 1995; Ferguson and Lohmann 1994). A key component of the ideology was that private property relations and rights were paramount to development and include domains such as economics, politics, science, technology, and society. Anthropologists were faced with new property regimes after the fall of the Soviet Union and subsequent post-socialist economies (Hall, et al. 2011; Mellac 2011; Sikor 2001; Verdery and Humphrey 2004). Hann's (1998) edited volume on property relations addresses these issues in post-socialist economies as a result of neoliberalism's influence.

¹⁰⁰ The most fertile soils are associated with a limited duration of agriculture use and areas that have a relief less susceptible to erosion.

The age of neoliberalism has raised some issues concerning culture and property. The establishment of private property poses brand-new problems and issues for people across the world (Hirsch 2010). Land ownership is a contested enterprise in the southwest Pacific due to cultural norms of property that are challenging legal definitions. Western legal strategies assume property can be easily defined, allowing a clear distinction between people and objects. Melanesian ideology on relations of individuals and things has questioned this assumption; new terms and concepts are being developed to address network transactions (Hirsch and Strathern 2004).

Peasant societies are under siege from globalization, which has spread in the most remote peasant societies in the Southeast Massif threatening their livelihoods. Peasantries are relentlessly assaulted by financial institutions, global industrial-retailing circuits, intellectual property rights protocols displacing indigenous knowledge through seed monopolies, and from globally managed food networks that are displacing smallholders (McMichael 2006). The new “corporate food regime” is displacing peasants through mechanisms described by David Harvey’s concept of “accumulation by dispossession,” which involves the direct expropriation of peasants by destabilizing effects of food imports, contract farming, and through privatization of public agriculture services. These processes cumulatively build corporate agriculture, a process that McMichael (2006) argues undermines local stewardship of the land and removes food security from the local to the global arena. And yet, through these adversities, highland peasants in Vietnam remain in place. This is because the labor pool needed for the capitalism is always slower than the

rate at which capitalism moves, creating capital involution (McMichael 2006).¹⁰¹ Labor efficiency increases, and means of production change rapidly but are limited by human labor and thus restrict capitalism's momentum. The aims of neoliberalism like global prosperity are contradicted by the actual results of agrarian relations, which manifest in various forms, of accumulation through dispossession, concentrating and centralizing agribusiness capital, privatizing states, redistributing social resources away from the peasantry, and degrading environments (McMichael 2006: 9). Marx conceptualizes the process as follows:

“The fact that the means of production, and the productiveness of labour, increase more rapidly than the productive population, expresses itself, therefore, capitalistically in the inverse form that the labouring population always increases more rapidly than the conditions under which capital can employ this increase for its own self-reproduction” (*Capital* Vol.1, page 645, cited in McMichael 2006: 411). Land degradation remains a serious problem that threatens land productivity and

livelihoods of smallholders in many areas of the developing world. In Vietnam, as much as half the total land area has been significantly eroded and degraded from soil nutrient loss (Clemens, et al. 2010; UNEP 2001). Deforestation is increasingly affecting mountainous areas in the northwest highlands, a problem that threatens smallholder livelihoods (Katsutoshi, et al. 2004; Lam, et al. 2005; Wezel, et al. 2002a). Concerns are being raised about the sustainability of current land use. Smallholders suffer from financial loss due to degraded soils and reduced productivity of cultivated soils. Encroachment in upland slopes has been driven by population growth, which increased by 267% between 1976 and 2010

¹⁰¹ Capital “involution” is the tendency to intensify and concentrate capital investments while at the same time being socially exclusionary. Globalization involves centralizing material capital, a process that fragments labor under conditions of intense development in advanced industrial agriculture systems. Globalization provides material based solutions to the problem of food supply, but it neglects the social question of food supply. The result is global labor remains impoverished due to limited employment opportunities. Agrarian labor struggles surface over access to land and forms of land tenure systems (McMichael 2006: 410). Development tends to concentrate social wealth within contained circuits of money and commodities, a process that benefits some.

(Lahmayer 2003).¹⁰² As more smallholders abandon traditional swidden agricultural practices (and the use of the fallow system) in favor of modern market-driven practices that apply chemical fertilizers, environmental problems and negative effects are becoming increasingly severe (Wezel, et al. 2002a). The tropical monsoon of the region accelerates soil erosion on steep slopes used for agriculture.

The magnitude of degradation and deforestation often exceeds conservation activities in developing countries. Programs and policies in Vietnam and elsewhere were guided by little prior research. It is far too common for conservation programs to be adopted based on incorrect assumptions and little understanding of smallholder incentives and constraints to land conservation (Worku and Mekonnen 2012). This has been the case in Vietnam. I have rarely met Vietnamese scholars who understand swidden as a beneficial practice in Vietnam. Many scholars in Vietnam have to balance political agendas and scientific research. One university anthropologist was forbidden from publishing any of his research in the government journal *Anthropology Review*, because his data revealed voices of dissent about government policies in the periphery.

Research in the northwest area remains limited, but a growing body of work is beginning to look into the erosion-prone landscape. Research from similar regions suggests smallholder livelihoods are improved by information that directly relates to their environmental needs (Schuler, et al. 2006). The implementation of sustainable land use can benefit from qualitative and quantitative evaluation of soil, water, and land resources (Clemens, et al. 2010). These details are not currently available in Phông Lái or Thuận

¹⁰² In 1976, the first year demographic data was collected, the population of Sơn La was 410,000 and in 2010 the population increased to 1,093,000 people according to government statistical data, which are error prone and should only be used as an approximate value.

Châu district (Bo, et al. 2002). An important research program combining social and natural sciences is *The Uplands Program*. This long-term interdisciplinary research project brings graduate students¹⁰³ from Germany, Thailand, and Vietnam to study mountain sustainability in Thailand and Vietnam. This research program leans toward modern technology and sophisticated modeling to understand farming practices. While attending a conference in Son La in 2009, I found that sustainable agriculture was being defined as relying on inorganic fertilizers; a similar strategy that is being used in Africa with the Bill Gates Foundation Alliance for a Green Revolution in Africa.¹⁰⁴

Recent work by Hall, Hirsch, and Li in *Powers of Exclusion: Land dilemmas in Southeast Asia* provides a broad overview of the changing property relations across the region. Their work examines the power of exclusion through property rights, outlining winners and losers in the transformation process. This process includes regulation, force, the market, and legitimation. These processes provide a wealth of information that in the end leaves no simple solution to property rights. Those with property rights are given exclusive access and rights. Households, villages, conservation groups, and governments desire these same goals; and thus dilemmas in land will not go away. The context and the history of each space reveal different lessons.

¹⁰³ The program brings in students from University of Hohenheim in Germany, Chiang Mai University, Kasetsart University, Mae Jo University, and Silpakorn University in Thailand, and Hanoi University of Agriculture, Thai Nguyen University of Agriculture and Forestry, and the National Institute of Animal Husbandry in Vietnam.

¹⁰⁴ For more information about the program see Uplands 2012 conference presentations (https://uplands2012.uni-hohenheim.de/86158?&no_cache=1) and Bill Gates Foundation Alliance for a Green Revolution in Africa (<http://www.gatesfoundation.org/How-We-Work/Resources/Grantee-Profiles/Grantee-Profile-Alliance-for-a-Green-Revolution-in-Africa-AGRA>).

