ABSTRACT

Hybrid Rice: State Intervention, Minority Resistance, and the Future of Agriculture in the Uplands of Northern Vietnam

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Vietnam is among the world's largest rice producers, exporting 6 million metric tons of rice in 2017. Much of this success is attributed to the *doi moi* reforms of the late 1980s, credited for decollectivizing agricultural lands, liberating markets, and improving livelihoods. However, some poverty remains, particularly among ethnic minority communities. Recent poverty alleviation efforts have consequently focused on ethnic minorities, as exemplified through policies encouraging the adoption of hybrid rice seeds and disuse of swidden cultivation. However, these policies are often met with resistance. In order to understand this tension, one must first understand its origins in Vietnam's agricultural history. Spanning the origin of wet rice, waves of immigration into uplands, French colonization and resistance, and the myriad of land reforms within the last century, the agricultural history of Vietnam gives light to these policies and other modern complications regarding agricultural use and environmental concerns among minority communities.

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HYBRID RICE:

STATE INTERVENTION, MINORITY RESISTANCE, AND THE FUTURE OF AGRICULTURE IN THE UPLANDS OF NORTHERN VIETNAM

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The grower of trees, the gardener, the man born to farming, whose hands reach into the ground and sprout, to him the soil is a divine drug. He enters into death yearly, and comes back rejoicing. He has seen the light lie down in the dung heap, and rise again in the corn. His thought passes along the row ends like a mole. What miraculous seed has he swallowed that the unending sentence of his love flows out of his mouth like a vine clinging in the sunlight, and like water descending in the dark?

- Wendell Berry, Farming: A Hand Book

INTRODUCTION

Vietnam is the third largest rice exporter in the world ("Rice: World Markets," 2017: 15). The U.S. Department of Agriculture reports that Vietnam exported 6 million metric tons of rice during 2017 alone, placing it behind only India (11.2 million metric tons) and Thailand (10.5 million metric tons) ("Rice: World Markets," 2017: 15). However, Vietnam has not always been the economic powerhouse that it is today. Before the extensive *doi moi* policy reforms initiated in the late 1980s that led to much of the country's participation in the international market, Vietnam was actually a net importer of significant quantities of rice (Nielsen, 2003: 2). In addition to benefitting the national economy, this recent prosperity has also rapidly improved the quality of life for many. Only recently, the poverty rate in Vietnam dropped from 58% in 1998 to 14.5% in 2008 ("Viet Nam," 2012). This remarkably fast advancement can be attributed in large part to improvements in the agricultural sector: land titling policies and the liberalization of prices in recent decades, in addition to improved technology, land use, and irrigation, have led to massive economic growth ("Viet Nam," 2012). As of 2012, 30% of Vietnam's exports and 22% of the country's GDP comes from the agricultural sector ("Viet Nam," 2012). This growth is not limited to a select few: 65.1% of Vietnam's population reside in rural settings, and 52% of the country's employment comes from the agricultural sector (Central Intelligence Agency, 2017; "Viet Nam," 2012).

However, despite such rapid development during recent decades, parts of rural Vietnam remain impoverished ("Viet Nam," 2012). The relatively new land use rights system introduced during the *doi moi* period has created both positive and negative

effects on rural livelihoods. Vulnerability to natural disaster and lack of access to high-quality land continue to plague many rural populations, particularly ethnic minority groups ("Viet Nam," 2012).

Vietnam officially recognizes 54 ethnic groups, the Kinh (Viet) being the majority (Central Intelligence Agency, 2017). While the remaining 53 minority groups compose only 13% of the country's population, they account for 30% of the country's poor ("Viet Nam," 2012). Thus, poverty in Vietnam is disproportionately prevalent among ethnic minorities. Of these, 49 minority groups live primarily in the uplands of Vietnam, numbering 10 million individuals (Turner, 2015: 20-21). 6 million of these live in the northern uplands specifically (Turner, 2015: 20).

One of the most prominent ethnic minority groups in the northern uplands region of Vietnam is the Hmong, with a recorded population of 1,068,189 individuals in Vietnam (Turner, 2015: 20-21). Today, the Hmong are at the heart of Vietnamese agricultural reforms aimed at poverty alleviation and economic assimilation (Bonnin & Turner, 2012: 95). In an effort to increase rice yields, the state has encouraged the use of hybrid rice seeds and more industrialized production techniques in the northern upland regions (Bonnin & Turner, 2012: 95). However, government initiatives have been met with resistance among the Hmong households, who have practiced traditional swidden agriculture apart from much involvement of government regulation for centuries (Bonnin & Turner, 2012: 95).

The purpose of this thesis is threefold: first, in order to understand current tensions between ethnic minorities and the state, it will be demonstrated that the historical prejudices against ethnic minorities found in the precolonial period have shaped modern

prejudices, and that these biases are reflected in modern interventionist policies targeting agricultural practices among ethnic minority groups. Second, the thesis will explore the ways in which historical land ownership and use in Vietnam has shaped the unique land use rights found today, as is demonstrated by communal lands common in the precolonial period and the post-colonial response to the creation of a French landlord class. Finally, the ways in which the present land use rights system affects rural landholders will be discussed, including the fragmentation of land, limited time land use rights, land use flexibility, and tenure security.

Consequently, while the last chapter of this undertaking is devoted to the specific issues surrounding government agricultural interventions among Hmong and other ethnic minority households, the former chapters take a broad glimpse at the history of agriculture in Vietnam in order to best understand the historical context surrounding agrarian issues in Vietnam today.

Chapter One explores the origins of wet rice agriculture among the Lac people in Vietnam, followed by discussions of agriculture and state relations during the Le and Nguyen Dynasties. Here, the immigration of ethnic minorities into the uplands and the subsequent state response are detailed. Finally, the shift in agricultural organization under French colonization is discussed.

Chapter Two continues the agricultural history of Vietnam, beginning with the nationalist resistance against colonization. The various land reforms during the Indochina Wars, including land redistribution and collectivization, are detailed.

Chapter Three picks up with decollectivization and the *doi moi* period following Vietnamese independence, and continues through to current land use rights and agricultural practices. The specifics of current land use rights are detailed, and the benefits and costs of this system to rural landholders are discussed.

Finally, Chapter Four begins the discussion of current state interventions among ethnic minority groups in the northern uplands, focusing largely on the effects had upon and the responses of Hmong communities. Interventions of particular interest include the state push to use hybrid rice seeds rather than traditional local varieties, and state actions against swidden agriculture. Environmental considerations surrounding use of hybrid rice and state subsidized inputs, swidden agriculture and deforestation in the uplands, and the relationship between ethnic minorities and the environment will also be discussed.

CHAPTER ONE

A Brief Agricultural History of Vietnam: Origins through the Colonial Period

Recent agrarian history in Vietnam has been marked by intense, mercurial land reforms often intended to reverse much of the influence of the French colonial period. While many of these reforms took inspiration from China, historical land rights and use have also been a precedent for the movements of the last half century. Consequently, understanding the history of village councils, communal lands, and wet rice cultivation gives insight into modern agricultural practices.

Additionally, much of the prejudice faced by ethnic minority groups in Vietnam today finds origin in precolonial relationships between immigrant minority groups and the state. Beginning with the earliest migrations of minorities into the uplands of Vietnam, the state has struggled to integrate minorities into the wider governance and economy. In particular, lowland governance took issue with the use of swidden agriculture and dry rice cultivation among upland ethnic minorities during the precolonial period.

The subsequent colonial period did much to change agricultural organization in Vietnam, introducing a landlord class and plantation system that were later the targets of reform. Thus, the precolonial and colonial agricultural practices of Vietnam have shaped much of the country's modern agrarian landscape by serving as inspiration for recent transformations and giving origin to the present biases towards ethnic minorities.

Precolonial Vietnam

The Dong Son Culture

In some ways, the foundation of Vietnamese civilization began with rice. As the swamps of the Red River plains dried and became more suitable for human habitation around 3,000 BCE, the earliest agricultural communities started to settle in what is now northern Vietnam (Goscha, 2016: 13). With them spread the cultivation of rice from the Yangzi valley (Goscha, 2016: 13). The evolution of more advanced irrigation, in the form of dikes and canals, led to the development of double-cropping and wet rice agriculture (Goscha, 2016: 13).

Wet rice agriculture is a labor-intensive practice in which rice seedlings are transplanted into irrigated paddies ("Wet Rice Agriculture," 2009). The paddies are then drained once the rice ripens ("Wet Rice Agriculture," 2009). The preparation of paddy fields, transplanting of seedlings from seedbeds to paddies, and harvesting of rice require a particularly large amount of labor ("Wet Rice Agriculture," 2009). The evolution of double-cropping, developed by the first early agriculturalists, is additionally labor-intensive, as the production of two rice crops a year requires that the harvesting of one crop and the transplanting of the other occur simultaneously ("Wet Rice Agriculture," 2009). Thus, the early wet rice paddy fields were dependent on two main factors: labor and irrigation. As the development of more reliable irrigation led to increased wet rice production, agriculturalists became more sedentary, and population flourished, consequently providing a more stable source of labor (Goscha, 2016: 14). The many years of labor invested in irrigation construction, and leveling and terracing of land, made

it difficult for agriculturalists to consider abandoning these hard-earned paddy fields (Scott, 2009: 74).

In contrast, however, to the intense demands of irrigation and labor, wet rice production requires much less land than other forms of rice production (Scott, 2009: 74). In addition to the effects of sedentarization, this ensured that the societies formed around wet rice production were a dense concentration of permanently settled labor and grain (Scott, 2009: 65). In turn, socio-political institutions formed, maritime trade blossomed, and crafts such as bronze-casting and cloth production took root (Goscha, 2016: 14). In this way, these first settled agriculturalists, known as the Lac people, created a distinct identity and society that would later survive various attempts at Han assimilation (McLeod & Nguyen, 2001: 15). As one of the first people groups in Asia to develop systems of irrigation and wet rice agriculture, the Lac gave rise to what is now known as the Dong Son culture (McLeod & Nguyen, 2001: 15; Goscha, 2016: 14).

Chinese Imperialism and Early Independence

The expansion of the Han Chinese during the Qin and Han Dynasties eventually reached the Lac people (McLeod & Nguyen, 2001: 15). By 39-43 CE, rebellions led to the annexation and direct rule of the Lac states by the victorious Han (McLeod & Nguyen, 2001: 15-16). During this period, Chinese bureaucracy and culture swept across the territories, as many assimilated to Confucian and Legalist thought (McLeod & Nguyen, 2001: 16). However, memory of the Lac culture remained through the centuries, giving rise to repeated rebellions against Chinese rule (McLeod & Nguyen, 2001: 16).

Eventually, insurgents were successful, and independence from the Chinese was won in 939 CE (McLeod & Nguyen, 2001: 16).

Throughout the various waves of Han expansion and occupation in Southeast Asia, native populations were faced with three choices: "assimilation and absorption, rebellion, or flight (often after failed resistance)" (Scott, 2009: 138). Those that were assimilated were often simply absorbed into the Han identity, over time ceasing to be a separate ethnic group (Scott, 2009: 138-39). However, those that chose the latter option sought to retain their ethnic identity by fleeing into lands outside of Han reach (Scott, 2009: 138-39). Over time, these patterns of flight led to the creation of pockets of ethnic minorities scattered across Southeast Asia, often in upland regions (Scott, 2009: 138-39). While some groups maintained wet rice agriculture, others spread into remote hill regions unsuitable for such irrigated cultivation (Scott, 2009: 139). These migrations continued well into the Nguyen Dynasty, and even later throughout French colonial rule (Scott, 2009: 153).

Following Viet independence in 939 CE, several Vietnamese dynasties rose and fell, weaving Chinese tradition into their unique Vietnamese culture (McLeod & Nguyen, 2001: 16-17). Despite repeated attacks by both the Chinese and the Mongols, the Vietnamese states remained independent until 1407, during which the Chinese Ming Dynasty briefly occupied the Viet (McLeod & Nguyen, 2001: 17). The occupation was short-lived, however, as Le Loi defeated the Ming in 1428, giving rise to the Le Dynasty (McLeod & Nguyen, 2001: 17).

The Le Dynasty (1428–1788)

The Le Dynasty was independent of China, but adopted Chinese ideals to reinforce monarchy, government, and taxation through Chinese concepts like the Heavenly Mandate (McLeod & Nguyen, 2001: 17). Often, such Chinese influence resulted in a homogenization of state culture (Gillespie, 2006: 452). For example, Chinese teachings encouraging the blending of Taoism, Confucianism, and Mahayana Buddhism to achieve a "reduction of religions into the same source" (tam giao dong nguyen)" were popularized by Vietnamese leadership (Gillespie, 2006: 452). Such unification of culture was advantageous to state builders: the more uniform a society, the easier it was to assess and tax (Scott, 2009: 74-75). Monoculture wet rice production fit this ideal of uniformity well. Irrigated rice binds producers to a particular rhythm of sowing, transplanting, weeding, and threshing (Scott, 2009: 74). In this way, wet rice producers across the Le Dynasty cultivated their rice in roughly the same way and time, creating a society that was easily accounted for and taxed (Scott, 2009: 74).

Similarly, the Le Penal Code (*Lê Trieu Hinh Luat*) adapted many of its provisions from Chinese Ming and Tang Codes, while still maintaining some unique regulations (Gillespie, 2006: 435). Notably, the Le Penal Code distinguished different jurisdictions for the ethnic majority, called people of the state (*Kinh*), and ethnic minorities (*man lieu*) (Gillespie, 2006: 474). While minority leaders were required to provide a tribute to the Le state, they were allowed much cultural independence from state regulation (Gillespie, 2006: 474). Thus, they were less a part of the unification process during this period, and were left to practice their own separate forms of agriculture and society with some degree

of autonomy. However, such independence would soon be challenged by the later Nguyen Dynasty.

The Nguyen Dynasty (1802–1885)

In the period prior to French colonialism, nearly 80% of all Viet lived in rural communities, concentrated around a farming village (McLeod & Nguyen, 2001: 21). Such villages served as administrative centers, each led by a council of twelve elected 'notables' (hoi lang) (McLeod & Nguyen, 2001: 23). Rather than taxing families directly, the state submitted tax demands to the village council based on the population of each village (McLeod & Nguyen, 2001: 23). In turn, notables were responsible for delegating tax obligations to each household (McLeod & Nguyen, 2001: 23). Additionally, the council of notables also governed communal lands corporately owned by the village (McLeod & Nguyen, 2001: 23). Often, the communal land (cong dien) was let, and the earnings were managed by the council to aid orphans and widows, finance village festivals, and cover other expenses (McLeod & Nguyen, 2001: 23). In this way, rural villages during the Nguyen Dynasty, prior to French colonialism, benefited from limited self-government (McLeod & Nguyen, 2001: 23).