Post-Socialist Economies and Economic Anthropology

The concept of private property permeates classic liberal thought (Carruthers and Ariovich 2004). Property rights intersect all aspects of society including law, economy, politics, and culture. Ownership involves socially recognized economic rights, and for anthropologists, it is important to describe how property rights vary cross-culturally. Property is important in anthropology because it formalizes many forms of inequality; and property is the focus of many scholars researching transitional post-socialist economies (Hann 1998; Hare 2008; Hirsch and Strathern 2004; Li 1996a; Li 1996b; Li and Bryan 2007; Wen 1996). The new market economies in post-socialist countries were boosted by privatization of assets belonging to the state. The transition led to the countryside being allocated back to households. But many large farms were retained by the state to avoid complete collapse of the successful economy farms in Vietnam and across much of Eastern Europe. In Eastern Europe there were many problems due to bureaucratic limitations; farmers were limited in their ability to adjust to the market, to purchase the necessary inputs, or many were unable to use the parcels allocated to them. Other problems were linked to labor and capital shortages, and many farmers were not prepared to take risks in the market.

Neoliberal commentary identified the failure of the state to set up necessary preconditions for markets, such as an accurate cadastral survey and a banking system. Economic analysis correctly identified limitations starting commercial farming systems, but as Hann and Hart (2011c) point out, there is no discussion about moral values of the people. Economists tend to avoid culture and moral values of people and land. Polanyi

(2001[1944]) points out land and labor are fictitious commodities, which have been demonstrated in studies of post-socialist economies (Hann 2003; Hann 2007). For example, in Hungary, farmers who desired to be farmers were elderly villagers seeking to retain the old ways and the respect of their forefathers, rather than to achieve economic gain. And in many cases, the land was more an economic liability than an asset. Likewise, unpaid labor by families continues in Vietnam, and elsewhere, challenging the acceptance of the free market for farm labor. In fact, family labor plays an important role in most industrial capitalist economies today. In Vietnam and other post-socialist economies local elites have emerged. They have strong communist party connections, and more assets, and they have strong socialist capital connections (Hann and Hart 2011). These individuals have access to funds and knowledge of activities in the region before others and can shift to take advantage of these opportunities. Their government positions are not well paid and they are not well educated, but they are in a good position to increase their wealth through knowledge and opportunities. In the 1980s, Vietnam's reforms opened the market economy while maintaining state control over some aspects of the economy. Poverty rates for many have been lowered and the market is restricted from dominating all spheres of the economy. However, these advances from poverty have largely occurred in the delta regions, not among highland ethnic groups. Social security measures are in place to, in theory, maintain a minimal standard of living, yet in practice they do not. In Phông Lái, two widows reported they were not given any of their subsidies or approved for loans by the commune officials. In some cases, collectives are still run by communities (Hann and Hart 2011: 138; Mellac 2011; Sikor 1999). In the Thái village of Khâu Lay, households farm plots of land in the collective with each household having long-term leases. In Thái villages,

subsistence needs are addressed with periodic redistribution taken to meet the household needs of the collective. Today, in Marxist terminology the majority of smallholders have been dispossessed from their land in Vietnam and China. In Smith and Ricardo's terminology the market in Vietnam and China may be best suited for creating a division of labor for the wellbeing of the citizens. However, serious problems with the new economies have been highlighted by David Harvey (2005) such as the harsh working conditions and the privatization of many social services as "neoliberalism with Chinese characteristics." In similar ways, post-socialist strategies of Vietnam and China reflect a reduction in distribution of goods and services and an opening of a market economy. Capitalist countries have limited the market after 1945, to grow social democracy. These processes of "disembedding" (Polanyi 1944) reflect difficult and necessary adjustments taken by both socialist and capitalist economies toward a more centrist economy (Hann and Hart 2011: 139).

In Phổng Lái land tenure is largely controlled by individuals and households; however, common property remains controlled by the village head in the Thái village. For the Thái village, tenure security of the paddy fields is protected by the village and by the state. Land tenure is protected and passed down through the household. Adoption of technology is thus both a component of each household and part of the collective. In the paddy fields, the Thái members plant similar crops, although in the springtime they are free to grow soya, maize, and/or some other crop, but in the summer when the streams flow, they grow wet rice, and they are all required to take turns maintaining the irrigation channels.

Private Property Rights and Sustainability

Researchers and policymakers frequently cite tenure security as the main reason for slow adoption of technology in developing countries. Customary property regimes are commonly considered inferior to private property rights regimes and are associated with inefficient resource management technologies. A growing body of theoretical and empirical studies shows property rights can constrain or facilitate adoption of conservation practices; these studies have not been clearly understood, since experts look only at direct effects or confound the effects with other factors. Meinzen-Dick's et al.(2002) volume weaves together multiple frameworks, guidelines, for empirical research for understanding property rights, collective action and technology adoption. The volume shows the importance of considering interrelations between property rights and collective action institutions, the feedback effects of new technologies on property rights, the importance of social capital on collective action, and other important factors relating to technology adoption.

The theory of private property rights has been established by economic historians analyzing the rise of western civilization (Carruthers and Ariovich 2004; Earle 2000; North 1981; Ricardo 1819). The institution of property rights protect capitalists from losing property and encourage sustainable investments while driving the market to be more competitive (Marx and Engels 1993[1848]; Polanyi 2001[1944]). This inherent contradiction generally places economics at odds with the environment. Many capitalist ventures tend to be short sighted and focused on short-term market demands which are

inherently maladapted to natural ecosystems that require long-term planning (Berkes, et al. 2000; Folke, et al. 2005; Pretty 1995; Rappaport 1992; Rhoades 2001; Zimmerer 1994).

Since the dustbowl, the U.S. government implemented programs to help conserve natural resources. This system helps preserve the natural resources from the competitive forces of the economy. Subsidies encouraged farmers, many of who own large agribusinesses, to practice sustainable land-use practices. Therefore, if property rights encourage investments, do they also encourage overuse? My results suggest the answer is complicated. For much of the uplands the land is being dangerously overused. The same cannot be said of the lowland valleys, where farmers are making efforts to conserve the soil. These results support and challenge Soule et al. (2000), Feder (1988), Belsey (1995), and Gavian and Fafchamps (1996). These studies suggest that land tenure encourages soil conservation investments and lack of land tenure discourages long-term investments. Investments include conservation tillage, grassed waterways, strip cropping, contour farming, tree planting, fencing, and using manure. I found some of these practices are being done by smallholders, in upland areas, but most of the investments are targeted in lowland areas. I agree with Place (2009) that these long-term investments have only a marginal effect. My study found agreement with Gebremedhin and Swinton (2003) and Amsalu and de Graff (2007); land tenure was not considered an important factor influencing soil conservation investments. In Tigray, long-term investments in stone terraces were associated with secure land tenure, labor availability, and access to educational opportunities, short-term investments in soil bunds were associated with insecure land tenure, and absence of educational opportunities.

Limitations and Possibilities of This Study

This dissertation research has several limitations and possibilities for further study. A major limitation is language. My Vietnamese language skills are modest; I required a Vietnamese translator to conduct research. Only one of my four translators spoke some Thái. Thus, all interviews were done in Vietnamese and translated into English. Informants were nearly all fluent in Vietnamese; however, for the majority of them it was their second language. And many of them were not in a situation where they may Vietnamese on a regular basis. The more subtle issues relating to politics, history, soil erosion, and land management may have been reduced to simple ideas and thoughts as a result of the language barrier of both the informant and the translator. In an attempt to correct for misunderstandings, I attended each interview and looked for potential problems. The fastest interviews could be done in one hour, but the slowest interviews could take three hours. Often the longer interviews were a result of the fact that the smallholder had more data to provide and had limited language ability.