The primary economic activity of these rural communities remained rice cultivation (McLeod & Nguyen, 2001: 21). In fact, rice so permeated village life that it regularly served as currency among the rural Viet: rent and taxes were often paid for in rice, and rice farmers frequently traded their yields for other goods (McLeod & Nguyen, 2001: 21). Despite this, most villagers continued to practice subsistence farming, producing rice for consumption rather than market (McLeod & Nguyen, 2001: 21). In

addition, most agricultural households practiced some trade other than rice farming, such as fishing and weaving (McLeod & Nguyen, 2001: 22). Land ownership, aside from village communal lands, was notably familial (McLeod & Nguyen, 2001: 21). Such private ownership largely resulted from efforts by the Nguyen Dynasty to impede the creation of a strong landed interest (McLeod & Nguyen, 2001: 23). Thus, villages were fairly self-sufficient, operating as the basic unit of social life and administration in rural areas (McLeod & Nguyen, 2001: 22). However, despite provisions for limited self-government offered by the Nguyen Dynasty, Vietnamese leadership during this period also placed increased pressure on minority ethnic groups to assimilate to a more legible, taxable way of life (Gillespie, 2006: 474).

Whereas a unification of culture during the Le Dynasty still allowed ethnic minorities some cultural freedom, the nineteenth century Nguyen Dynasty took a more assimilationist approach (Gillespie, 2006: 474). Nguyen Emperor Minh Mang (1820-41) wrote of the hill tribe minorities that "we must hope that their barbarian habits will be subconsciously dissipated, and they will daily become more infected by Han (Sino-Vietnamese) customs" (Gillespie, 2006: 474). In particular, Minh Mang was concerned with the use of swidden agriculture by some upland ethnic minorities (Scott, 2009: 76).

Many of the ethnic minority groups that settled the uplands of Vietnam chose to cultivate rice and other agricultural products using swidden agriculture, rather than focusing on wet rice cultivation like the majority of lowland Vietnam (Scott, 2009: 139). Herold Wiens describes the exodus of ethnic minorities in Southeast Asia as having two main directions, the second of which moved into mountainous lands ill-suited for traditional wet rice cultivation:

In the second direction moved the mountain-roving, fire-field or shifting agriculturalists, the Miao, the Yao, the Lolo and their related agricultural groups. Nevertheless, the vertical movements did not find sufficient room for the displaced mountain tribesmen, so that among them, also, there have been migrations to the south and southwest frontier regions and even across the frontiers into Vietnam-Laos and northern Thailand and northern Burma. (Scott, 2009: 139)

The Miao noted above, known as the Hmong in Vietnam, had been migrating throughout Southeast Asia for centuries (Scott, 2009: 140). However, large waves of dispersal following suppression campaigns and risings in 1698, 1732, 1794, and 1855 led to the more recent flight of large numbers of Hmong into the uplands of northern Vietnam (Scott, 2009: 140). Both the Hmong and the Yao practiced agriculture in a less than uniform manner (Scott, 2009: 140). Opium and maize production, foraging, and swiddening agriculture were all a part of ethnic minority livelihoods, in addition to wet rice cultivation (Scott, 2009: 140). As Wiens remarked, the Hmong and Yao were particularly known for their "fire-field or shifting" agriculture, otherwise known as swidden agriculture (Scott, 2009: 139).

Swidden agriculture is practiced by alternating parcels of land between crop cultivation and fallow rest periods ("Shifting Cultivation," 2011). A farmer will typically grow a crop on a particular parcel for two to three years, and then let the land lay fallow for at least ten years as native vegetation regrows ("Shifting Cultivation," 2011). Often upland farmers will also rotate multiple crops, planting rice on a parcel for one to two years, and then planting maize or cassava before letting the parcel lay fallow again (Pandey & Minh, 1998: 252). In order to clear a parcel for cultivation, swidden agriculturalists will cut down and burn native vegetation ("Shifting Cultivation," 2011). Such agriculture made sense in the mountainous uplands of northern Vietnam, far from

constructed irrigation (Scott, 2009: 139). It required less labor, suitable for small ethnic minority groups, and in turn resulted in sizeable surplus for family cultivators (Scott, 2009: 65). However, unlike wet rice agriculture, swidden agriculture is not easily assessable, controllable, and therefore taxable (Scott, 2009: 73).

Unlike wet rice cultivation, swidden agriculture requires large tracts of land (Scott, 2009: 65). In combination with the lessened need for labor, swidden agriculture thus imposes "an upper limit of population density of about 20-30 square kilometers" (Scott, 2009: 65). Thus, communities that practiced swidden agriculture were dispersed at much less dense concentrations than those practicing wet rice cultivation. Additionally, the shifting nature of swidden agriculture led to much internal migration, as swidden agriculturalists moved from plot to plot in the rotation of crop cultivation and resting fallow (Scott, 2009: 78). Add to this the cultivation of crops other than rice, and additional income brought in from foraging, and the economy of the swidden agriculturalists was anything but legible and taxable (Scott, 2009: 78). The lack of concentrated manpower for the state to access and control, the lack of uniform pattern to crop production for the state to predict, and the lack of permanent settlements for the state to assess and tax made it extremely difficult for the Nguyen Dynasty to incorporate swidden agricultural communities into the state administration and economy (Scott, 2009: 78). In essence, the ethnic minority groups of upland Vietnam, such as the Hmong and the Yao, were frustratingly outside of the Nguyen Dynasty's control.

Colonial Vietnam

French Indochina

Despite prominent attempts at integration by Nguyen powers like Emperor Minh Mang, most of the lowland ethnic majority – the Kinh – were generally disinterested in northern upland residents throughout precolonial history (Michaud & Turner, 2016: 155). The Kinh were far more invested in further developing wet rice agriculture, protecting the region from Chinese invasion, and controlling southern territories (Michaud & Turner, 2016: 155). They had little time to focus on the remote ethnic minorities inhabiting the undesirable uplands. The few Nguyen policies that did successfully address mountain dwellers were primarily aimed at the upper valley of the Clear River (Michaud, 2013: 54). Minorities further north and northwest, such as the Hmong and the Yao, were largely unaffected (Michaud, 2013: 54). However, these once secluded minority groups suddenly became a focus of attention during French colonization (Michaud & Turner, 2016: 155).

In 1858, French forces landed in Vietnam (McLeod & Nguyen, 2001: 26).

Starting in the south, they worked their way northwards in search of an accessible route on the rivers to China (McLeod & Nguyen, 2001: 27-28). By the 1880s, all of Vietnam was under French command (McLeod & Nguyen, 2001: 28). During this period, Vietnam was divided into three French holdings: Tonkin in the north, Annam in the center, and Cochin China in the south (McLeod & Nguyen, 2001: 28). In combination with French-held Laos and Cambodia, this region was known as French Indochina (McLeod & Nguyen, 2001: 28). Whereas the northern upland borderlands of Tonkin were generally deemed unimportant by lowland Kinh due to their unsuitability for wet rice agriculture,

the region was highly valuable to French traders looking to bypass treaty ports along the coast of China (Michaud & Turner, 2016: 155).



Figure 1. Map of French holdings in Indochina with dates of acquisition. Reprinted from *The Colonial Bastille: A History of Imprisonment in Vietnam, 1862-1940* (p. x) by P. Zinoman, 2001, University of California Press: Berkeley, California.

Across general Indochina, French economic reforms devastated small farmers. While the precolonial Vietnamese economy was based on village-level units of subsistence agriculture, French governors desired an export-oriented plantation economy (McLeod & Nguyen, 2001: 28). During French colonial rule, many poor farmers lost their land and became wage-laborers or tenants for market-oriented plantations (McLeod & Nguyen, 2001: 29). Rice cultivators were often coerced into selling their crop at unfavorable rates (McLeod & Nguyen, 2001: 28-29). Heavy taxes were charged directly to family heads, rather than villages (McLeod & Nguyen, 2001: 28-29). Consequently,

many turned to usurers, putting down parcels of land as collateral (McLeod & Nguyen, 2001: 28-29). Such land was often eventually lost to creditors and absorbed by large plantations (McLeod & Nguyen, 2001: 28-29). In addition to this, land owned by defeated soldiers had been redistributed to French collaborators, and notables were encouraged to take communal lands as private property (McLeod & Nguyen, 2001: 28-29).

Meanwhile, the rural agricultural reforms ongoing in China during this period inspired many Vietnamese intellectuals to idealize land reforms of their own as a method of stimulating the national economy (Woodside, 1970: 706). Chinese cooperatives were particularly inspiring to many Viet, who subsequently sought the assistance of the French in creating agricultural cooperatives of their own (Woodside, 1970: 706). However, the French colonial regime ignored reformers' requests for agrarian policy change, instead encouraging the development of landlord-tenant systems of agriculture (Woodside, 1970: 706). The result was a stagnation of technological advancement, low rice productivity, and the growth of a landlord class (Woodside, 1970: 706). Consequently, the idealization of cooperatives as the solution to the agricultural woes brought about by the French continued through the decades of colonial rule, eventually manifesting in sweeping reforms and collectivization after independence (Woodside, 1970: 706).

The French recognized, however, that administration of the upland frontier required a different approach than that of lowland governance (Michaud & Turner, 2016: 156). Effective French rule required that populations be legible and taxable – traits which upland ethnic minority groups had long evaded. It was determined that a united civilian and military rule would be the most successful means of occupation (Michaud & Turner,

2016: 156). Thus, the region was divided into four Military Territories, which were further subdivided into sectors and community *partisans* (militias) in order to achieve a scale of governance that matched the distribution of unique ethnic groups (Michaud & Turner, 2016: 156). However, gaining influence over such a variety of local leaderships and customs was not easy. A key step to the integration of northern upland ethnic minorities into French governance and economy was the administration of two geographic and ethnographic surveys in 1897 and 1903 (Michaud & Turner, 2016: 156). The 4000 pages of surveys give insight into upland livelihoods, French enclosing strategies, and local reactions to French rule (Michaud & Turner, 2016: 155). Importantly, the surveys made upland ethnic minority groups known and legible in a way that had never before been accomplished (Michaud & Turner, 2016: 155).

One key factor in the integration of ethnic minority uplanders was the geographic enclosure of the region through the delineation of an official border with China in 1896 (Michaud & Turner, 2016: 164). Consequently, movement was restricted and trade more regulated, as border posts allowed the French to monitor cross-border economic activity (Michaud & Turner, 2016: 164). Hence, trade with China was subject to taxation and regulation (Michaud & Turner, 2016: 164). The official mapping of the region and division into administrative units only served to further enclose uplanders (Michaud & Turner, 2016: 164). New and improved roads and other infrastructure made the area more traversable, and therefore more accessible (Michaud & Turner, 2016: 165). In this way, the creation of hard boundaries and better roads made it more difficult for uplanders to escape the government's watchful eye.

The consequence of both extensive surveys and geographic standardization was an economic enclosure that better integrated minority uplanders into the state. While the uplands came nowhere near the plantation economy, land loss, and land redistribution of the lowland Kinh, minority populations in the northern borderlands were regulated and taxed in a way previously unknown (Michaud & Turner, 2016: 165). The surveillance of traditional trade routes and the adoption of the French piaster as common currency further contributed to this integration (Michaud & Turner, 2016: 164).

However, this enclosure was met with subtle resistance by upland ethnic minority groups (Michaud & Turner, 2016: 164). Farmers continued to produce crops at subsistence level, rarely yielding a surplus despite colonial encouragement (Michaud & Turner, 2016: 164). This escape from the cash-crop, market economy baffled the French, who viewed subsistence agriculture as "apathy" (Michaud & Turner, 2016: 164).

Additionally, barter remained the most commonly used method of transaction among fellow uplanders (Michaud & Turner, 2016: 165). While small trade between villagers was less regulated by the French, who placed more importance on cross-border trade with China, bartering further hid minority dealings from French regulation (Michaud & Turner, 2016: 165). Tax evasion, underreporting agricultural yields, and circumventing cross-border regulations via new trade routes were all additional forms of subtle resistance practiced by ethnic minority upland groups in the northern borderlands (Michaud & Turner, 2016: 165).

Despite the widespread use of such tactics, the French enclosure of the northern uplands was largely regarded as a success (Michaud & Turner, 2016: 165). French investment in the region focused primarily on access to China rather than agricultural

production, and thus upland integration allowed for the continuation of upland swidden agriculture and subsistence agriculture. However, minorities living in the area were more integrated into mainstream economy and governance than ever before, albeit with significantly more freedom than the lowland Kinh (Michaud & Turner, 2016: 165). Thus, French occupation in the northern borderlands significantly altered the relationship between upland minorities and the state, creating a more accessible population.

CHAPTER TWO

A Brief Agricultural History of Vietnam: Resistance through the Indochina Wars

The period following French colonialism in Vietnam is marked by two major features: war and agrarian transformation. War came to Vietnam first through French, and later Japanese, involvement in World War II, and was followed by decades of additional war with France and the United States in the Indochina Wars. In the midst of this violence, agricultural reforms meant to reverse inequalities brought by the landlord class were established. From land redistribution to shared work groups to collectivization, the face of agriculture in Vietnam changed dramatically during the Indochina Wars. By the end of the wars, however, the now reunified Socialist Republic of Vietnam reversed many of these reforms. Preserving socialism at a political level required economic liberalization. Thus, much of the agricultural landscape known in Vietnam today was shaped by the liberal land reforms brought about during the economic shift of the late 1980s. Altogether, this period of turbulence, experimentation, and growth following French colonialism dramatically altered Vietnamese policy, economy, and agriculture in ways that are still active and visible today.

Colonial Resistance

Nationalism and the Rise of the Viet Minh

French occupation was not without resistance. In response to the decimation of the Vietnamese imperial order, as well as uneasy social tensions created by the French, a vibrant wave of nationalism rooted itself in the people of Vietnam (McLeod & Nguyen, 2001: 29). This nationalism gave rise to a period of resistance spanning nearly a century. Such resistance took many forms: initial stages embraced Confucianism as a rejection of Western ideals, while later movements were inspired by Western philosophies (McLeod & Nguyen, 2001: 29-30). Regardless of dogma, resistors to French occupation were quickly imprisoned or killed (McLeod & Nguyen, 2001: 30). Eventually, however, this violence led to a critical shift in the shape of Vietnamese nationalism. In 1930, a particularly powerful movement of noncommunist resistance culminated in an organized insurrection that was crushed by the French, who subsequently bombed nearby villages in retaliation (McLeod & Nguyen, 2001: 30). The resulting void created by the destruction of noncommunist nationalism gave room for a different form of resistance: Marxism (McLeod & Nguyen, 2001: 30).

Thus, the following years of insurgency were marked by communist nationalism, led primarily by Ho Chi Minh. In 1930, Ho founded the Indochinese Communist Party (ICP), the ancestor of today's Vietnam Communist Party (McLeod & Nguyen, 2001: 31). The overarching goal of the ICP was to overthrow French imperialism and Vietnamese feudalism, replacing these with an independent, socialist Indochina (Ho Chi Minh, 1930). Other aims listed in the foundation of the ICP included the confiscation and redistribution of plantations and property belonging to the bourgeoisie, the delegation of imperialist-owned enterprises to the "worker-peasant-soldier government," and the gift of democratic freedoms to all people (Ho Chi Minh, 1930). In 1941, in response to the political developments of World War II, the ICP founded the Vietnam Independence League, called the Viet Minh, drawing support from communists and noncommunists alike

(McLeod & Nguyen, 2001: 31). The primary objective of the Viet Minh was resistance against both French and the later Japanese occupation (McLeod & Nguyen, 2001: 31). However, on March 9, 1945, Japan launched an anti-French coup that shocked Indochina (Gunn, 2011: 83). All French residents who had not escaped to the uplands were attacked, interned, or sequestered, as Japan took full administrative control (Gunn, 2011: 83).

During this period, Japanese military control greatly altered the economy and infrastructure established by the French (Gunn, 2011: 83). Initially, some services remained, including the monitoring of agriculture, tax collection, and dike repair (Gunn, 2011: 83). Despite this, most rural Viet were increasingly impoverished as the market established by the French collapsed (Gunn, 2011: 83). Thus, many accustomed to the economic nets of French exchange were forced into self-sufficiency (Gunn, 2011: 83). Public services and market mechanisms deteriorated further as the war progressed, due both to the destruction of infrastructure by bombs and violence and the lack of attention given by the Japanese to rural Viet needs (Gunn, 2011: 84). The exploitation of Viet resources, in particular rice to feed Japan, took priority (Gunn, 2011: 84).

For this reason, Japan forced farmers to sell rice to the administration, even in regions in desperate need of food: "even Tonkin, where food was tragically scarce, had to supply 130,305 tonnes in 1943; and 186,130 tonnes in 1944" (Gunn, 2011: 90). The price at which the rice was bought was insultingly low, at 19 piasters a quintal (Gunn, 2011: 90). When farmers could not produce the amount of rice they were obliged to sell, they had to purchase this deficit at a price of 54 piasters at the market (Gunn, 2011: 90). When

the United States cut off coal supplies, this rice was stockpiled by both French and Japanese, and used as fuel (Gunn, 2011: 90).

It was during this period of Japanese exploitation that famine struck Vietnam. The Great Vietnamese Famine spanned the north and central regions of the country, lasting from 1944 through 1945 (McLeod & Nguyen, xvii). Official Vietnamese estimates place the death toll between 1,000,000 to 2,000,000 victims (Gunn, 2011: 81). The dominant opinion holds that the famine was initially caused by crop failures in 1943-45, and was exacerbated by the lack of dike maintenance and the destructive flooding in 1944 (Gunn, 2011: 90). However, the continued brutal exploitation of rice resources by the Japanese during this period certainly played a major role in both the vulnerability to and persistence of famine in Vietnam. The demoralization caused by this disaster set the backdrop for the beginning of land reforms in Vietnam that would continue for decades to come (Woodside, 1970: 706). As Woodside poignantly wrote, "the gospel of reform, then as now, was the gospel of the salvation of the north from starvation" (Woodside, 1970: 706). Magazines published in 1945 declared "rehabilitation through your own efforts" and "a decimeter of soil is a decimeter of gold" (Woodside, 1970: 706-07). Through such propaganda, the Viet Minh rallied for land reforms, eventually establishing rent reduction programs and famine salvation groups during this period (Woodside, 1970: 707). Thus, the more extreme land reforms that followed in later years often found their root in the events of the Great Vietnamese Famine (Woodside, 1970: 707).

Unaffected by this development, World War II continued on. In an effort to win Vietnamese support against the Allies, Japan invited the Vietnamese Bảo Đại emperor to reign over a pseudo-independent Vietnam, while Japan retained actual authority (McLeod

& Nguyen, 2001: 31). Despite their success in the Pacific theatre, Japan and its allies were losing the war. Thus, when the Japanese surrendered shortly after, the Bảo Đại was discredited by collaboration (McLeod & Nguyen, 2001: 31). The result was a pervasive power vacuum (McLeod & Nguyen, 2001: 31). Without the French, the Japanese, and the Bảo Đại monarchy, the Viet Minh became the most credible choice for future leadership. The Viet Minh resistors were highly regarded for two reasons: first, they were the only group that fought for independence from both France and Japan; second, they were composed of the only widespread indigenous armed force (McLeod & Nguyen, 2001: 31). Consequently, the Viet Minh easily took control of the administration after Japan's defeat. On September 2, 1945, Ho Chi Minh read a Declaration of Independence inspired by both French and American precedents, and thus established the Democratic Republic of Vietnam (D.R.V.) (McLeod & Nguyen, 2001: 32).

The Indochina Wars

The French War (1945-1954)

France, vexed by the loss of their colonial foothold, sought to regain control over Vietnam (McLeod & Nguyen, 2001: 32). Thus, the First Indochina War between France and the D.R.V., called the French War in Vietnam, was initiated in 1946 (McLeod & Nguyen, 2001: 32). In order to remain competitive, the D.R.V. required the support of the masses. Wealthier peasants were compelled by their nationalism to provide food and shelter, intelligence, and recruits (McLeod & Nguyen, 2001: 32). However, enticing the truly poor demanded additional appeals.

For this reason, the D.R.V. instituted land-distribution programs and rent reduction for the poor rural villagers, granting claims to land in exchange for military support (McLeod & Nguyen, 2001: 32). Those who refused to help the D.R.V. were executed or tortured (McLeod & Nguyen, 2001: 32). During the French War, land was originally only confiscated from those who supported the French, whereas those who supported the Viet Minh needed only to reduce rent (Moise, 2011). Historically, the landlord-tenant system was much more prevalent in South Vietnam than other regions (Moise, 2011). Thus, during this period, land reforms affected the South much more than North Vietnam (Moise, 2011).

However, North Vietnam was not unaffected by the violence of the war. In fact, the northern uplands had become a major theatre of war, and the once discrete communities of ethnic minorities became major players. The ethnic minority groups of the North uplands were a complex mosaic of political affiliations, serving as a refuge for both the French and for the Viet Minh. As previously noted, the French had a divide-and-rule style of governance when colonizing Vietnam: regions were divided by the different economic sectors, and ruled accordingly (Michaud, 2009: 28). Often, urban areas were ruled with a much tighter grip than remote upland areas (Michaud, 2009: 28).

Consequently, the French frequently prevented measures to assimilate upland ethnic minorities to the cultural ways of the lowland Kinh, in order to maintain French geographic and economic divisions (Michaud, 2009: 28). In doing so, they granted upland minority groups a degree of autonomy that was not taken for granted, particularly in the North. Hence, while nearly all of Vietnam was in revolt against the French during the First Indochina War, many ethnic minority groups in the northern uplands provided

refuge for the French (McAlister, 1966: 803). In return, the French fought off Viet Minh cadres (McAlister, 1966: 790).

One important exception was the case of the Tho ethnic minority group (McAlister, 1966: 793). Mistreated substantially more by the French than other ethnic minority groups in the northern uplands, the Tho openly supported the Viet Minh, granting them a useful foothold in the mountains (McAlister, 1966: 794). This alliance proved invaluable, as the Viet Minh relied upon retreat to the uplands to baffle and beat the French (McAlister, 1966: 793). Without the Tho, it is likely that the Viet Minh would not have been able to develop as effective a guerilla zone (McAlister, 1966: 795).

Most other ethnic minority groups in the area supported the French, most notably the Black and White Tai (McAlister, 1966: 795). For this reason, the Tai highlands were one of the last footholds the French maintained during the war (McAlister, 1966: 803). Some minority groups were divided, however. The Hmong east of the Red River were staunch rivals of the Tho, and thus were eager to help the French (McAlister, 1966: 819). However, the Hmong west of the Red River had more complicated political relationships (McAlister, 1966: 819). Their migration into the uplands and successful cultivation of opium put the Hmong at odds with many Tai groups (McAlister, 1966: 820). Efforts by the French to establish a central authority among the various, widespread groups of Hmong had failed, as the minority group treasured an autonomy greater than that which the French offered (McAlister, 1966: 823). Additionally, the Hmong in this region were known to drastically underreport their agricultural production to the French, and sell the hidden excess to China on secret trade routes (McAlister, 1966: 821). Thus, the Viet Minh found some alliance with the Hmong west of the Red River, and were eager to use

the hidden trade routes to smuggle weapons and supplies in from China (McAlister, 1966: 821). Moreover, because the Hmong in the east were sympathetic to the French, western Hmong often served as a Trojan horse of sorts for the Viet Minh (McAlister, 1966: 820). By 1945, alarmed by the organization of the Tai, the Hmong of the west had fully allied themselves to the Viet Minh (McAlister, 1966: 824). Thus, the Viet Minh were significantly aided by the complex political allegiances of the various ethnic minority groups of the northern uplands. Between support from ethnic minority groups and from the mass of Kinh peasants, the Viet Minh were able to maintain significant advantages in battle.

Consequently, despite being disadvantaged in both number and technology, the Democratic Republic of Vietnam emerged undefeated in 1954 (McLeod & Nguyen, 2001: 32). A truce was signed at the Geneva Conference, wherein Vietnam was divided along the Seventeenth Parallel, with the D.R.V. controlling the North and France administering the South (McLeod & Nguyen, 2001: 33). An election to determine the character of independent Vietnam was slated for 1956 (McLeod & Nguyen, 2001: 33).

Agrarian Transformation: Land Reform and Collectivization

Concurrent to this period of uncertainty, an agrarian transformation swept through Vietnam. This transformation began with the land reforms initiated after the Great Vietnamese Famine in 1945 and continued through the mid-1970s (Woodside, 1970: 706; Kerkvliet & Selden, 1998: 37). After the late 1950s, however, redistributive land reforms were eclipsed by collectivization. These waves of reform and collectivization comprise the first modern agrarian transformation in Vietnam (Kerkvliet & Selden, 1998: 37). A

second transformation, beginning in the late 1970s, would undo much of the structure created by the former transformation (Kerkvliet & Selden, 1998: 37).

Land redistribution in Vietnam during the French War took on a much more extreme form than previous reforms (Moise, 2011). Beginning with the 1953 Land Reform Law, a radical version of property redistribution was enacted (Sasso, 2011). The campaign targeted a broader definition of landlord, with landowners owning as few as 18 acres considered as such (Moise, 2011). The reforms swept through the DRV controlled North Vietnam, causing many noncommunist cadres in the North to defect (Moise, 2011). Those who resisted the Viet Minh were killed (Moise, 2011).

Government divided the people into five classifications – "landlords, rich peasants, middle peasants, poor peasants, and farm workers" – and it was estimated that 5% of the population was composed of landlords (Sasso, 2011). Thus, cadres were responsible for reporting a certain quota of people as landlords to fit this estimate (Sasso, 2011). Those found belonging to the landlord class were either executed, starved to death, or sent to labor camps (Sasso, 2011). Villages were desperate, and often people reported their own neighbors in order to avoid appearing as an enemy to the party (Sasso, 2011). Those denounced as landlords were brought before local leadership at a "peasant-struggle meeting" and charged (Sasso, 2011). Over time, these meetings took on a more formal shape as agricultural reform tribunals, composed of 6 to 10 members who oversaw judgements (Sasso, 2011). The land reforms were estimated to have affected 3,653 villages, and approximately 8,000 landlords and resistors were put to death (Moise, 2011).

After a particularly poignant revolt on November 2, 1956, Ho Chi Minh decided to reverse some of these reform policies (Moise, 2011). A "correction of errors" was enacted, and land was returned to many who had been wrongly defined as landlords (Moise, 2011). Nearly 12,000 victims were released from labor camps during this time (Sasso, 2011). Additionally, relatives of victims were allowed to seek revenge on those who had reported them, and thus many additional people became secondhand victims (Sasso, 2011). It was later admitted that the purpose of the land reform campaign was not actually the confiscation of land for the purpose of redistribution, but rather the "motivation of the masses" against the landlord class (Sasso, 2011). Even until 1997, the descendants of landlords were not considered trustworthy of party membership until investigation (Moise, 2011). The belief that the landlord class was a threat to Communist ideology persisted (Moise, 2011).

Collectivization, the other key movement in the first agrarian transformation, began in earnest in 1955 in north Vietnam, stretching to the south only after American military defeat in 1975 (Kerkvliet & Selden, 1998: 41). The need to maintain popular support and unity during war time ensured that this process was implemented with caution (Kerkvliet & Selden, 1998: 41-42). Thus, most of the early cooperatives created during this period were low-level (Kerkvliet & Selden, 1998: 41).

At the time, collectivization was viewed as a three-stage process, beginning with labor exchange teams, followed by low-level cooperatives, resulting finally in high-level cooperatives, also called collectives (Woodside, 1970: 707). In a low-level cooperative, only some production tools were held in common, and some private land ownership was still intact (Woodside, 1970: 707). Ideally, high-level cooperatives held all means of

production, including land, in common (Woodside, 1970: 707). In order to enforce participation in these collectives, population movement was restricted (Kerkvliet & Selden, 1998: 42). Residency papers were required to obtain housing, education, health care, ration coupons, and the ability to buy food at state-run stores (Kerkvliet & Selden, 1998: 42). As of 1960, 86% of rural households in north Vietnam were a part of low-level cooperatives (Kerkvliet & Selden, 1998: 41). By 1969, 92% of rural households were members of high-level cooperatives (Kerkvliet & Selden, 1998: 41).

In theory, collectives were supposed to be the size of the lowest unit of administration (*xa*) (Kerkvliet & Selden, 1998: 43). However, even by the mid-1970s, most cooperatives were smaller than a *xa* (Kerkvliet & Selden, 1998: 43). The average collective in north Vietnam in 1960 numbered 60-85 households (Kerkvliet & Selden, 1998: 43). In 1970, the average collective was composed of 150 households (Kerkvliet & Selden, 1998: 43). By 1980, this number more than doubled at an average of 370 households (Kerkvliet & Selden, 1998: 43). Typically, one could join a collective at the age of sixteen (Woodside, 1970: 708). Membership required that one give up all land, farm animals, farm tools, and a payment of 30-40 piasters to be held in common by the collective (Woodside, 1970: 708). In return, members were given a small plot of residential land, called "five per cent soil" to tend for one's own household needs (Woodside, 1970: 709).

The D.R.V. intended that each hectare of cooperative land yield five tons of rice paddy annually, a goal reached in 1969 by thousands of cooperatives (Woodside, 1970: 709-10). Additionally, it was expected that each cooperative raise two pigs for every one hectare of land (Woodside, 1970: 710). Collectives were required to purchase inputs and

goods for such production directly from the state, and to sell their produce back to the state at government mandated prices (Kerkvliet & Selden, 1998: 41). However, the D.R.V. maintained the free market for several goods, and was unable to dispose of the black market (Kerkvliet & Selden, 1998: 41). Even the trade of staples in the open market was legal until 1974 (Kerkvliet & Selden, 1998: 41). By the late 1970s, agencies often gravitated towards negotiated prices in order to obtain vital goods such as rice (Kerkvliet & Selden, 1998: 41).