Another limitation of this study has to do with the sample size (N=93 households) out of more than 250 households in the sample universe. It is likely as well that the three villages where I worked are not representative of all Kinh, Thái, and Hmông in the region. Limitations were due to situations largely out of my control, such as waiting for official permission to begin conducting research and collecting data, or waiting on my assistants, who were often pulled away to do other tasks for their employer; inclement weather and monsoon season made travel impossible on dirt roads. Smallholders are always busy, often requiring multiple visits until someone is home and can spend time being interviewed.

Other setbacks included waiting on government officials to provide paperwork and information in the community. Often these delays in paperwork were a disappointment since the documents were often inaccurate or simply withheld. In many situations, officials wanted payments for documents. However, great effort was put forth to collect data from a minimum of thirty households in each village.

Another limitation of this cross-sectional study is the limited time depth. Will smallholders perceive erosion problems differently in the future? How will their ideas about what makes a good farmer change? Which smallholders will be able to adjust to setbacks? Will the Kinh strategy of diversifying their income pay off in the long run? And how will Hmông and Thái households fare in the future? Will Hmông farms become smaller over time as their families grow? Which farms will fail?

In conclusion this dissertation finds smallholders have adjusted to market pressure to by intensifying agricultural production along culturally familiar practices of swidden agriculture. However, the pressure to intensify production has led to a reduction in fallow periods and an substantial increase in soil erosion. Smallholders are not getting the message about soil erosion control. They are getting information about high yield varietal maize seeds, which require applications of fertilizer, herbicide, and pesticide. The move toward a liberalized land market has given smallholders more incentive to investment in their land. They do this primary through labor and not through capital. The Kinh appear to be benefitting the most from post-đổi mới economy due to their mainstream status. Kinh are investing in their homes, creating businesses that allow them to expand into the market and away from a livelihood dependent on agriculture. The land reform has led to greater home investments at the cost of land investments. Smallholders in Phông Lái do not see

land as private property. And the red book certificates do not appear to have any significant effect on investment decisions.

Future studies can address how investments are being driven. A longer diachronic study would allow better understanding of how investments are being decided. Households were investing in storage facilities and home improvement projects. Once these larger investments are completed, it seems likely they will be lessened. Other important aspects to consider are collecting life history interviews, and observing land use through two years. It would be very useful to compare smallholders' environmental knowledge and understanding with their actual land use management. Other important issues include collecting data on union membership and participation, access to grants and loans, and sources of external income. How will the next generation gain access to farmland? And finally, what influence does rural development have on class formation and livelihoods?

This dissertation finds the theory of property rights has limitations when applied to marginal areas such as in the northwestern highlands of Vietnam. Smallholders in this study have little incentive or opportunity to make meaningful conservation investments in their property. As this research demonstrates, more localized case studies can offer valuable insight in to how communities understand and utilize land tenure. Natural resource management is a difficult prospect under the best conditions. To date there is no complete theory that can be applied to solving the problems of resource management. As Acheson (2006: 128) points out "private owners, governments, and local communities all can be effective in managing natural resources. They can also fail." In the case of private property, over-exploitation can occur even when property rights are "complete" and markets are efficient. Over-exploitation can occur triggered due to poverty, economic

competition, and slow growing resources. State management systems can fail from problems due to corruption as in the case in Vietnam, or from rent seeking, and/or from intentional design flaws. However, local-level management poses many challenges and unless resources are matched to the ideal governance scheme they are likely to be ineffective. What works well in one area such as fisheries may not transfer well to another locality. Realistically, a combination of private property, governments and common property land tenure systems is a good place from which to find sustainable management institutions.

In light of the fact Vietnam is a developing country with limited financial resources and poor quality natural resources, it is recommended that policies should be carefully designed and considered. Policies should aim to be participatory in nature and involve cross-sectorial cooperation in order to achieve better success with smallholders. Smallholders and stakeholders ought to be involved in determining objectives, actions and targets, so that there will be support for the planned policies as well as better effectiveness. One important change needed in Vietnam is to adopt a participatory approach in the agricultural sector rather than relying on top-down policies.

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APPENDICES

Appendix A. Definitions, Emphases and Assumptions of Sustainable Agriculture

	Environmental emphasis	Social emphasis	Economic Emphasis
	Definitions of Sustainability		
Sustainable components	Conserving natural environment continuous growth of economy (ecocentric), to provide resources for people (anthropocentric). Focus on natural capital.	Social justice, empowerment of indigenous peoples, women, minorities. Focus on social (moral) and human capital; fair distribution.	Continuous growth of economy to provide wealth for future generations. Focus on economic (human-made) capital; allocative efficiency.
	Assumptions		
Human carrying capacity	Surpassed (or will be soon)	Best dealt with later	No limit (in near future), can be increased for a very long time.
Human population size	Needs to be controlled	Not the major problem	Not a problem
Consumption	Depends on population size, must be reduced	Inequity is main problem	Must increase
Technology	Must be efficient, less destructive on environment	Must be more assessable	Can be improved to increase human carrying capacity
Natural resources	Complementary; finite physical (source and sink)	Unequal distribution major problem	Substitutable; demand and technology drive supply
Human Nature	Concern for environment	Concern for others	Concern for self
Markets	Can't value natural resources; destroy environment. Must define limits ecologically. Low discount rate on future value.	Can't value social good; destroy community. Need redistribution to address inequity. Low discount rate future value.	Translates self-interest into social good. Trickle down to address inequity. High discount rate on value.

(adopted from Cleveland and Soleri 2009: 212).