Consequently, households remained important units of production, consumption, and social life (Kerkvliet & Selden, 1998: 43). Although political leaders often portrayed household-level participation in the free market as a capitalistic activity, household economy was allowed to continue as it filled the economic gaps that collectives could not (Kerkvliet & Selden, 1998: 43). In this way, household production and free trade of certain goods actually stabilized collectives by taking the burden of these activities away from collective labor (Kerkvliet & Selden, 1998: 43). Household production came from orchards, handicrafts, livestock, and private land, providing vital supplies of money and food for cooperative families (Kerkvliet & Selden, 1998: 44). By 1961, 50% of household income in north Vietnam was derived from such household economic activities (Kerkvliet & Selden, 1998: 44). This portion increased to 60% in the late 1970s due to national economic decline (Kerkvliet & Selden, 1998: 44).

Despite massive participation, cooperativization in Vietnam had its flaws. Only a minority of collectives ever actually met state standards (Kerkvliet & Selden, 1998: 43). By the mid-1970s, very few had collectivized pig-raising, and 70% had no specialized production groups (Kerkvliet & Selden, 1998: 43). Members of weaker collectives

sometimes withheld produce from the state, and leaders profited at the expense of other members (Kerkvliet & Selden, 1998: 43). Meanwhile, tension between state and villages persisted, as "the strong tradition of decentralized guerilla agriculture in the north" clashed with modern government planning (Woodside, 1970: 709). As in previous eras, the decentralized, subsistence agriculture of the northern uplands was in direct opposition to the goals of the state (Woodside, 1970: 708). Within the cooperative, individual household needs still took priority in the minds of most members. Often, working the 'five per cent soil' was more attractive than cooperative needs (Woodside, 1970: 709). Consequently, it was reported in 1969 that members were only working at a pace of 5-6 hours per day at collective tasks (Woodside, 1970: 709). Additionally, cooperative members were generally unlikely to feel individually responsible for commonly held goods (Woodside, 1970: 709). The Vietnamese phrase "tinh trang cha chung khong ai khoc," meaning "the situation of the common father for whom no one weeps," was used to describe the apathy members felt towards cooperative-owned machines that broke down (Woodside, 1970: 709).

In this way, collectivization became the dominant agricultural mode for almost all of northern Vietnam during the French and American wars. Though it was not always received with open arms, collectivization did give farmers some freedoms that the previous French landlord holdings did not. Despite this widespread adoption, however, the period of agrarian transformation following the American War dismantled much of the collectivized system.

The American War (1955-1975)

In response to the increasing fear of communism at home, the United States aided France throughout the French War in Vietnam (McLeod & Nguyen, 2001: 33). The U.S. was not prepared to end the fight, however, and when France signed the Geneva Accords, U.S. officials pressured France to pull out of Vietnam (McLeod & Nguyen, 2001: 33-4). Through U.S. intervention, an anti-communist state was established around Saigon, and Ngo Dinh Diem was appointed as President (McLeod & Nguyen, 2001: 34). The Republic of Vietnam (R.V.N.) was founded, and the election slated by the Geneva Accords was cancelled (McLeod & Nguyen, 2001: 34).

The result was two Vietnams: in the North, the Democratic Republic of Vietnam founded by Ho in 1945 continued to seek the reunification of Vietnam under the Communist Party; in the South, the Republic of Vietnam (R.V.N.) founded by Diem in 1955 was backed by the United States (McLeod & Nguyen, 2001: 34). The D.R.V. retained much of their original support from indigenous peasants. Diem, however, pursued a different demographic: the landlord class (Moise, 2011).

Prior to the Second Indochina War, called the American War, the Viet Minh had already confiscated and redistributed much of the land in South Vietnam, where the tenancy system had been much more prevalent (Moise, 2011). After establishing the R.V.N., Diem "nullified" these land reforms, effectively reversing the redistribution and giving property back to the landlord class (Moise, 2011). Rent collection resumed, and the average tenant was required to surrender between a quarter and a third of his crop (Moise, 2011). Naturally, the peasant class was dissatisfied with these changes. Diem's policies were extreme in their violence, and needlessly isolated much of the southern Viet

(McLeod & Nguyen, 2001: 34). Ordinance 57, passed by Diem in 1956, established the R.V.N.'s own land reforms (Moise, 2011). However, these were far less generous than those enacted by the Viet Minh (Moise, 2011). Landlords were still entitled to much of their land, and tenants were required to pay a fee for what little property they were given (Moise, 2011). Additionally, corruption among officials hurt implementation (Moise, 2011).

According to a 1970 report, 60% of Vietnam was agrarian during this time (Prosterman, 1970: 752). Consequently, agricultural issues were at the heart of Vietnamese conflict. The right to land ownership was a fundamental, high stakes concern for the majority of the Viet population. Thus, Diem's failure to adequately woo the agrarian poor set a large number of Viet in the South against the R.V.N. (Moise, 2011). The U.S., too, was slow to understand the importance of agricultural reform: "the basic reason land reform was not pursued was that U.S. officials did not believe that land-based grievances were important ... the Americans offered the peasant a constitution; the Viet Cong offered him his land and with it the right to survive" (Sansom, 1970: 229, 234). Recognizing this error, the D.R.V. pursued the support of the alienated southern poor through additional land reforms of their own (McLeod & Nguyen, 2001: 35).

The war reached a stalemate in 1967 (McLeod & Nguyen, 2001: 35). The U.S. could no longer defend its involvement, as both international and domestic public opinion swayed to opposition (McLeod & Nguyen, 2001: 35-36). Thus, negotiations were initiated in Paris after the 1968 Tet Offensive, ultimately culminating in the Paris Accords of 1973 (McLeod & Nguyen, 2001: 36). A treaty was signed, ending U.S. intervention and calling for the peaceful reconciliation of Vietnam (McLeod & Nguyen,

2001: 36). However, failure to compromise rendered the agreement unsustainable. Shortly after the U.S. withdrew its forces, the two Vietnams broke the ceasefire (McLeod & Nguyen, 2001: 36). Though the R.V.N. was better numbered and equipped, they were demoralized by the betrayal of the Americans. Consequently, on April 30, 1975, the R.V.N. was defeated for good (McLeod & Nguyen, 2001: 36).

CHAPTER THREE

A Brief Agricultural History: Independence through Current Land Use Rights

The agricultural history of Vietnam concludes with a variety of agricultural reforms, initially meant to bolster collectivization but later resulting in decollectivization, following the country's independence. Together with the concurrent period of economic liberalization, called *doi moi*, the agricultural reforms of the past three decades have resulted in the present-day land use rights policy. This current land law finds much of its origin in history, in part created out of fear of returning to the unequal land distribution of the French colonial period. Thus, even today the agricultural landscape of Vietnam is shaped by responses to the past. The details of current land use rights are expounded in the latter half of this chapter, followed by a discussion of the benefits and costs of such a system to poverty alleviation and rural agricultural household livelihoods.

A Reunified Vietnam

After nearly a century of French colonization, followed by decades of war and rebellion, the pieces of Vietnam were finally reunified. In 1976, the country was officially established as *Viet Nam Cong Hoa Xa Hoi Chu Nghia*, or the Socialist Republic of Vietnam (S.R.V.) (McLeod & Nguyen, 2001: 36). The creation of a national constitution followed soon after, in 1980 (McLeod & Nguyen, 2001: 36). The document was decidedly Leninist, and thus, the government of Vietnam was founded on two parallel powers: the Vietnam Communist Party (VCP) and the state (McLeod & Nguyen, 2001: 37). The VCP is responsible for creating policy, while the state is obligated to

enforce and apply that policy (McLeod & Nguyen, 2001: 36). In reality, however, the S.R.V. is highly centralized, with the VCP controlling nearly all aspects of government (Cima, 1987). This centralization extended to the economy of Vietnam, resulting in a nationalization of industry during a time of economic distress (McLeod & Nguyen, 2011: 37).

After the American War, Vietnam was faced with serious economic issues. The southern half of the country was particularly hard hit, as it had become dependent on both U.S. aid and the participation of U.S. personnel in the local economy (McLeod & Nguyen, 2011: 37). Additionally, much of the southern landscape was destroyed by the war, leaving the population with cratered farms and defoliated forests (McLeod & Nguyen, 2011: 37). A population of refugees, demobilized soldiers, sex workers, and drug addicts left by the war all exacerbated the existing economic turbulence (McLeod & Nguyen, 2011: 37). In response, the VCP embraced centralized economic planning, determining exactly what industries should make, which materials to use, and where and how to sell (McLeod & Nguyen, 2011: 38). Concurrent to this was a similar push to both expand and intensify agricultural collectivization across the country (McLeod & Nguyen, 2011: 37).

Progress and Post-War Tensions

In some ways, the agricultural collectivization of the mid-century provided security for a population at war. When north Vietnamese soldiers were away and unable to care for their kin, the collective provided families with food, shelter, and other

necessities (Kerkvliet & Selden, 1998: 47). Wounded soldiers were given a stipend through the collective upon return, and were still provided with a share of the production regardless of whether or not they were able to work (Kerkvliet & Selden, 1998: 47). Thus, agricultural cooperatives provided a sort of insurance during turbulent times. Meanwhile, the state needed to appease villagers in order to mobilize food, troops, and money (Kerkvliet & Selden, 1998: 47). Consequently, Vietnamese leadership allowed much more space for the household economy, choosing not to press extreme demands on collectives lest they alienate villagers (Kerkvliet & Selden, 1998: 47). Thus, through much of the American War, collectives represented a careful balance between the state and the people. Villagers did not outright oppose collectivization, while the state allowed collectives to maintain weak forms (Kerkvliet & Selden, 1998: 47).

Despite this somewhat uneasy compromise, the first agrarian transformation had accomplished a great deal. Before the Indochina Wars, just 5% of rural Vietnamese households in northern Vietnam, in addition to French citizens and the Catholic Church, owned one third of all cultivated land (Kerkvliet & Selden, 1998: 38). Poor peasants and laborers in the north accounted for 62% of the rural population, but owned only 13% of cultivated land (Kerkvliet & Selden, 1998: 38). In the south, inequality had been even starker. Less than 3% of landowners held 45% of cultivated land, while 72% of landowners held just 12% of cultivated land (Kerkvliet & Selden, 1998: 38). By the end of the American War in 1975, land redistribution in both the north and the south ensured a massive reduction in landless laborers and large landholdings alike (Kerkvliet & Selden, 1998: 39). The first agrarian transformation had decidedly shifted political power away from a landlord class to demobilized soldiers and land reformists (Kerkvliet &

Selden, 1998: 40). In addition to this social reform, the agrarian transformation also accomplished a great deal of economic success. Before major U.S. bombing in the mid-1960s, industrial outputs in the north were increasing by 15% and capital goods by 20% annually (Kerkvliet & Selden, 1998: 45). Economic conditions for rural Vietnamese in the north also increased. During the late 1950s and early 1960s, production of staple foods increased significantly from 223 kilograms per capita in 1939 to 318 kilograms by 1961 (Kerkvliet & Selden, 1998: 45-46). Agricultural yields continued to improve until the end of the war, increasing from 1.7 metric tons per hectare in 1955 to 2.4 metric tons per hectare in 1974 (Kerkvliet & Selden, 1998: 46). All of this progress was due in large part to innovations in agriculture brought on by agrarian reform. Increased use of fertilizer, the significant expansion of irrigation, new varieties of rice and increased use of double- and triple-cropping all contributed to this growth in agricultural yield (Kerkvliet & Selden, 1998: 46).

However, these economic achievements were not enough to keep rural villagers happy. Despite the steady growth in yield, standard of living in the cooperatives had obviously peaked in the 1960s (Kerkvliet & Selden, 1998: 46). Much of this was likely due to continued war with the United States and the devastating U.S. bombings (Kerkvliet & Selden, 1998: 46). Food supply was in decline, and regardless of the war, the natural enemy for villagers to blame was the collectivization system (Kerkvliet & Selden, 1998: 46). Rice production just barely kept up with population growth during this period (Kerkvliet & Selden, 1998: 46). By 1974, rice yields were at 242 kilograms per capita, one kilogram short of the yield from 1955 (Kerkvliet & Selden, 1998: 46). The sharp decline in food aid from allied countries after the end of the American War in 1975

also contributed a great deal to loss of food supply (Kerkvliet & Selden, 1998: 46).

Hence, even before the war ended, during the mid-1960s to 1970s, many north

Vietnamese had quietly returned significant collective tasks to the household level

(Kerkvliet & Selden, 1998: 47). This unspoken shift was usually met with the approval of local officials concerned with meeting quotas, increasing agricultural yields, and improving local livelihoods (Kerkvliet & Selden, 1998: 47). Thus, the period was marked by a growing dependence on the household economy, and an increasing resentment for collectivization (Kerkvliet & Selden, 1998: 46).

When the war ended in 1975, many no longer saw a compelling reason for collectivization (Kerkvliet & Selden, 1998: 47). Villagers no longer needed the insurance that collectives brought soldiers' families, and no longer feared appearing unpatriotic during wartime (Kerkvliet & Selden, 1998: 47). The state, on the other hand, no longer needed to win over villagers to fight and provide food and money for the military (Kerkvliet & Selden, 1998: 47). Consequently, the goals of the state and those of rural people grew increasingly polarized after the war. Vietnamese leadership increased pressure on cooperatives to adhere to model standards, and collectivization was finally extended to the south (Kerkvliet & Selden, 1998: 47). Southern villagers, however, who had not been subject to collectivization prior to 1975, often fled the low-level cooperatives introduced by the state after reunification (Kerkvliet & Selden, 1998: 48). 13,000 of these cooperatives were established in the Mekong Delta alone, but by 1980, only 3,700 were left (Kerkvliet & Selden, 1998: 48). Of these, most were quite weak, never reaching the high-level collectives familiar in the north (Kerkvliet & Selden, 1998: 48).

Despite the state's mounting attempts to increase collectivization in the mid1970s, it became increasingly clear that collective agriculture was no longer working.

Discontent and increased household reliance in the north, as well as flat out defiance in the south, compelled leadership to reconsider the future of collectivization (Kerkvliet & Selden, 1998: 48). By the end of the decade, it was decided that a return to household-level production was the cure to an increasing economic crisis (Kerkvliet & Selden, 1998: 48). Thus, the process of decollectivization and the redistribution of land to individual households began.

Decollectivization and Doi Moi

Regardless of the clear desire for decollectivization, actual land redistribution in Vietnam was a slow process that spanned nearly a decade. In reaction to extreme food scarcity in northern Vietnam, the state introduced Directive 100 in January of 1981 (Raymond, 2008: 52). Directive 100 gave households the right to take over the laborintensive aspects of cultivation on plots of land contracted from the collective for a period of 1 to 3 years (Raymond, 2008: 52). In return, households were expected to give up a mandated amount of grain to the cooperative each year (Raymond, 2008: 52). This switch alone created significant increases in rice production: the period of 1982-1987 had the highest annual growth in rice yield per hectare since 1950, and from 1980-1986 alone, rice output increased by 40 kilograms per capita (Pingali & Xuan, 1992: 697). However, many Vietnamese farmers took liberties with the policy, bargaining for low quotas from the collective and selling excess produce in the free market for a better price (Raymond, 2008: 53). Despite these attempts, farmers only kept 20% of their crop yield on average

under the directive (Raymond, 2008: 53). Furthermore, land and equipment was still owned by the collective, and often the actual distribution of land by the collectives was viewed as unfair (Pingali & Xuan, 1992: 697, 706). Consequently, the household economy still remained more attractive to most rural households (Raymond, 2008: 53).

In an attempt to further stimulate the economy, several new regulations were instituted in 1985 (Raymond, 2008: 53). Rather than achieving their intended purpose, however, these new regulations created a hyperinflation that eventually resulted in famine (Raymond, 2008: 53-4). By 1988, approximately 40% of rural households in northern Vietnam were facing food shortages, and over 3.5 million Vietnamese were threatened by severe hunger (Raymond, 2008: 54). Faced with this devastation, the Vietnamese Communist Party decided that it was time to take more extreme measures towards economic liberalization (Raymond, 2008: 54). The resulting economic reforms, many of which directly targeted the agricultural sector, are now known as *doi moi*, meaning 'renovation' (Raymond, 2008: 54).

Beginning with liberal policies introduced by the Sixth National Congress in July of 1986, *doi moi* aimed to encourage foreign investment in Vietnam, ensure the profitability of government industry, pay workers according to their productivity, and further bolster the contract system of agriculture introduced by Directive 100 (Frost, 2011). As Frost aptly notes, "the same sort of demands for a better life that had toppled so many Communist regimes in Eastern Europe and the former Soviet Union led to a rather unique effort to maintain a Communist government by liberalizing economically but not politically" (Frost, 2011). In order to preserve a socialist government, Vietnam needed to embrace the free market. Thus, within the agricultural sphere, several *doi moi*

policy reforms were introduced that intended to further privatize markets, decentralize agricultural inputs, and free households to choose their own agricultural practices (Pingali & Xuan, 1992: 697-99).

Consequently, true redistribution of land to households began in 1988 with the doi moi era Resolution 10 (Raymond, 2008: 54). This landmark resolution decollectivized land and assigned parcels to rural villagers, formally ending the requirement for farmers to perform collective labor (Pingali & Xuan, 1992: 708). Households were responsible for all phases of cultivation, and thereby gained the right to sell to either the state or the market, to negotiate prices, and purchase inputs from wherever they pleased (Raymond, 2008: 54). However, this land redistribution never fully extended to private ownership (Kerkvliet & Selden, 1998: 50). Many officials and villagers alike opposed privatization, wary of future inequalities reminiscent of colonial landlords made possible by private land ownership (Kerkvliet & Selden, 1998: 51). Rather, long-term "use rights" were preferred, with the periodic redistribution of these rights functioning as a safeguard from possible unequal accumulation of land over time (Kerkvliet & Selden, 1998: 51). The 1993 Land Law relied heavily on such public opinion (Kerkvliet & Selden, 1998: 51). The policy declared the rights and obligations of landholders, expanding upon Resolution 10, and established land in Vietnam as the property of "the entire people" (Kerkvliet & Selden, 1998: 51). Thus, Vietnamese do not own land (Kerkvliet & Selden, 1998: 51). Instead, they are given the right to use that land as they wish for a given period of tenure: 20 years for annual crops or 50 years for perennial (Kerkvliet & Selden, 1998: 51; Saint-Macary, 2010: 618). In exchange for this use right, villagers pay taxes to the state, fees for irrigation, and payments to villages for infrastructure repairs (Kerkvliet & Selden,

1998: 51-52). The exact use of a villager's land is not overregulated. In addition to agricultural cultivation, those with a use right are allowed to lease out, mortgage, inherit, exchange, and transfer their use-right to a parcel of land (Saint-Macary, 2010: 618). In fact, it is quite common for villagers with outside sources of income to hire agricultural laborers or sublet their land for additional cash (Kerkvliet & Selden, 1998: 52). In this way, the modern land use rights system is based in some ways on a response to the colonialism of the past century. In order to avoid unequal land distribution and the creation of landlord class similar to that of French Indochina, the 1993 land law refuses full privatization as a security against the repetition of past wrongs.

The result of these reforms was an economic revival that eventually placed Vietnam in its position today as the world's third largest rice exporter (Raymond, 2008: 55). Agricultural productivity increased dramatically once private production was allowed (Raymond, 2008: 54). Rice exports more than doubled from 0.91 million tons in 1988 to 1.95 million tons in 1992 (Raymond, 2008: 55). By the late 1990s, Vietnam regularly exported more than 3 million tons of rice annually, solidifying its position in the international market (Raymond, 2008: 55). The reforms were very successful with the general population, too. By 1991, 97% of agricultural goods in Vietnam were produced by private households, composing nearly 40% of the GDP (Raymond, 2008: 45). Today, the basic principles of the 1993 land law remain in effect. Although the policy has been updated in past decades to reflect international needs, the majority of the 1993 land law as it pertains to rural households is practiced in the same way today.

In summary, agricultural land today is still considered the property of the people as a whole, managed by the state as a representative of the people (Marsh, et al., 2007:

13). Land use rights are granted to a particular individual or household for a period of time determined by the type of crop planted, either 20 years for annual or 50 years for perennial (Marsh, et al. 2007: 13). The terms of the land use rights are recorded in a Red Book that serves as the land use contract (Marsh, et al., 2007: 13). Land parcels may be exchanged, mortgaged, given as inheritance, used as collateral, rented, sold, or used for a joint venture (Marsh, et al., 2007: 13). While individual landholders retain much freedom over what their parcels are used for, the state still maintains the right to determine land use through government planning (Giesecke, et al., 2013: 1202). For example, the recent Resolution on National Food Security requires that 3.8 million hectares be reserved for rice production by 2020 (Giesecke, et al., 2013: 1202). In this way, the state still maintains some centralized control over the cultivation of held lands. However, the current land use rights system grants rural households much more freedom and, as will be seen, livelihood security.

Land Use Rights and Poverty Alleviation

One vital effect of recent market liberalization, agricultural reforms, and *doi moi* era economic success was a rapid decline in national poverty. Between the years 1993 and 2004, poverty rates fell from 58.1% to 19.55% (Barai, 2009: 1). A decade later, rates of impoverishment are still declining: the World Bank estimates that 13.5% of the population was classified as below the national poverty line in 2014 ("Vietnam," 2018). As noted in the figure below, this decline occurred dramatically fast compared to other Asian nations (fig. 2):

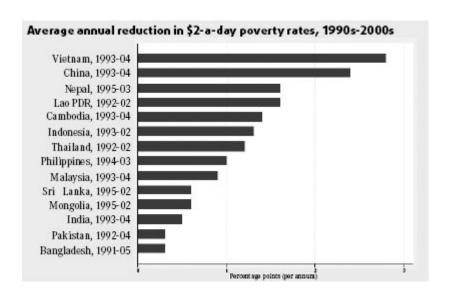


Figure 2. Average poverty rate reductions among Asian nations. Reprinted from Liqun, J. (2007). China's poverty reduction initiatives on right track (p. 10). *China Daily*.

Much of this remarkably swift progress can be attributed to the increased land tenure security granted by the 1993 land law. Access to land resources are an important determinant of poverty, as land can generate livelihoods, investments, wealth accumulation, and the transfer of wealth to future generations (Marsh, et al., 2007: 25). Hence, Vietnamese households with more landholdings are frequently less vulnerable to poverty (Menon, et al., 2017: 460). The shift from communal ownership during the collectivization period to individual ownership through land use rights in following decades led to increased investment and livelihood security by granting agricultural households greater security in land tenure (Nguyen, 2012: 45). Consequently, the latter half of this chapter is devoted to expounding the various benefits and costs to rural farmers associated with the current land use rights system in Vietnam, including the perceived value of land, tenure security, land use flexibility, and land fragmentation.

Land Value Perceptions. The perceived value of a land parcel to an individual or household is dependent upon the current net value of all projected future earnings (Marsh, et al., 2007: 13). This perceived value can determine the willingness of a household to make long-term investments in a land parcel, including purchasing updated technology, practicing more sustainable cultivation methods, and further developing infrastructure such as irrigation (Marsh, et al., 2007: 14). However, the length of a land use right and the expectations of renewal are often determinative of perceived value, as landholders will view future earnings as more or less depending on the length of a lease (Marsh, et al., 2007: 13). In this regard, the limited tenure periods offered by the current land use rights system may put landholders at a disadvantage (Marsh et al., 2007: 13). Those who view 20 or 50 year land use rights as too limiting are less likely to invest in long-term infrastructure and practice sustainable land management techniques like allowing parcels to lay fallow (Marsh et al., 2007: 14; Menon, et al., 2017: 454). However, the current land use rights system grants considerably more authority over land use to the individual, and therefore more perceived value, compared to the very minimal personal value felt during collectivization. Consequently, household investments in land have increased significantly over the past three decades: the acquisition of land use rights is correlated with the allocation of larger portions of parcels to perennial crops, further development of infrastructure, and increased labor on non-farming activities (Menon, et al., 2017: 459). Such developments better household security by increasing land value, increasing production efficiency, increasing crop yields, and diversifying income sources (Marsh, et al., 2007: 14). Thus, the introduction of land use rights with the 1993 land law has increased livelihood security for agricultural households by granting valuable land

assets, spurring investment and sustainable use. Additional investment may be encouraged by lengthening the term of land use rights, thereby increasing the perceived value of the land.

Tenure Security. The security that a household feels in the right to parcel of land – that the land will not be falsely seized or challenged – also contributes to the likelihood of long-term investment (Nguyen, 2012: 45). Effective land registration and documentation, with proof of right given to the landholder, is a key mechanism of ensuring tenure security (Nguyen, 2012: 45). In Vietnam, those with land use rights are given a land title known as a 'Red Book' (Marsh, et al., 2007: 13). This measure helps instill tenure security by tangibly granting, in writing, the right to use a parcel of land. Such security, in addition to encouraging investment, also allows landholders increased access to reliable credit (Menon, et al., 2017: 459). Stronger land use rights and security facilitate loan obtainment because banks and other formal lending institutions typically accept land as collateral (Menon, et al., 2017: 455). Consequently, household access to credit and the frequency of borrowing from formal sources have increased in recent years (Menon, et al., 2017: 459). Such credit allows for even further investment in both agricultural and non-agricultural activities, granting additional livelihood security (Menon, et al., 2017: 459). In short, investment inspired by increased tenure security and access to credit results in higher agricultural yields, increased labor efficiency, and increased diversification of economic activities (Menon, et al., 2017: 455).

Land Use Flexibility. Another key determinant of livelihood security associated with landholdings is agricultural land use flexibility (Marsh, et al., 2007: 7). Specifically, such flexibility refers to the ability of agricultural land use patterns to adapt to changing

production opportunities and conditions (Marsh, et al., 2007: 7). The capacity to adopt updated technology, adjust cropping patterns, and alter land use, for example, represent important measures of flexibility (Marsh, et al., 2007: 7). Land use flexibility reduces vulnerability both to changes in the market, such as the price of inputs, and changes in the climate, such as drought (Marsh, et al., 2007: 7). Increased flexibility also allows agriculturalists to seize market opportunities, making them more competitive (Marsh, et al., 2007: 7). In this way, the adaptive capacity of an agricultural household's land use is an important measure of livelihood security and competitive potential. However, as with perceived land value, the likelihood of investment to increase land use flexibility is often dependent upon the length of a land use right (Marsh, et al., 2007: 8). Additionally, land use rights in Vietnam are assigned in either 20 or 50 year leases according to whether the crops grown are annual or perennial, respectively (Marsh, et al., 2007: 8). Thus, the crops grown on a particular parcel are restricted according to the land use right term, stifling flexibility (Marsh, et al., 2007: 8). Hence, in order to encourage agricultural land use flexibility, some have recommended extending the length of land use right terms and allowing for production of both annual and perennial crops on the same parcel (Marsh, et al., 2007: 8).

Land Fragmentation. Current land holdings in northern Vietnam are extremely fragmented, particularly in mountainous areas where geography limits the concentration of arable land (Marsh, et al., 2007: 10). Often those with land use certificates in this region are granted multiple parcels in various locations, rather than one larger plot (Marsh, et al., 2007: 10). Such fragmentation has had both positive and negative effects on Vietnamese agriculturalists. For example, an increase in the number of plots held by

one household has been linked to decreased rice yields and increased need for labor and monetary inputs (Marsh, et al., 2007: 10). At the same time, an increased number of parcels is also an important factor in increased crop diversity and increased livelihood security (Marsh, et al., 2007: 10). Thus, land fragmentation can actually encourage greater land use flexibility, which in turn leads to greater economic security.

Additionally, particularly among mountainous upland regions, where the threats of drought and flooding are higher, having a dispersal of parcels can provide security from natural disasters (Marsh, et al. 2007: 12). The table below details further benefits and costs created by land fragmentation in Vietnam today:

Benefits of Multiple Plot Ownership		Costs of Multiple Plot Ownership		
Private	Public	Private	Public	
Risk spreading (flooding, disease, pests)	Implicit insurance	Increased cost	Delays in application of new technology	
Inheritance flexibility	Equality of land among households	Increased labor use	Commercial zoning, planning difficulties	
Crop rotation flexibility	Increased biodiversity	Loss of border lands	Higher transaction costs when used as collateral	
Ability to transfer, sell, or mortgage small parcels		Access difficulties		
Seasonal labor spreading		Increased dispute		
		Irrigation difficulties		

Table 1. Costs and benefits of land fragmentation in northern Vietnam. Adapted from Marsh, S.P., et al. (eds). (2007). Agricultural development and land policy in Vietnam: policy briefs. *ACIAR Monograph*, *126*, p.11.

In conclusion, the rise of Vietnamese independence saw the fall of agricultural collectivization, as the household economy became increasingly important to rural livelihoods. The introduction of the landmark 1993 land law granted farmers the right to use personal parcels of land for 20 or 50 years, ending state requirements to fulfill collective tasks. Rather than embracing complete privatization, the people of Vietnam preferred a land use rights system due to fears of unequal land distribution over time, as previously experienced by the creation of a landlord class during the colonial period. In this way, the current land use rights are largely formed in response to both the historical failings of collectivization and landlord style plantations alike.

The land use rights system in place today has brought both benefits and costs to the rural Vietnamese agricultural households. Important benefits include the value of land given to the individual, the tenure security granted by the red book, increased opportunities for investment, increased access to credit, increased agricultural and economic diversity, and improved livelihood security. Costs include the limitation of perceived value due to limited time tenures, the inhibition of land use flexibility due to strict annual versus perennial land use terms, and the decreased yield created by land fragmentation, among others. Altogether, the 1993 land law as it is interpreted today has played a large role in the widespread and rapid alleviation of poverty in Vietnam. However, new reforms extending the length of use rights and encouraging further diversification, investment could more improve rural livelihoods.