Appendix B. Annals of Vietnam's Land History

Precolonial period	High agriculture population densities around Red River Delta and coastal areas. Kinh movement toward the south for land colonization. Mekong Delta colonized in quasi-military settlements.
Colonial period (1800s-1953)	Communal lands accounted for 20% of land cultivated in Red River delta in 1930s. Colonial state promotes communal land as safety net from wealthy landlords. Rubber and coffee plantations expand across lowlands and highland regions. Kinh migrate into highlands, sedentarization of ethnic minorities begins, relocation of overpopulated Kinh to highlands for security reasons and civilization of highlands. Landlords gain power in delta regions. Large land holdings alienated to French plantations 104K ha in Tonkin, 168k ha in Annam, 606.6k ha Cochinchina. Rise of landless class in delta regions, leads to frequent peasant unrest. Communist party rises in Việt Minh-controlled areas in 1945, due to cancellation of debt collectors, and landlords, rent reform, and allocation of land seized by aggressive landlords. More “patriotic” landlords are retained by party for party support against the French.
North Vietnam Post-Independence Socialism (1954-1975)	Initial land seizures due to land reforms excessively violent (1954-56) against well-off peasants and landlords, moderate loss of Party control over land distribution and petty class conflicts. 810k ha of land is redistributed by 1956. Acknowledgement of mishandling of land reform by party leads to increased agricultural production after land redistribution. 1959 collectivization begins and 90% complete in North by 1968. Collectivization develops capitalization of agriculture and helps prevent rise of landlord class. 1 million Kinh relocated from Red River Delta to New Economic Zones in Northwest highlands in 1960s. Collectivization continues into the 1970s. 5% of land allocated to households own-account production, contributes up to 40% of output.
South Vietnam Post-independence US-supported regime (1954-75)	Land and social inequality was greater in South, which lead to greater class tensions. Viet Cong gain traction from peasant grievances. Ngo Dinh Diem reforms rent and land holding ceilings above 1950 limit. Nguyen Van Thieu conducts pre-emptive land reform from 1970 under “land to the tiller” program in which land is redistributed to peasants. US-supported strategic hamlets program concentrates population into larger settlements.
Liberation, reunification and socialism (1975-1980)	Collectivization of land and draught animals begins rapidly but is slow to take hold. Agriculture production declines significantly. Large-scale land clearing and settlement of land in the central highlands. 6 million people relocate to central highlands in part from resettlement programs and spontaneous movement. Government emphasizes provincial self-sufficiency in rice production.
Early Reforms (1980s)	Contract system from 1980 under decree 100 initiates return to household production system under contract with cooperative, which provides agricultural services and supplies in exchange for fixed quota system (e.g. rice, cassava, coffee, or tea). Land remains collectively owned. De facto production increasingly household rather than communally-oriented, and reform follows rather than leads peasant land tenure programs.
Đổi Mới (Renovation) (1986-1993)	Đổi Mới period is initiated with the 6 th party congress in 1986. Decree 10 in 1988 allows land to be allocated to households, marking a de jure return to household production system. Cooperatives are reduced in service to non-divisible services such as plant protection and irrigation.
Market Based Growth (1993-present)	Rise of land prices and establishment of de facto land market. 1993 Land Law creates land use certificates allocating agricultural land in lowlands for 20 years with a 10 ha maximum, forestland for 50 years with a 30ha limit in uplands and homes for life. Buying and selling of land use certificates sanctioned. Allocation of forestland to households in uplands in 1994 encouraging forestry on “barren hills.” Land tensions between ethnic minorities and Kinh begin to form due to large expansion of coffee production in central highlands. Dispossession, including land sales by ethnic minorities to newcomers. Deforestation and access to depleted water creates tension and increasing conflict over access to natural resources and banning of swidden agriculture. Increased poverty, indebtedness, and landlessness in Mekong Delta. Increased land disputes over government projects and forcible evictions for development projects, golf courses, urban expansion, infrastructure, and resorts. Rapid deforestation of mangroves for aquaculture in south Vietnam. Adopted from (Hall, et al. 2011:206-208).

Appendix C. Photos of Upland Agriculture in Phông Lái

C1. Thái householder with annual crop cultivation on upland slopes and perennial crop production in lowland. Terracing and irrigation investments put in lowland valley with seasonal access to water. On upland slope, as many as five micro-plots can be seen. Horizontal lines are used as field markers. The lines are described locally as terraces, and are thought to help reduce erosion. These so-called “terraces” are more accurately described as a steep drop-off that is cut below another plot. Other than keeping vegetation in place, there is little else to prevent soil erosion. (Photography by the author.)



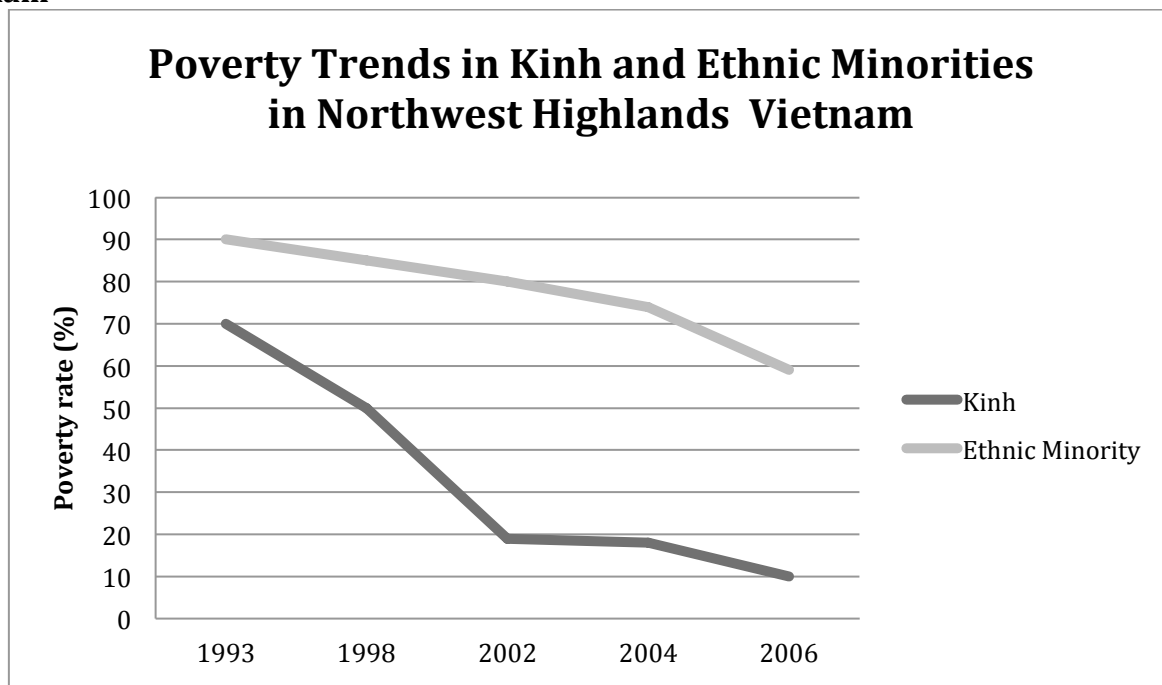
C2. Example of maize production along a 60° upland slope. (Photograph by the author.)



C3. Slash and burn fields revealing rock outcrops dominating the upland cropland. (Photograph by author.)