CHAPTER FOUR

State Intervention, Minority Resistance, and Environmental Concerns

As evidenced in the preceding chapter, the *doi moi* era of economic and agricultural reforms introduced in the late 1980s significantly improved the livelihoods of many in Vietnam. Poverty rates declined remarkably fast during this period, dropping 38.5 percentage points in only two decades (Barai, 2009: 1). However, the benefits brought by doi moi reforms have not been equally felt; today, remaining poverty is concentrated among ethnic minority groups, particularly those residing in northern mountainous areas (Turner, 2012: 550). The rate of poverty alleviation in this region has slowed even further over the past decade, leading some to conclude that the agrarian transition experienced in the last three decades has had little effect on state-defined poverty among northern upland ethnic minority households (Turner, 2012: 550). Consequently, the purpose of this chapter is to explore the causes of present poverty concentration among upland ethnic minority groups, to discuss the poverty alleviation initiatives enacted by the government of Vietnam in response to this concentration, and to take a closer look at the implicit prejudices that underlie many such policies. Additionally, the chapter will discuss the environmental costs and benefits of such interventions. Hmong and Yao ethnic minority groups, often the target of agricultural interventionist policies, will be discussed as a case study with regard to the recent state push to adopt hybrid rice seeds.

Poverty Concentration among Ethnic Minorities

Of the 54 ethnic groups that compose Vietnam, the ethnic majority, called the Kinh, account for 86% of the population (Nguyen, et al., 2017: 94). The Kinh generally inhabit the lowlands, where education, healthcare, and infrastructure are easily accessible (Nguyen, et al., 2017: 94). Conversely, ethnic minority groups tend to reside in remote or mountainous regions, where access to such services is limited (Nguyen, et al., 2017: 94). This contrast is not new; as previous chapters have noted, minority groups that migrated into uplands have encouraged this isolation from the ethnic majority in order to retain a certain degree of autonomy. While the infrastructure created and surveys conducted by the French during the colonial period did much to integrate mountain dwelling minorities into the national economy, as did post WWII technology, these ethnic minority groups continue to engage in subtle resistance to this day (Michaud & Turner, 2016: 156; Bonnin & Turner, 2012: 95). Additionally, the Kinh continue to regard ethnic minorities with some prejudice, often characterizing upland minorities as superstitious, ecologically destructive, and 'backward' (Corlin, 2004: 298; Turner, 2012: 543). Consequently, even where Kinh now reside in upland regions due to the increasing need for land, cultural integration between the Kinh and ethnic minority groups is rare (Corlin, 2004: 298).

Today, poverty is disproportionately concentrated among remote ethnic minority groups, particularly those who reside in the northwest region of Vietnam (Tran, et al., 2015: 268). In 2010, it was estimated that 66.3% of ethnic minorities were classified as 'poor' and 37.4% classified 'extremely poor' according to the World Bank poverty line (Nguyen, et al., 2017: 94). Among the ethnic majority, only 12.9% were considered 'poor' and 2.9% 'extremely poor' (Nguyen, et al., 2017: 94). However, per capita income

is increasing among the ethnic majority and ethnic minorities alike: between 2002 and 2012, the ethnic majority experienced an increase in average income per capita of 8.6%, while ethnic minorities experienced "a respectable but lower" increase of 6.1% (Nguyen, et al., 2017: 94). Thus, a significant disparity in rates of poverty exists between the ethnic majority and ethnic minorities in Vietnam. However, among ethnic minorities, poverty is further concentrated within households living in the northwest uplands (Tran, et al., 2015: 268). Of ethnic minorities in this region, 73% were classified as 'poor' and 45.5% were classified as 'extremely poor' (Nguyen, et al., 2017: 95). The map below shows the rate of poverty among ethnic minorities, measured as per capita expenditure below the expenditure poverty line, compared to the ethnic majority in northwest Vietnam (fig. 3):

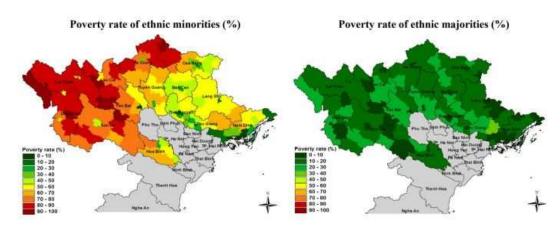


Figure 3. Poverty rates among northwest districts of Vietnam. Reprinted from Nguyen, C. V., et al. (2017). Ethnic Minorities in Northern Mountains of Vietnam: Employment, Poverty and Income. *Social Indicators Research*, 134(1): 93-115.

Within this region, ethnic minorities often have very low income and little opportunity for non-agricultural jobs (Nguyen, et al., 2017: 94). Data gathered from two separate studies on ethnic minority livelihoods in the northwest region found that the average annual per capita income among minority households was just 4724.9 thousand

VND, or \$189 USD (Nguyen, et al. 2017: 103). Additionally, minority groups in this area have quite limited access to education, healthcare, and infrastructure (Nguyen, et al., 2017: 94). Strengthening access to such services has been observed to reduce both the incidence and intensity poverty in the northwest uplands (Tran, et al., 2015: 268). Notable factors known to contribute to reduced poverty among ethnic minorities in Vietnam include off-farm employment, levels of education, means of transportation, access to a postal office, and ownership of fixed assets (Tran, et al., 2015: 268). Other studies indicate that the gap between ethnic minority livelihoods and those of the ethnic majority are largely due to a lack of endowments and the limited returns made on existent endowments (Nguyen, et al., 2017: 95).

Additionally, while the 1993 land law did well to ensure equitable amounts of land were distributed to the people of Vietnam, inequalities in the quality of land parcels were abundant (Baulch, et al., 2010: 38). Today, ethnic minorities actually possess greater amounts of land than the ethnic majority Kinh (Baulch, et al., 2010: 38). However, the quality of land that ethnic minorities hold differs: while Kinh land bundles usually contain the rights to water surface land and irrigated crop land, minority groups' land bundles are composed mainly of poor quality, unirrigated crop land and forest land (Baulch, et al., 2010: 38). While greater than 80% of Kinh cropland is irrigated, only 44% of ethnic minority land has irrigation (Baulch, et al., 2010: 38). Additionally, non-poor households among minorities and the Kinh alike have on average three times as much land devoted to perennial crops per capita than do poor households (Tran, et al., 2015: 274). In part, this difference in quality can be attributed to the geographic range of ethnic minorities versus the ethnic majority. While Kinh have historically inhabited the

lowlands, home to both better infrastructure and better land for wet rice production, ethnic minorities have traditionally inhabited the drier, more remote uplands of Vietnam (Nguyen, et al., 2017: 94). Consequently, the land local to ethnic minorities was likely of a different quality than lowland parcels to begin with. Furthermore, a variety of government programs have encouraged the allocation of forest land to ethnic minority groups in order to promote environmental responsibility (Tran, et al., 2015: 274).

Exacerbating this contrast in quality, however, is the lack of fluency in Vietnamese prevalent among many ethnic minority groups (Corlin, 2004: 301). Not only does this put minorities at a disadvantage when it comes to negotiating with officials for the best land, but it also leads to a general lack of legal understanding (Corlin, 2004: 301; Baulch, et al., 2010: 39). Ethnic minorities often have less knowledge about their land use rights, and less access to land procedures and laws (Baulch, et al., 2010: 39). While land historically managed by an ethnic minority community was not treated as a commodity, the current land use rights system allows for the inheritance, leasing, and sale of land tenures (Baulch, et al., 2010: 39). However, ethnic minorities with poor legal knowledge may not be aware of these rights (Baulch, et al., 2010: 39). Consequently, the transition from historic minority land use rights to present day use rights has been challenging for many (Baulch, et al., 2010: 39).

Additionally, even minorities with knowledge of their land use rights may exercise restraint in practicing them due to ethnic conventions and customs (Baulch, et al., 2010: 39). The administration of land among some ethnic minority groups may be tied to religious beliefs, particular community governance practices, or territorial sovereignty (Baulch, et al., 2010: 39). Such conventions may dictate that landholders are

allowed to use land but not to sell (Baulch, et al., 2010: 39). Occasionally, households with large amounts of arable land may lend parcels to those with less without charging any sort of fee (Baulch, et al., 2010: 39). Thus, many minority groups have difficulty embracing all of their private rights in the transition to a modern land use rights system that is based on a market economy (Baulch, et al., 2010: 39). Additionally, the actual distribution of land among ethnic minorities is often flawed, as minority officials may not allocate land meant for households to those households (Baulch, et al., 2010: 40). One study found that while 95% of paddy land among ethnic minorities had been properly allocated, less than 25% of forest land meant for allocation had actually been distributed to minority households (Baulch, et al., 2010: 40). As a result, such minorities are unable to secure their land rights, leading to a loss of both land tenure security and the possibility to use such land tenure as collateral (Baulch, et al., 2010: 40). Consequently, ethnic minorities are less able to seize market opportunities, invest in infrastructure, or otherwise enhance agricultural and non-agricultural ventures (Baulch, et al., 2010: 40). In this way, ethnic minority groups are generally disadvantaged under the new land use rights system initiated by the 1993 land law.

However, problems arising from the new land tenure system are not the only source of conflict between ethnic minorities and the state. Additional actions taken in recent decades by the Vietnamese government have exacerbated poverty among ethnic minorities. In order to understand why remote ethnic minorities did not experience the same sort of poverty alleviation as the Kinh during *doi moi*, a closer look at one specific minority group – the Hmong – is instructive.

Case Study: The Hmong

The Hmong are one of the largest ethnic minority groups in Vietnam, numbering over half a million, and often residing in the northwest highlands (Corlin, 2004: 295). The Hmong are also one of the poorest ethnic minority groups, and widespread illiteracy and poor health are issues of particular concern among Hmong communities (Corlin, 2004: 297). However, for many Hmong this poverty is relatively new (Corlin, 2004: 297). Prior to the *doi moi* period of reforms, the Hmong were known for their opium production, which served as a source of cash income for many ethnic minority cultivators (Turner, 2012: 545). One Hmong man, in response to a survey on minority livelihoods, recalled the wealth gained from the opium trade: "When I grew opium I gained a lot of money, and with the money I bought silver ... every day you had money. The people who smoked the opium – they didn't know how to save money" (Turner, 2012: 545). Consequently, when opium cultivation was banned in 1993, many Hmong were left without a vital source of income (Turner, 2012: 544). Despite the sweeping economic and agricultural reforms initiated by doi moi efforts during this same time, Hmong repeatedly report that the reduction of opium cultivation was the most important long-term livelihood change experienced over the past three decades (Turner, 2012: 544). Additionally, the cutting of forest timber for sale was made illegal at the same time (see table 2) (Turner, 2012: 545).

Date	Vietnam government decrees and interventions				
1960s	Democratic Republic of Vietnam extends agricultural collectivization to the northern mountains.				
1979	Border war between China and Vietnam.				
1981	Households assigned output quotas and allowed to retain harvests exceeding quota.				
1986	Communist Party officially begins to liberalize the economy and shift to more market-oriented planning, known as đổi mới.				
	Hoàng Liên Sơn Nature Reserve established, Decision 194/CT.				
1988	Resolution 10. Scaling back of the cooperative system. Cooperatives terminated annual contracts, allocated shares of wet-rice land to households based on labor capacity.				
1991	Law on Forest Protection and Development (also known as Forest Protection and Development Act). Defined three types of forests: protection forest, special-use forest, and production forest. Different regulations for each.				
1992	Program 327, implemented over 1993–1998, aimed at forest restoration and protection and the establishment of special-use forests. Followed by Program 661, 1998–2010, which became the basis for the Five Million Hectare Reforestation Program (5MHRP; not detailed in this article).				
	The export of round-wood, sawn-wood, and rough-sawn flooring planks banned and official felling to be reduced by 88 percent. Logging in watershed protection and special-use forests, and forest exploitation in seven provinces in the north halted.				
1993	Government bans opium production via Resolution No. 06/CP 29-1-1993.				
	Land Law: Citizens could receive twenty-year renewable tenure rights on land for annual crops and fifty-year rights for perennial crops and forest land. Land rights could be leased, exchanged, transferred, inherited, and mortgaged.				
	Independent overseas tourism allowed again in uplands.				
1997	Permanent logging ban imposed in special-use forests and a thirty-year logging ban instituted in critical watersheds.				
1998	Government Decree 20/1998/ND-CP introduces subsidies for commodities such as hybrid seeds, fertilizers, pesticides, kerosene, iodized salt, and basic medicines in communes classified as upland and ethnic minority areas ("Zone 3" communes).				
1999	Subsidized rice seed program introduced in Lào Cai province.				
2002	12 July: Hoàng Liên Sơn becomes a National Park.				

Table 2. Government decrees, interventions relevant to Vietnam northern uplands. Source: Turner, S. (2012). "Forever Hmong": Ethnic Minority Livelihoods and Agrarian Transition in Upland Northern Vietnam. *The Professional Geographer*, 64(4): 540-553.

The sale of rot-resistant *per mu* wood for coffins in China and Vietnam had become a lucrative trade among the Hmong (Turner, 2012: 545). Consequently, the enforcement of this ban at the same time as the opium ban only exacerbated an already stressed Hmong economy (Turner, 2012: 545). Thus, while much of Vietnam was celebrating the benefits of the 1993 land law during *doi moi*, among the Hmong such benefits were overshadowed by the consequences of the opium and timber bans (Turner, 2012: 545).

Both Hmong households and the state strategized to diversify Hmong livelihoods during this period of instability (Turner, 2012: 545). Hmong farmers responded by clearing more land up for rice paddy construction, wherein both rice and sweet corn were planted (Turner, 2012: 545). The state, in an effort to stimulate a new source of income,

gave several Hmong households fruit seedlings (Turner, 2012: 545). However, once the trees yielded fruit simultaneously, fruit prices plummeted (Turner, 2012: 546). Additionally, because no local infrastructure existed to process the fruit and competition from other growers was strong, many abandoned the scheme and returned to semisubsistence rice cultivation (Turner, 2012: 546).

Other government activities have additionally impacted the Hmong of the northern uplands. New tar-sealed roads and channeled waters, for example, have been introduced to the region within the last two decades (Turner, 2012: 546). Importantly, the recent creation of large hydroelectric dams and reservoirs have displaced several northern ethnic minority communities in this region (Corlin, 2004: 302). However, the designation of the Hoàng Liên So'n National Park had perhaps some of the more notable effects on local Hmong land uses and livelihoods (Turner, 2012: 546). Those living within the boundaries of the protected forest do not hold a legal title to their land, and are therefore more strictly regulated than those operating normally under the current land use rights system (Turner, 2012: 546). For instance, Hmong located on protected land are not allowed to collect plants or animals, graze animals, or light fires (Turner, 2012: 546). Such added regulation and lack of legal title acts to decrease Hmong livelihood security, as perceptions of land value are low without tenure security, and land use flexibility is limited by the state (Marsh, et al., 2007: 7, 14). Consequently, the extensification of agriculture in this area has been significantly lacking (Turner, 2012: 546). While the park has created notable environmental benefits, such as the conservation of valuable habitat for indigenous gibbons, it has also significantly altered the way in which ethnic minorities residing within its limits relate to the land (Rawson, et al., 2011: 30). And

although ethnic minorities maintain significant representation in the higher levels of Vietnamese government, minority desires are typically not reflected in state decision making, in large because the highly centralized nature of the state guarantees that national targets override local concerns (Corlin, 2004: 303). Such a relationship has led some to call the upland minorities of Vietnam "victims of progress ... victims of conservation" (Corlin, 2004: 302).

Today, arable land in Vietnam is a scarce resource (Corlin, 2004: 306). Increasing population pressure, the creation of dams and national parks, as well as deforestation have all led a frightening decline in Hmong access to fresh forest land (Corlin, 2004: 306). In desperation, the Hmong have turned to growing rice and maize in the hollows and cracks of rocks large enough for only one plant (Corlin, 2004:306). For a historically remote people, who fled to the uplands to maintain autonomy, the recent intrusion of large-scale government infrastructure in a once isolated region is unprecedented. Thus, in the decades following the ban on opium and cutting of timber for sale, the Hmong have grappled with additional government interference on their livelihoods, resulting in limited land use flexibility and minimal feelings of security (Turner, 2004: 546).

Poverty Alleviation and Government Intervention

The government of Vietnam has not been apathetic to the concentration of poverty among upland ethnic minorities such as the Hmong. In response to conditions of impoverishment, the state has enforced several poverty alleviation initiatives targeting ethnic minorities (see table 3) (Baulch, et al., 2010: 62).

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Program	Objectives	Target Group	Total Budget (VND billions)	Budgeting Period
Resettlement and Sedentarization Program	Resettlement, poverty reduction and environment protection	Ethnic minority and mountainous areas, and afforestation areas	868	2000-2004; 2008
Policy of Support for Extremely Difficult Ethnic Minority Households	Poverty reduction	Ethnic minorities whose population is below 10,000 persons, poor households	182	2001-2006
Programme 134	Production land, residential land, houses and water for ethnic minorities	Poor ethnic minority households and villages	4,482.60	2004-2008
Programme 327	Regreening bare hills, protection forest	Afforestation areas	1082.4	1996-1998
Educational National Target Programme	Support for the education of ethnic minorities and disadvantaged regions	Ethnic minorities and disadvantaged groups	510	2007
Programme 139	Increase the access to health service	Poor households, poor households in P135, Decision 960, and 656 areas	2304	2002-2006
Price and transportation subsidies	Decrease the price difference due to remoteness	Poor households and region 3 communes	2,312	2004-2010
Programme 143	Poverty reduction and employment creation	Nationally targeted	8,387	2001-2005
Programme 135 - Phase I	Infrastructure improvement and construction for communal centers, resettlement projects, agricultural and forestry production and marketing, training	Initially, the 1,000 poorest communes rising to 2,410 communes in 2005, and then scaled back to ~1,800 in 2006	8,420.20	1999-2005
Programme 135 - Phase II	Production promotion and economic restructure, infrastructure improvement, capacity building and training, social service supports, civil welfare improvement, legal awareness improvement	1,946 Region 3 communes and 3,149 Region 2 extremely difficult villages	16,039	2006-2010

Table 3. Main policies and programs aimed at the improvement of ethnic minority livelihoods. Adapted from Baulch, B., et al. (2010). Ethnic minority poverty in Vietnam. *Chronic Poverty Research Centre Working Paper*, 169.

One of the most well-funded and far reaching poverty alleviation programs initiated by the Vietnamese government was the "Socio-economic Development for the Communes Facing Greatest Hardships in the Ethnic Minority and Mountainous Areas" also called Program 135 (Cuong, et al., 2015: 3). The second phase, Program 135-II, was the first of its kind to implement a systematic evaluation of the program (Cuong, et al., 2015: 12). Consequently, more is known about the effects of Program 135-II, active from 2006-2010, than prior policies (Cuong, et al., 2015: 3). The objective of Program 135-II was four-fold: 1) to raise the annual income per capita of at least 70% of the target groups to 3.5 million VND; 2) to reduce the poverty rate among the target groups to below 30%; 3) to improve agricultural productivity; and 4) to increase primary school enrollment to at least 95% and lower secondary school enrollment to at least 75% (Cuong, et al., 2015: 3). This was accomplished largely through the development of infrastructure, improved access to social services, and state capacity building (Cuong, et al., 2015: 4). Additionally, increased support was given for market-oriented agricultural production (Cuong, et al., 2015: 4). This distinction, that market-oriented cultivation in particular was to receive support, is a key feature of many Vietnamese policies, and it is one of the reasons why Program 135-II has created tensions among minorities such as the Hmong (Bonnin & Turner, 2012: 99).

Today, many ethnic minority groups in Vietnam are still semi-subsistent, composed mainly of smallholder farmers with high levels of dependency on agriculture as the main source of income (Tung & Rasmussen, 2005: 11). Despite encouragement to abandon semi-subsistence in favor of a more competitive, market-based agriculture, some ethnic minorities actively choose to continue traditional livelihoods, feeling no

inclination to abandon this way of life (Turner, 2012: 542). In order to understand this persistence of semi-substinence, it is helpful to distinguish between state definitions of wealth and endogenous definitions of wealth. Among the Hmong, for example, definitions of well-being and wealth are reflected in semi-substinence vocabulary, rather than capitalist terms (Turner, 2012: 550). In a survey about changes in minority livelihoods, one Hmong woman explained that well-being was "a big enough house for everyone, enough rice fields to feed everyone, and some buffalo" (Turner, 2012: 550). Poverty, on the other hand, is endogenously defined among the Hmong as the inability to produce enough rice for a year of consumption (Bonnin & Turner, 2012: 98). Consequently, there is no need for minority groups with such perceptions of wealth to pursue anything more than semi-subsistence livelihoods in order to meet endogenous definitions of well-being. Long-term economic interests exist among such ethnic minorities, but are limited to attainment of a secure semi-subsistence livelihood and access to land, which serves as the main means of production (Turner, 2012: 550).

However, the *doi moi* reforms that benefitted the Kinh were based on increasing economic liberalization, becoming more competitive in the international economy, and therefore transitioning into a more market-based economy (Frost, 2011). While this orientation towards a market economy worked well for the ethnic majority Kinh, rapidly improving living conditions and increasing growth rates, such an economic orientation is less harmonious with ethnic minority definitions of well-being and therefore with ethnic minority motivations and livelihoods (Turner, 2012: 550). Rather than adapting policies to meet minority cultures and needs, the state continues to push for the integration of ethnic minorities economically, politically, and ideologically (Bonnin & Turner, 2012:

96). Such integration is often encouraged in the name of poverty alleviation and increased livelihood security, while simultaneously pulling ethnic minorities directly within the gaze of the state (Bonnin & Turner, 201: 96; Turner, 2012: 543). Thus, the state extends its grasp into the mountains through minority policies promoting economic reorganization of the highlands, marketplace construction, the encouragement of fixed agriculture, mono-crops, and cash-crops, and the education of minority youth in the Vietnamese language (Bonnin & Turner, 2012: 96; Turner, 2012: 543). Consequently, there is little room for endogenous definitions of wealth in the policies meant to help ethnic minorities.

The tension such policies create between the state and minorities is only exacerbated by the persistent, derogatory stereotypes held by Kinh against upland ethnic minorities. To this day, Kinh often regard mountain dwelling minorities as 'backward' and 'primitive,' as opium addicts and witchcraft practitioners, and as ecologically destructive nomads (Corlin, 2004: 298). Such prejudices are reminiscent of the historical relationship between the Kinh and ethnic minorities. As early as the Nguyen Dynasty, Emperor Minh Mang referred to minorities as barbarians practicing a backward agriculture, and who consequently needed to be assimilated into the ethnic majority (Gillespie, 2006: 474). During the colonial period, French occupiers could not understand why upland minorities did not abandon subsistence agriculture for the cash-crop market economy offered by the French, perceiving minorities as 'lazy' or 'apathetic' (Michaud & Turner, 2016: 164). Such prejudice continues to color Kinh attitudes towards ethnic minorities, and thus modern poverty alleviation policies are also shaped by historical stereotypes that misrepresent their target groups. Such bias in policy is no more evident

than in the government insistence that swidden agriculture is the cause of widespread ecological destruction and poverty in the highlands of Vietnam (Bonnin & Turner, 2012: 98).

Although today most upland ethnic minorities practice multiple types of cultivation, swidden agriculture is still used due to geographic and climatic conditions (Corlin, 2004: 305). The Hmong and Yao, for example, still practice swidden cultivation of rice in high elevation districts (Bonnin & Turner, 2012: 98). In fact, due to the scarcity of arable land and pressure from an increasing population, pioneering swidden cultivation is increasing in use, even in regions where such cultivation has not been practiced historically (Corlin, 2004: 306). However, the state has continued to blame shifting agriculture for environmental degradation and poverty despite the fact that this assignment of blame has recently been contested by the scientific community (Bonnin & Turner, 2012: 98). The root of this bias can be traced as far back as the precolonial period, in which swidden agriculture was deemed 'backward' because it was more mobile, less uniform, less assessable, and therefore less taxable (Scott, 2009: 78). Early emperors decried swidden cultivation because it did not integrate well into an economy dominated by fixed wet rice cultivation (Scott, 2009: 78). Today, swidden agriculture is villainized for much the same reason, as such cultivation does not match the livelihoods of the ethnic majority of Vietnam and therefore is perceived as a source of poverty.

Additionally, swiddening is currently blamed for much deforestation and soil erosion (Corlin, 2004: 302). While swidden cultivation may contribute to such degradation in small amounts, the majority of deforestation and soil erosion experienced in the uplands can actually be attributed to outside causes (Corlin, 2004: 302).

Estimations attribute approximately 25% of upland deforestation in Vietnam to swidden cultivation, while 50% is traced back to timber exploitation for commercial interests, and the remaining 25% to storms and forest fires (Corlin, 2004: 302). However, even the deforestation caused by swiddening is in large part due to the shortened forest regeneration periods caused by current population pressures and demand for arable land (Corlin, 2004: 302). Swiddening as it was historically practiced among ethnic minorities allowed for longer, ecologically appropriate fallow periods ("Shifting Cultivation," 2011). Additionally, traditional management of forest lands among certain ethnic groups encouraged conservation of sensitive areas (Corlin, 2004: 306). The Hmong, for example, historically excluded forests near water sources and on the top third of a hill from swidden agriculture, in order to protect against landslides and erosion (Corlin, 2004: 306). However, increasing population pressure in recent years has caused the Hmong to sell their land use rights and to migrate higher into mountains to pioneer swidden agriculture in ecologically sensitive areas (Corlin, 2004: 297). Furthermore, population pressure and the increased demand for food have led to more intensified production of erosion-prone maize and other crops on hillsides in the northern uplands (Saint-Macary, et al., 2010: 617). As a result of intensification, soil erosion and landslides have become issues of major concern in this region, as they cause decreased soil fertility, damage to road infrastructure, and the sedimentation of lowland reservoirs, paddy fields, and irrigation channels (Saint-Macary, et al., 2010: 617). Thus, the deforestation and erosion currently experienced in the northern uplands of Vietnam is more accurately attributed to commercial interests, natural disasters, agricultural intensification, and increased population growth rather than swidden cultivation.

Despite such findings, many government policies aimed at the alleviation of poverty among ethnic minorities in the uplands of Vietnam continue to discourage swidden agriculture (Bonnin & Turner, 2012: 98). Programs promoting 'sedentarization' attempt to shift cultivation towards fixed cultivation and production for market (Bonnin & Turner, 2012: 98). Additional changes in agricultural patterns towards increased efficiency and intensification, most recently focusing on the use of hybrid and high yield variety seeds, are also encouraged by state programs and policies (Turner, 2012: 544). Today, the Hmong are at the heart of hybrid rice seed movement initiated by Program 135-II (Bonnin & Turner, 2012: 99). Consequently, the chapter returns to the case study.

Case Study Continued: The Hmong and Hybrid Rice

As the preferred staple food in Vietnam, rice has played a pivotal role in Vietnamese culture, economy, and food security throughout history (Bonnin & Turner, 2012: 95). Consequently, managing the production, distribution, and consumption of rice is of utmost importance to the state (Bonnin & Turner, 2012: 95). Beginning in the early 1990s, in an effort to increase national food security, the government of Vietnam has researched and encouraged the use hybrid rice seeds bred from genetically distinct parents for "hybrid vigor" (Bonnin & Turner, 2012: 96). Since the seeds' first distribution in the north, the use of hybrid rice seeds has been relentlessly encouraged, especially among upland minority groups (Bonnin & Turner, 2012: 96). National promotion of hybrid rice is widespread in the form of posters, calendars, loudspeaker announcements, and local support from agricultural extension officers (Bonnin & Turner, 2012: 96). Such advocacy is not without warrant: use of hybrid rice seeds have, on average, increased rice

yields by 30% to 50% (Bonnin & Turner, 2012: 99). Additionally, cultivation of hybrid rice seeds requires less space than traditional varieties, an important quality for a country facing serious scarcity of arable land (Bonnin & Turner, 2012: 99). While traditional upland varieties of rice require more space between seedlings which are later transplanted, hybrid rice is planted tightly in paddy fields (Bonnin & Turner, 2012: 99). Consequently, their use has been particularly encouraged among upland ethnic minorities as a part of active poverty alleviation programs (Bonnin & Turner, 2012: 99). Program 135, for example, ensures access to hybridized rice, cassava, or maize through free seeds or subsidies to qualifying ethnic minority farmers (Bonnin & Turner, 2012: 99). Additionally, Government Decree 20/1998/ND-CP provides subsidies for hybrid seeds, pesticides, and fertilizers in upland regions" (Bonnin & Turner, 2012: 99).

However, despite both increased yields and subsidized costs, some ethnic minority groups are hesitant to adopt hybrid seed varieties may resist using hybrid rice. The Hmong of Lào Cai province exemplify this apprehension, both acknowledging the benefits of hybrid rice to food security and maintaining caution actually using such seeds due to the dependence on the Vietnamese government that hybrid seed adoption creates (Bonnin & Turner, 2012: 99). Additionally, the Hmong prefer to grow their own several varieties of traditional rice seeds for a multitude of reasons, not the least of which being that traditional rice simply tastes better to the Hmong than hybrid rice (Bonnin & Turner, 2012: 100). For example, the Hmong have historically planted multiple different varieties of traditional rice seed types as a safety control protecting yields from the unpredictable climate common in upland regions (Bonnin & Turner, 2012: 99). Despite the practical security offered by growing a diversified rice crop, the state still encourages whole-scale

adoption of the hybrid rice variety, as a mix of seeds is not considered profitable or marketable (Bonnin & Turner, 2012: 99). Furthermore, many Hmong associate the ability to grow large amounts of traditional rice with wealth (Bonnin & Turner, 2012: 100). Hybrid rice seeds are often only cultivated when a Hmong can no longer afford to only grow traditional rice (Bonnin & Turner, 2012: 100). When asked which seeds they preferred to grow, both Hmong and Yao farmers unanimously reported that, all other variables willing, they would grow exclusively traditional rice varieties (Bonnin & Turner, 2012: 100). However, due to the increased yields resulting from hybrid rice seeds, many Hmong adopt hybrid cultivation when they can no longer supply enough rice for their household using traditional varieties alone (Bonnin & Turner, 2012: 100). In general, hybrid rice seeds fill this gap well, providing increased food security through increased yields (Bonnin & Turner, 2012: 99). Hmong farmers from Lào Cai province reported that 10 kg of traditional seeds typically yielded 500-600 kg of rice, while 10 kg of hybrid rice with minimal fertilizer yielded 600-800 kg (Bonnin & Turner, 2012: 99). 10 kg of hybrid rice applied with the state recommended amount of chemical fertilizer was reported to yield approximately 1200-1500 kg of rice (Bonnin & Turner, 2012: 99).