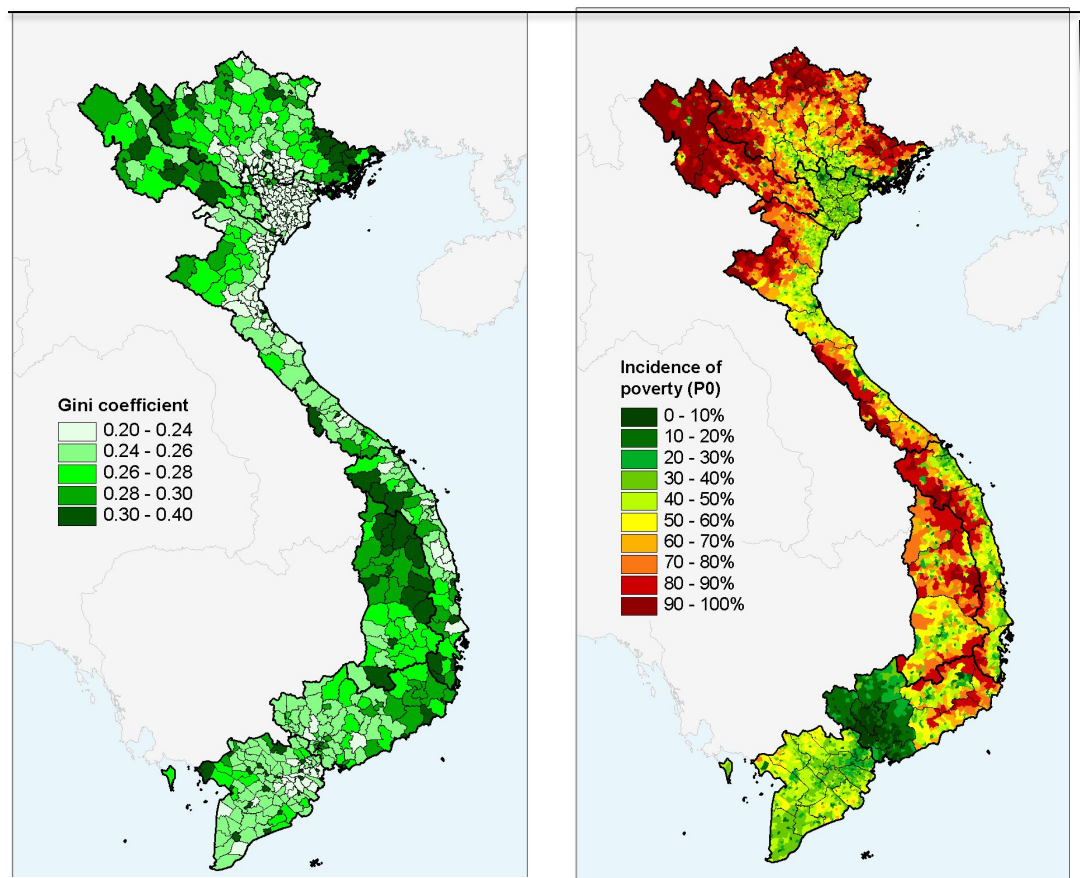


Appendix D. Poverty Trends in Kinh and Ethnic Minorities in Northwest Highlands of Vietnam



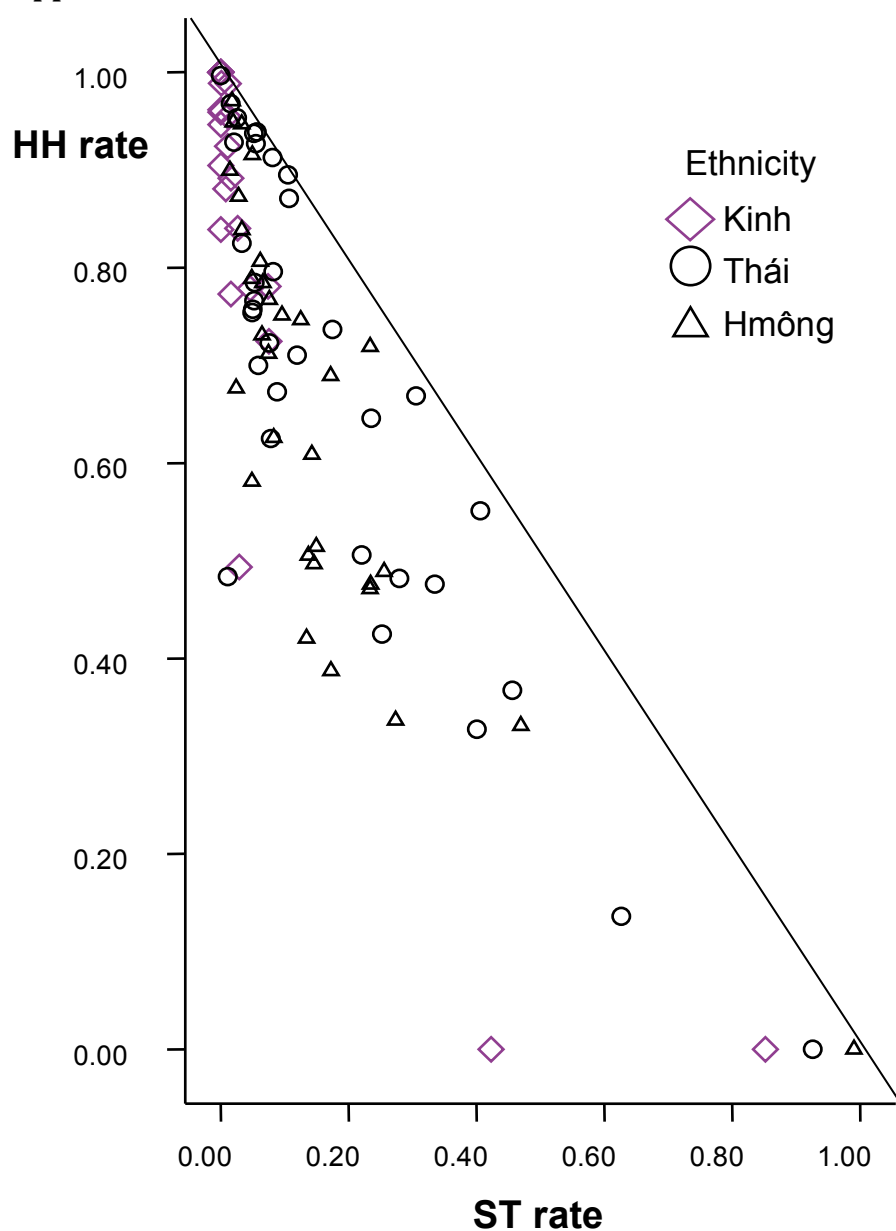
(Adopted from Roome and Fisiy 2009).

Appendix E. Map of Vietnam Showing Incidence of Poverty and Gini Co-efficient



The Map shows the proportion of the population living in households with per capita income below the poverty line. The poverty line is set at 1,789,871 VND/person/year in 2000 (~ 200 USD). Sơn La Province is the 3rd poorest in Vietnam with 73% in poverty, 81% in rural poverty on average. The poverty rate for Phòng Lái commune level poverty climbs to 95% (Minot, et al. 2003). Gini coefficient measures equality, 0=equality, 1= inequality. In Thuận Châu district, the Gini co-efficient is at the highest level of inequality.

Appendix F. Scatter Plot Ratio of Short-term vs. Household Investment Rate



In this figure, Kinh, Thái, Hmông household values are placed along a 45° continuum between household investment in the upper left and short-term investments in the lower right. The farther a household falls below the line, the higher the long-term investment rate is for that observation. Kinh households are clustered near the upper left corner revealing a high proportion income spent on household investment rate. Thái and Hmông ratio values are slightly more evenly spread across the continuum.

Appendix G. Household Questionnaire

Số Phiếu:

Bảng hỏi hộ gia đình General Information about the Members of Households

Các hộ gia đình thân mến!

Tôi là Richard Owens, hiện đang học tiến sỹ Nhân học, tại trường Đại học Georgia, Hoa Kỳ. Hiện chúng tôi đang thực hiện đề tài “Sự thích ứng và biến đổi trong sử dụng đất của người nông dân ở vùng Tây Bắc Việt Nam”. Chúng tôi rất cần những thông tin trao đổi thẳng thắn và chân thành từ các bạn. Những thông tin các bạn đưa ra sẽ được giữ kín và chỉ sử dụng cho mục đích khoa học.

Rất mong các bạn đồng ý tham gia phỏng vấn
Xin chân thành cảm ơn!