However, adoption of hybrid rice seeds can also have negative consequences for Hmong households. First, adoption of hybrid varieties requires significantly increased financial outlays (Bonnin & Turner, 2012: 100). Rather than setting aside seed from the previous harvest to replant, farmers must purchase new hybrid seeds each season, because replanted hybrid seeds have decreased capacity (Bonnin & Turner, 2012: 96). In addition to the seeds, farmers also need to purchase chemical pesticides and fertilizers to accompany the hybrid rice (Bonnin & Turner, 2012: 100). Pesticides are used in no small

amount, either, as they are applied on hybrids when the seeds are sown, transplanted, and at least twice in the growing period (Bonnin & Turner, 2012: 100). Despite this reapplication, fertilizer is often considered the most expensive cost for hybrid rice cultivation, as government subsidies are minimal and eventually intended to 'fade out' entirely (Bonnin & Turner, 2012: 100). Chemical fertilizer is quite costly compared to the natural fertilizer – a combination of dried buffalo dung and kitchen ash – used for traditional varieties (Bonnin & Turner, 2012: 100). Additionally, hybrid rice seeds require more regular irrigation, creating additional expense (Bonnin & Turner, 2012: 100). Altogether, hybrid rice seeds are typically 5 to 10 times more expensive to produce than traditional rice in Lào Cai province (Bonnin & Turner, 2012: 100). Such expenses often discourage Hmong farmers, who are often well below the poverty line (Bonnin & Turner, 2012: 100).

Secondly, distribution of subsidized hybrid rice seeds and inputs through the state is often complicated (Bonnin & Turner, 2012: 99). Seeds are generally only disseminated through state distribution centers, which can be quite far from remote minority groups (Bonnin & Turner, 2012: 99). This distance is particularly difficult in regions where road conditions are poor or transportation is limited (Bonnin & Turner, 2012: 99). Additionally, hybrid seeds have to be ordered well ahead of the planting season, creating issues for households that require more time flexibility due to shifting land claims (Bonnin & Turner, 2012: 100). Even with advanced ordering, hybrid seeds don't always arrive punctually, delaying planting seasons by as much as 2-4 weeks (Bonnin & Turner, 2012: 100). When seeds and inputs do arrive, farmers receive them all at once, causing a labor crunch as community members are all planting within the same small window of

time and are therefore less able to support each other (Bonnin & Turner, 2012: 101). Perhaps most frustratingly, distribution centers may simply run out of seeds and inputs (Bonnin & Turner, 2012: 101). Individuals are allowed to purchase additional seeds not originally ordered directly from the centers during distribution, and thus many who did pay months ago arrive at centers only to discover that there is no seed left (Bonnin & Turner, 2012: 101).

Finally, hybrid rice seeds are not always appropriate for regional climate and practices. For example, hybrid seed varieties only grow under a limited range of environmental conditions, and therefore do not always perform favorably in upland regions where climate varies significantly (Bonnin & Turner, 2012: 100). Additionally, hybrid rice does not support the dietary needs of local buffalo vital for ploughing the steep uplands of north Vietnam (Bonnin & Turner, 2012: 99). While traditional rice stalks provide valuable food sources for the buffalo, hybrid rice stalks are too tough for buffalo consumption (Bonnin & Turner, 2012: 99). Thus, farmers of hybrid rice are often forced to travel great distances to purchase adequate food for their buffalo, adding to expenses (Bonnin & Turner, 2012: 99). Consequently, the use of hybrid rice seeds in the northern uplands continues to bring both positive consequences, in the form of increased yields, and negative consequences, via increased expenses, poor distribution, and less than favorable regional suitability. Altogether, the majority of Hmong farmers agree that the introduction of hybrid rice has been a "good thing," bolstering food security (Bonnin & Turner, 2012: 101). However, for the reasons cited above, Hmong communities simultaneously feel that the hybrid rice program has increased livelihood vulnerability,

and they are hesitant to embrace a program that relies so heavily on government (Bonnin & Turner, 2012: 101).

Concluding Thoughts

The doi moi economic and agricultural reforms of the late 1980s did much to lift the ethnic majority Kinh out of poverty, contributing to a remarkably swift drop in national poverty rates over the past three decades. In particular, the new land use rights system, based in large part on the 1993 land law, has increased farmers' tenure security, land use flexibility, and economic diversity. However, the doi moi era agrarian transformation was less effective at reducing poverty among ethnic minority groups, resulting in a concentration of poverty among upland ethnic minority communities today. This contrast in results can be attributed to three main factors, namely that 1) ethnic minority households are less knowledgeable of their land use rights due to remoteness, language barriers, and cultural differences; 2) current agricultural policies favor intensive agriculture intended for a market economy, disadvantaging ethnic minorities who subscribe to semi-substinence; and 3) these policies, both historic and current, are colored by stereotypes and prejudices against ethnic minority cultures and use of swidden agriculture. Additional stressors, such as the banning of opium and felling timber for commercial purposes, and the creation of dams, national parks, and other infrastructure have exacerbated minority vulnerabilities. Finally, increasing scarcity of arable land and pressures from a growing population have pushed minority communities higher into the uplands, often creating additional livelihood vulnerability and environmental degradation.

State response to this concentration of poverty has not been to alter policies to meet minority needs and cultural preferences, but to initiate additional programming towards poverty alleviation. Many of these new programs, including the notable Program 135-II, have been quite successful on paper at increasing food security and incomes. However, ethnic minority groups often resist adopting these programs because, in many ways, they suffer from the same biases as the doi moi reforms in that they preference intensive, market-oriented cultivation and are not always appropriate for upland topography, climate, and cultures. In the case of hybrid rice use among the Hmong, households turn to hybrids only after they can no longer maintain traditional rice cultivation. Despite the increased yields brought by hybrid rice, Hmong are hesitant to adopt these seeds because they do not carry the same cultural significance as traditional varieties, do not taste as good, are often more expensive to cultivate, can be inappropriate for the regional climate, and foster a dependence on a government perceived as unreliable by Hmong households. Consequently, such programs are less effective at cultivating sustainable livelihood security among upland minorities.

In order to improve poverty alleviation programs, such as the use of hybrid rice seeds among upland minorities, the author suggests five main recommendations: first, allow the opinions of the minority leaders to actually affect policy. Many ethnic minorities hold prominent positions in government, but their input is rarely prioritized over centralized national goals. Second, disseminate clear legal and agricultural information to ethnic minority communities in native languages. Third, rather than pushing the market economy on minority agriculture, encourage livelihood diversity via non-farm jobs. Livelihood security in the uplands is strongly tied to non-farm income and

activities (Marsh, et al., 2007: 28). Thus, programs intended to diversify rather than streamline incomes are invaluable to poverty alleviation. Fourth, allow swidden agriculture where it is ecologically appropriate and encourage longer fallow periods. Within this aim, additionally encourage sustainable forest and land management through the partnership of traditional ecological knowledge and an updated understanding of upland environmental needs. Finally, above all, tailor programs and policies to local cultures and endogenous definitions rather than overriding national targets. A hybrid rice seed may significantly increase yields, but adoption will be limited if the rice does not taste good. In conclusion, in order to better address concentrations of poverty among ethnic minorities in the uplands of Vietnam, it is of utmost importance to understand both the cultural context of these groups and historic origins of minority relations with the state of Vietnam.

BIBLIOGRAPHY

- Barai, M. K. (2009). Poverty Reduction in Vietnam: Role of *Doi Moi* and Agriculture. *The Asian Scholar*, 5: 1-17.
- Baulch, B., et al. (2010). Ethnic minority poverty in Vietnam. *Chronic Poverty Research Centre Working Paper*, 169.
- Berry, W. (1971). Farming: A Hand Book. Berkley: Counterpoint.
- Bonnin, C. & Turner, S. (2012). At What Price Rice? Food Security, Livelihood Vulnerability, and State Interventions in Upland Northern Vietnam. *Geoforum*, 43(1): 95–105.
- Central Intelligence Agency. "Vietnam." *The World Factbook, Central Intelligence Agency*, n.d. Web. 19 Oct. 2017.
- Cima, R. J., ed. (1987). *Vietnam: A Country Study*. Washington: GPO for the Library of Congress.
- Corlin, C. (2004). Hmong and the Land Question in Vietnam: National Policy and Local Concepts of the Environment. 295-320. In Tapp, N. et al. (eds). (2004). *Hmong/Miao in Asia*. Silkworm Books: Chiang Mai, Thailand.
- Cuong, N. V., et al. (2015). Do the poorest ethnic minorities benefit from a large-scale poverty reduction program? Evidence from Vietnam. *The Quarterly Review of Economics and Finance*, 56: 3-14.
- Frost, P. (2011). Doi Moi. In Tucker, S.C. (Ed.) *Encyclopedia of the Vietnam War: A Political, Social, and Military History*, ABC-CLIO, 2nd edition.
- Gillespie, J. (2006). Evolving concepts of human rights in Vietnam. In R. Peerenboom, C. J. Petersen, & A. H. Y. Chen (Eds.), *Human Rights in Asia: A Comparative Legal Study of Twelve Asian Jurisdictions, France and the USA* (pp. 452 486). Abingdon Oxon UK: Routledge.
- Goscha, C. (2016). Vietnam: A New History. New York: Basic Books.
- Gunn, G. C. (2011). The Great Vietnamese Famine of 1944-45 Revisited. 東南アジア研究年報, 52: 81-105.

- Ho, Chi Minh. (1930). Appeal Made on the Occasion of the Founding of the Indochinese Communist Party. In *Selected Writings of Ho Chi Minh (1920-1969)*. Hong Kong: University Press of the Pacific.
- Kerkvliet, B.J.T., & Selden, M. (1998). Agrarian Transformations in China and Vietnam. *The China Journal*, 40 (Special Issue: Transforming Asian Socialism. China and Vietnam Compared): 37-58.
- Liqun, J. (2007). China's poverty reduction initiatives on right track. *China Daily*, p. 10.
- Marsh, S. P., et al. (2007). Agricultural development and land use policy in Vietnam: policy briefs. *ACIAR Monograph*, 126.
- McAlister, J.T., Jr. (1966). Mountain Minorities and The Viet Minh: A Key to The Indochina War. *Southeast Asian Tribes, Minorities, and Nation, Volume 2*, Princeton University Press: 771-844.
- McLeod, M. W., and Nguyen T. D. (2001). *Culture and Customs of Vietnam*. Westport, CT: Greenwood Press.
- Menon, N., et al. (2017). Land Reform and Welfare in Vietnam: Why Gender of the Land-Rights Holder Matters. *Journal of International Development*, 29: 454-472.
- Michaud, J. (2009). Handling mountain minorities in China, Vietnam and Laos: from history to current concerns. *Asian Ethnicity*, 10(1): 25-49.
- Michaud, J. (Ed.) (2013). Turbulent Times and Enduring Peoples: Mountain Minorities in the South-East Asian Massif. Abingdon, Oxon: Routledge.
- Michaud, J. & Turner, S. (2016). Tonkin's uplands at the turn of the 20th century: Colonial military enclosure and local livelihoods effects. *Asia Pacific Viewpoint*, 57(2): 154-167.
- Moise. (2011). Land Reform, Vietnam. In Tucker, S.C. (Ed.) *Encyclopedia of the Vietnam War: A Political, Social, and Military History*, ABC-CLIO, 2nd edition.
- Nguyen, C. V., et al. (2017). Ethnic Minorities in Northern Mountains of Vietnam: Employment, Poverty and Income. *Social Indicators Research*, *134*(1): 93-115.
- Nguyen, T. T. (2012). Land Reform and Farm Production in the Northern Uplands of Vietnam. *Asian Economic Journal*, 26(1): 43-61.
- Nielsen, C. P. (2003), Vietnam's Rice Policy: Recent Reforms and Future Opportunities. *Asian Economic Journal*, 17: 1-26.

- Pandey, S. & Minh, D. V. (1998). A Socio-Economic Analysis of Rice Production Systems in the Uplands of Northern Vietnam. *Agriculture, Ecosystems & Environment, 70*(2–3): 249-58.
- Pingali, P. L. & Xuan, V. T. (1992). Vietnam: Decollectivization and Rice Productivity Growth. *Economic Development and Cultural Change*, 40(4): 697-718.
- Prosterman, R. L. (1970). Land-to-the-Tiller in South Vietnam: The Tables Turn. *Vietnam: Politics, Land Reform, and Development in the Countryside*, special issue of *Asian Survey*, 10(8): 751-764.
- Rawson, B. M., et al. (2011). The Conservation Status of Gibbons in Vietnam. Fauna & Flora International Vietnam Programme.
- Raymond, C. (2008). "No Responsibility and No Rice": The Rise and Fall of Agricultural Collectivization in Vietnam. *Agricultural History Society*, 82(1): 43-61.
- "Rice: World Markets and Trade." Foreign Agricultural Services, USDA, Oct. 2017.
- Saint-Macary, C., et al. (2010). Land titling policy and soil conservation in the northern uplands of Vietnam. *Land Use Policy*, 27: 617-627.
- Sansom, R. L. (1970). *The Economics of Insurgency*. Cambridge: M.I.T. Press.
- Sasso. (2011). Agricultural Reform Tribunals. In Tucker, S.C. (Ed.) *Encyclopedia of the Vietnam War: A Political, Social, and Military History*, ABC-CLIO, 2nd edition.
- Scott, J. C. (2009). *The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia*. Yale Agrarian Studies Series. New Haven, CT: Yale University Press.
- "Shifting cultivation." *Environmental Encyclopedia*, edited by Deirdre S. Blanchfield, Gale, 2011.
- Tran, T. Q., et al. (2015). A note on poverty among ethnic minorities in the Northwest region of Vietnam. *Post-Communist Economies*, 27(2): 268-281.
- Tung, D. X. & Rasmussen, S. (2005). Production function analysis for smallholder semisubsistence and semi-commercial poultry production systems in three agroecological regions in Northern provinces of Vietnam. *Livestock Research for Rural Development*, 17(6): 11.
- Turner, S. (2012). "Forever Hmong": Ethnic Minority Livelihoods and Agrarian Transition in Upland Northern Vietnam. *The Professional Geographer*, 64(4): 540-553.

- Turner, S., et al. (2015). *Frontier Livelihoods: Hmong in Sino-Vietnamese Borderlands*. Seattle: University of Washington Press.
- "Viet Nam." Food Security Portal, IFPRI, 2012.
- "Wet Rice Agriculture." Asia for Educators, Columbia University, 2009.
- Woodside, A. (1970), Decolonization and Agricultural Reform in Northern Vietnam. *Asian Survey, 10*(8): 705-723.
- Zinoman, P. (2001). *The Colonial Bastille: A History of Imprisonment in Vietnam, 1862-1940.* Berkeley: University of California Press.