INFORMED CONSENT

This is a research project of the University of Georgia

Participation is voluntary

You are not obliged to answer questions that you do not want to answer

The data are confidential

Thôn, bản: _____

Xã: _____

Huyện: _____

Tỉnh: _____

Người hỏi://2009

Người hỏi: _____

Người kiểm tra phiếu: _____

I. Thông Tin Chung Về Các Thành Viên Trong Hộ /Human Capital

1. Xin ông (bà) cho biết hộ nhà ta có mấy người...và thông tin chung về từng thành viên trong hộ (ghi từng người sống trong một nhà, có kinh tế chung). *Please provide us with information on your household ... and general information about each member of the household (record each person living in a house, have common economic).*

#	Họ tên của những người trong hộ Xin nêu theo thứ tự: -Chủ hộ Vợ/chồng của chủ hộ (nếu có) -Con của chủ hộ (nếu có) Người khác (nếu có) <i>Names of Family</i>	Quan hệ với chủ hộ 1.Chồng/Vợ 2.Con 3.Cháu 4.Chắt 5.Bố mẹ 6.Anh em trai 7. chi em gái 8.Ông, bà 9.Người khác <i>Family Pronouns</i>	Tuổi <i>Age</i>	Dân tộc <i>Ethnicity</i>	Tôn giáo 1.phật 2.thiên chúa 3.tin lành 4.hồi giáo 5. bà ni 6.bà là môn 7.khác <i>Religion</i>	Trình độ học vấn 0=mù chữ 1=chưa đi học 2= nhà trẻ, mẫu giáo 3=TH (cấp 1) 4=Trung học CS (cấpII) 5= THPT (cấpIII) 6= Cao đẳng trở lên 7=bỏ học 8=khác <i>Education level</i>	Nói thạo hay không nói thạo tiếng phổ thông 1=có 2=không <i>Can speak Vietnamese well?</i>	Nhiễm chất độc da cam 1.có 2.không <i>Agent orange?</i>	Tân tật 0=không 1=bẩm sinh 2=chiên tranh 3=tai nạn 4=bệnh tật Any Injury?
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									

2. Có bao nhiêu người lao động làm việc trên đất của ông/bà? How many laborers work on your land?

i. Gia đình/family _____ Thuê/hired _____

II. Tiếp cận vốn tài chính/Financial capital

1. Ông bà có vay tiền từ nguồn vay nhà nước không? Public Yes ☐ No ☐

Ông bà có vay tiền từ nguồn vay cá nhân không? Private Yes ☐ No ☐

2. Số vay hiện tại của gia đình/ lãi suất? current loans/interest rate?

3. Số tiền vay trong quá khứ của gia đình/ lãi suất? Past loan amount?

4. Thời điểm nào trong năm gia đình thiếu tiền? (*seasonal cash flow constraints*)?
5. Mức sống gia đình ta hiện đang thuộc loại nào (theo phân loại của Chính phủ)? *What is your family's class (Classified by the government)?*

#	Loại hộ (<i>government classification</i>)	So sánh với hàng xóm xung quanh (<i>relative classification</i>)
1	Hộ khá giả (<i>upper class</i>)	
2	Hộ trung bình (<i>Middle class</i>)	
3	Hộ nghèo (<i>Lower class</i>)	
4	Không phân loại (<i>not classified</i>)	

6. Trong năm gia đình ông bà có bao nhiêu tháng không đủ tiền chi tiêu tối thiểu cho tất cả nhu cầu (*) Mấy tháng.....tháng? *Chỉ được coi là thiếu ăn nếu gia đình không có việc làm kiếm tiền, buôn bán gì. (*How many months does your family not have enough money in a year for all of their needs*...months? *lack of food your family when you can't find work, trade or sell anything.*)
7. Xin ông (bà) cho biết ước tính thu nhập từ các nguồn khác nhau 2009 của gia đình ta là bao nhiêu? (*Estimated family income from different sources during the past year*)

#	Nguồn thu (<i>Type of revenue</i>)	Ước tính thành tiền (đ) (<i>amount</i>)
1	Lương thực (<i>food</i>)	
2	Rau, quả (<i>Vegetables and fruits</i>)	
3	Chăn nuôi (gia súc, gia cầm, cá và thủy sản nuôi khác)(<i>Livestock</i>)	
4	Nghề thủ công (đan lát, dệt vải, rèn, gốm, đan vàng, đúc đồng...)(<i>handicrafts</i>)	
5	Dịch vụ buôn bán (tiền lãi) (<i>business services</i>)	
6	Khai thác NLTN** (săn bắn, đánh cá, rau, măng, cây thuốc, mây, song, gỗ...) (<i>use of natural resources H+G, fishing, medicinal plants, lumber...</i>)	
7	Lương và phụ cấp từ nhà nước (<i>Pension and salary from government</i>)	
8	Thu phế liệu, làm thuê (<i>Selling junk or employment</i>)	
9	Người thân trợ giúp (<i>help from Relatives</i>)	
10	Đi vay (<i>bank loan</i>)	
11	Lãi xuất tiết kiệm (<i>interest from savings account</i>)	
12	Thu khác (<i>other</i>)	

*Thiếu ăn trong điều kiện hộ gia đình không tìm được nguồn thu nhập nào để bán hoặc đổi lấy lương thực. *When the family has nothing left to sell to get food* **Nguyên liệu thiên nhiên (*natural fuel*)

8. Xin ông (bà) cho biết ước tính các khoản chi tiêu của gia đình ta năm 2009 là bao nhiêu?
(*Estimated Household Expenditure for last year*)

#	Khoản chi (ăn, chăn nuôi, mua sắm) <i>Total expenditures (food, clothing, supplies, equipment)</i>	Ước tính thành tiền (đ) (<i>estimated costs</i>)
1	Lương thực (ngày 365 x ngày) (<i>total food costs/per annum</i>)	
3	Mỡ, muối nước mắm, gia vị/tháng (<i>oil, salt, fish sauce, spices</i>)	
4	Đường sữa/tháng x 12 tháng (<i>Milk and sugar</i>)	
5	Chi cho uống (rượu cần, rượu gạo, bia, chè, cà phê/tháng x 12 tháng) <i>Drinks (highland booze, rice wine, beer, tea, and coffee/mo.)</i>	
6	Chi xà phòng, thuốc đánh răng, cắt tóc/tháng x 12 tháng (<i>soap, bathing, hair cuts</i>)	
7	Thuốc hút /tháng x 12 tháng (<i>tobacco</i>)	
8	Chất đốt, điện thắp sáng/tháng x 12 tháng (<i>cooking fuel, electricity</i>)	
9	Quần áo, chăn màn, giày dép/năm (<i>clothing, blankets, shoes</i>)	
10	Làm nhà, sửa nhà, làm chuồng trại/năm (<i>building costs, house repairs, animal huts</i>)	
11	Mua sắm tiện nghi (xe, đài, giường, tủ, bàn.../năm) <i>Shopping (car, radio, bed, table, cabinet)</i>	
12	Chi phí tái sản xuất trồng trọt (mua giống, phân, công cụ, thủy lợi, thuốc bảo vệ thực vật.../năm) <i>Cost of production at producing cultivation (going to buy, distribution, tools, irrigation, Pesticides, tractors, plows, trailer/cart, shovel, hoe, knives, sickles, draft animals, harness ... / year)</i>	
13	Chi phí cho chăn nuôi/năm (<i>cost for animal feed</i>)	
14	Chi phí học hành (<i>education costs</i>)	
15	Chi chữa bệnh/năm (<i>health costs</i>)	
16	Chi văn hóa (sách, báo, phim, pin đài...)/năm <i>Cultural costs (books, magazine, movies, radio, batteries/year)</i>	
17	Chi hiếu, hỷ, lễ hội, giỗ tết/năm (<i>Death anniversary, wedding gifts, festival, tet holiday/year</i>)	
18	Chi phí đi lại (xăng, tiền xe...)/năm (<i>Travel costs, gas, car payment</i>)	
19	Đóng góp thuế và các phí an ninh quốc hòng, vệ sinh, quỹ tình thương.../năm (<i>Contributing tax and national security, hygiene, social improvement fund .../year</i>)	
20	Chi phí nâng cấp trang trại (hàng rào, hệ thống thủy lợi, đào ao thả cá, ao tích nước tưới, xây dựng bậc tam cấp, cây trồng/năm) <i>(Farm improvement (fences, irrigation, fish ponds, or watering holes, terracing of land, planting trees and shrubs...)/year)</i>	
21	Other expenses	

9. Năm qua, trừ các khoản chi cho cuộc sống, ông bà có tích lũy được không? (*Any money saved?*) Có/Không Nếu có thì tích lũy được bao nhiêu?.....đ

10. Xin ông bà cho biết tình hình chăn nuôi năm 2009 của gia đình ta. (Your livestock during the past year.)

#	Vật nuôi (animal type)	Số lượng (con) amount	Ước tính giá trị (đ) estimated value
1	Trâu, bò (buffalo, cow)		
2	Lợn (pig)		
3	Dê, cừu (goat, sheep)		
4	Ngựa (horse)		
5	Chó (dog)		
6	Gia cầm (gà, ngan, vịt, ngỗng) poultry		
7	Cá và thủy sản (fish)		
8	Vật nuôi khác (.....) other animals		

11. Xin ông bà cho biết sự thay đổi vật nuôi của gia đình? Số lượng gia súc của gia đình có tăng hay giảm không? (livestock history? Has it increased, decreased or changed at all?)

12. Gia đình Ông/bà có những thứ gì sau đây? (0 =không sở hữu và không được sử dụng chúng, 1 = không sở hữu, nhưng có thể mượn / sử dụng, 2 = sở hữu một số ít, sở hữu rất nhiều). How many of the following items to do own? (0= own none and have no access, 1= do not own, but can borrow/use, 2= own one, 3= one a few few, 4=own many).

1. Đồ nội thất/furniture	2. Máy cày/plow	3. Máy bừa/tiller
4. Máy xát/husker	5. Máy phát điện/electric generator	6. Đầu DVD
7. Đài vô tuyến/radio	8. Máy khâu/sewing machine	9. Súng săn/firearm
10. Xe đạp/bike	11. Xe máy/scooter	12. Màn ngủ/mos. Net
13. Nhà kho/storage boxes	14. Nồi xoong/cookig pot	15. Rìu/axe
16. Cưa máy/chain saw	17. Điện thoại di động/cell phone	18. Điện thoại cố định/phone
19. Máy bơm nước/water pump	20. Tivi	21. VCD
22. Lò sưởi/gas stove	23. Bình lọc nước/water filter	24. Máy vi tính/computer

25. Máy kéo/tractor	26. Những thứ khác/other	
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III. Kinh Tế Hộ Gia Đình (Access to Physical Capital)

1. Land holdings (Hectares) Tổng diện tích đất hộ ông bà hiện có..... (Ha). Trong đó:

Sử dụng/Owned	Cho thuê /Leased	Thuê /Rented	Mua /Bought

2. Xin ông (bà) cho biết thực trạng nhà ở gia đình ta hiện nay (house types)

#	Loại nhà	Diện tích (m ²) (Area)	Năm xây dựng (year built)
1	Nhà tạm (tranh, tre, nứa, lá) Temporary (cottage, bamboo, rattan, leaf)		
2	Nhà bán kiên cố (trường xây, gạch hay tường gỗ, mái lợp ngói hay tôn) In home, semi-solid wall (brick or wooden wall, Tin roof)		
3	Nhà kiên cố (tường mái bằng) Solid wall (brick wall, flat roof)		

3. Những nguồn chất đốt mà hộ gia đình ông bà hiện sử dụng ở mức độ nào (x)? Household Fuel consumption (high, medium, low)

Loại năng lượng sử dụng	Chi phí/ tháng (cost/mo.)
1.Điện (electricity)	
2.Gas	
3.Củi (wood)	
4.Than tổ ong (Pressed charcoal)	
5.Khác (other)	

IV. Tiếp cận vốn xã hội (Bourdieu định nghĩa) Access to Social capital (Bourdieu)

1. Gia đình ông (bà) nhận được sự giúp đỡ từ hàng xóm hoặc họ hàng như thế nào cho các công việc dưới đây (0 = không giúp, 1 = khó khăn, 2 = không khó khăn, 3 = rất dễ dàng). *How challenging would it be for you (yourself) to obtain the following favors from someone outside your household?* (0 = impossible, 1 = difficult, 2 = not difficult, 3 = very easy)

- | | | | | |
|--|----------------------------|----------------------------|----------------------------|----------------------------|
| 1. Trông con giúp một vài giờ khi ông (bà) làm việc
<i>Watch your children for a few hours while you work?</i> | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| 2. Trông con giúp một vài ngày khi ông (bà) có việc phải đi xa
<i>Watch your children for a few days while you visit a distant village?</i> | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| 3. Mời ông (bà) một bữa ăn
<i>Feed you one meal?</i> | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| 4. Mời gia đình ông (bà) một bữa ăn
<i>Feed your family one meal?</i> | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| 5. Cùng đi chợ xa
<i>Accompany you on a trip to a distant market?</i> | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| 6. Giúp một con bò khi gia đình làm nghi lễ
<i>Supply you with a cow for a ceremony?</i> | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| 7. Cho ông (bà) vay 100.000 đồng
<i>Loan you 100,000 đồng?</i> | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| 8. Cho ông (bà) vay 500.000 đồng
<i>Loan you 500,000 đồng?</i> | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| 9. Cho ông (bà) vay tiền mua xe máy
<i>Loan you a scooter?</i> | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| 10. Chăm sóc ông (bà) khi ốm đau
<i>Take care of you if you fall sick?</i> | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| 11. Chăm sóc ông (bà) khi về già?
<i>Take care of you in old age?</i> | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| 12. Lắng nghe ông (bà) khi ông (bà) gặp khó khăn
<i>Listen to you when you have a problem?</i> | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| 13. Ủng hộ ý kiến của ông (bà) trong cuộc họp cộng đồng
<i>Support you in a community decision?</i> | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |
| 14. Tiên cử ông (bà) làm lãnh đạo cao nhất cho một hoạt động cộng đồng?
<i>Choose you as leader in the community?</i> | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |

2. Trong năm qua, ông (bà) đã tham dự bao nhiêu nghi lễ? (tần số tuyệt đối) *During the last year, how many ceremonies have you attended? (absolute frequency)*

15. tết của dân tộc mình/ ethnic tet celebration
16. tết nguyên đán/ tet lunar new year
17. cúng ma bản / worship village ghost
18. giỗ họ/ ancestor clan worship (whole group)
19. lễ mừng thọ / old age feast to honor elders
20. đám cưới/ weddings
21. đám tang/ funerals
22. lễ chay/ special ancestor funeral feast (after death)
23. rằm tháng bảy / cemetery annual cleaning
24. thanh minh (mùng 3 tháng 3) (Lunar calendar in March)
25. cúng ma nhà /House spirit
26. giỗ bên họ ngoại / in-law ancestor clan worship
27. cấp sắc/celebration for new leadership position
28. lễ liên quan đến nông nghiệp/ agriculture activities
29. lễ liên quan đến săn, bắn, thu hái lâm sản/ H+G ceremony
30. lễ khác (ghi cụ thể)/other ceremony:

3. Trong những năm qua, ông (bà) đã tổ chức bao nhiêu nghi lễ/ During the past year how many ceremonies have you hosted:

31. Tết của dân tộc mình
32. Tết nguyên đán
33. cúng ma bản
34. giỗ họ
35. lễ mừng thọ
36. đám cưới/ weddings
37. đám tang/ funerals
38. lễ chay/
39. rằm tháng bảy/ special ancestor funeral feast
40. thanh minh (mùng 3 tháng 3)/ Lunar calendar March
41. cúng ma nhà/ house spirit
42. giỗ bên họ ngoại/ in-law ancestor clan worship
43. cấp sắc /celebration for new leadership position
44. lễ liên quan đến nông nghiệp /agriculture
45. lễ liên quan đến săn, bắn, thu hái lâm sản (H+G ceremony)
46. lễ khác (ghi cụ thể) other:

V. Tìm hiểu về nông nghiệp (agriculture system)

- Ông bà cho biết các loại cây trồng được sử dụng trên đất của ông bà qua các thời kì?
(*Plot history*)
- Ông bà dành bao nhiêu thời gian chăm sóc gia súc? How much time is spent taking care of animals each week?

- a. Ông bà dành bao nhiêu thời gian để chăn thả vật nuôi của mình? (Time)
 - b. Mất bao nhiêu thời gian để đi đến nơi chăn thả gia súc của ông bà? (Distance)
 - c. Ai là người làm việc đó? (who)
 - d. Ông bà cho biết quỹ thời gian chăm sóc gia súc giữa các mùa khác nhau nơi mình ở? (seasonal variation)
3. Ông bà cho gia súc ăn loại thức ăn gì? /What are animals fed?
 4. Chi phí hằng tháng là bao nhiêu/monthly cost
 5. Thời gian dành để chăm sóc chúng mỗi ngày? /Hours spent/day
 6. Ông bà nuôi bao nhiêu con?/livestock capacity
 7. Chi phí cho hoạt động nông nghiệp / crop activity budget
 8. Ông bà sử dụng những loại phân hóa học, phân vô cơ, thuốc trừ sâu nào, hạt giống và chi phí bao nhiêu cho trồng trọt? / Fertilizer, pesticide, herbicide and seed inputs (amount and cost)?
 9. *Has the amount of inouts applied changed at all? Y/N how?*
 10. Ông bà chi phí hết bao nhiêu cho công việc gặt hái? /*Harvest costs*
 11. Ông bà chi phí hết bao nhiêu và thời gian bao nhiêu cho hoạt động sau khi th hoạch?/*post-harvest costs?*
 12. Thời gian và chi phí cho việc vận chuyển sản phẩm?/*Transportation costs?*
 13. Ông bà bán ra thị trường với giá bao nhiêu?/ *Selling prices*

Loại cây/crop	Giá bán/kg năm 2007/08 selling price	Sản lượng năm 2007/2008 (kg) yeild	Diện tích Plot size	Giá bán/kg năm 2008/2009 selling price	Sản lượng yield 2008/09	Diện tích gieo trồng Plot size	Hóa chất sử dụng Inputs used	Loại cao sản hay giống lưu HYV or saved seeds
Ngô /corn								
Cà phê/coffee								
Đậu tương/ soybeans								
Cây hoa								

màu/fruits								
Lạc/nuts								
Lúa nước/wet rice								
Lúa nương/ dry rice								
Lúa nếp sticky rice								
Sắn/manioc								
Chè/Tea								
Khác/other								

13. Ông bà có sử dụng phân chuồng? Ông bà có mua hoặc bán phân chuồng không?/ *Manure use, sales or purchases?*

14. Ai khuyến khích ông bà trồng những loại cây đó?/ *Who informed you to grow these crops?*

15. Ông bà sẽ muốn trồng loại cây gì trong tương lai?/ *what do you want to grow in the future?*

16. Vì sao ông bà lại thay đổi cây trồng? Nguồn thông tin nào giúp ông bà thay đổi loại cây trồng như thế?/ *why did you change your crops?*

17. Vì sao ông bà làm trang trại theo mô như hiện tại?/ *why did you design your farm this way?*

18. Theo ông bà, đâu là vấn đề trong canh tác nông nghiệp của gia đình? (vốn, điều kiện môi trường, thị trường tiêu thụ, ruộng quá xa nhà, số lượng ruộng được giao)/ *In your opinion, what are problems with your farming system? (credit, environmental, market access, distance from house, number of plots?)*

19. Theo ông bà trong tương lai việc canh tác của gia đình có gặp khó khăn gì không?/ *Do you think there are going to be problems with farming in the future?*

20. Sau này ai sẽ là người sở hữu đất đai của gia đình? / *Who will inherit the land?*

VI. Đầu tư của gia đình/Investments

1. Ông bà có sổ đỏ/sổ đỏ không? Có mấy cái? *Do you have a redbook? How many of each?*
2. Sổ đỏ nói được sử dụng đất bao nhiêu năm đối với đất rừng, đất nông nghiệp, đất ở?
What does the redbook say about your forestry, agriculture, and living land rights? Are the land use rights the same for each property?
3. Có sổ đỏ thì không làm gì? Tại sao không được? *What can't you on your land according to the redbook?*
4. Đất ông bà có bị xói mòn không? *Is your farm's soil eroding?* _____ *Yes/no*
5. Để đất nông nghiệp không bị xói mòn, bạc màu, cần phải làm gì? Đã làm gì chưa? Tại sao chưa làm? *In order to avoid erosion, and dry soil what should you do? If you know the soil is eroding why have you not done anything?*
6. Có sổ đỏ, ông đầu tư tiền, công sức và xây dựng nhiều hơn hay vẫn như cũ? Tại sao?
Did you invest more \$ and labor on your land after receiving your redbook? Yes/no
7. Danh sách các loại đầu tư/*list of farm investments*

Hình thức đầu tư/type	Người làm/# of people	Thời gian/time	Chi phí/cost	Tổng số/total
Hàng rào/fence				
Ao cá/fish				
Đắp nền, tôn nền/terraces				
Đường xá khu đất/trồng trọt/contour farming				
Phân bón hữu cơ/organic inputs				
Nông lâm/agroforestry				
Lâm nghiệp/forestry				
Phân xanh /mulch				
Phân bón hóa học/chemical inputs				
Thủy lợi/irrigation				
Giếng nước/well				
Nhà ở/ housing structures				
Mua thêm/ buy more animals				
Khác/other				

8. Vài năm tới, đất có tốt bằng bây giờ không? Tại sao? *In the next few years will your land be as good as now? Y/N why?*
9. Ông bà cho biết quan điểm của mình về “sự tiến bộ”? *In your opinion what does progress mean?*
10. Ông bà có thể phác họa nông trại của mình; vị trí ruộng, đánh dấu trồng cây gì, và khoảng cách từ nhà tới ruộng? và cho biết tỷ lệ phần trăm lương thực để tiêu dùng, để bán? *Draw your farm and its field. Mark what is grown and how far the fields are from your home. Mark which percentage of land is for food and for market production.*