

A Fortuitous Frontier Opportunity: Cardamom Livelihoods in the Sino-Vietnamese Borderlands

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INTRODUCTION

On both sides of the Sino-Vietnamese borderline, across a frontier region that incorporates upland northern Vietnam and southeast Yunnan, rural livelihoods are being tested, negotiated, and transformed in response to an inflow of industrialized agricultural methods and far-reaching commodity markets. Commercial intensification, resource extraction projects, market liberalization, and new infrastructure and communications technologies are all playing key roles in diversifying 'life projects'. Since the start of reforms in the late 1970s in China and mid-1980s in Vietnam loosened the grip of these communist states over their flagging economies, this frontier region has witnessed collective property regimes being reorganized into private land-use rights, the strong promotion of cash cropping, and shifting cultivators being encouraged to become permanent, settled farmers.

As an important conceptual marker, the term 'frontier' often denotes landscapes used for extracting natural resources, politically marginalized locales, or sites where minority 'other' populations dwell, in addition to other interpretations. The term therefore seems apt to describe these borderlands, although it is important to note that 'borderlands' and 'frontiers' are not always one and the same. Historically, the frontier concept had two divergent definitions. Frederick Jackson Turner, writing in 1894 about the colonial conquest of the United States of America, (in)famously defined the frontier as 'the meeting point between savagery and civilization' (1894: 200). He drew a distinction between US and European versions of the frontier, suggesting that in contrast to the US version, the European frontier consists of 'a fortified boundary line running through dense populations'. Four decades later, Owen Lattimore (1940) drew on Turner's North American conceptualization of the frontier as the foundation for his study of the Inner Asian frontiers of China. Lattimore portrayed frontier relationships as constituting the march of Chinese modernity over marginal lands and peoples, with the frontier a constantly shifting region. Lattimore argued that taming the frontier was an uneasy and difficult endeavor requiring significant work and financial investments to succeed. A dualism was thus generated between empty/backward and densely populated/modern, as also enshrined in the US frontier model.

Also working in China but far more recently, Pat Giersch (2006) has tackled the obvious ethnocentric biases that such a conception of the frontier maintains. For Giersch (2006: 3), the frontier is 'a territory or zone in which multiple people meet; at least one group is intrusive, the other indigenous'. The idea that the frontier is flexible remains central to this rejuvenated imagery. Giersch argues that frontier formation is not a one-way process, and frontiers have

moved both forward and backward through history. The territories where this movement occurs become ‘middle grounds’ where indigenous and intrusive people mutually influence one another. Others working on frontiers in Latin America (Cleary, 1993) and Southeast Asia (Barney, 2009) have also taken part in the sustained academic critique of the original Turner thesis that focused on ‘the absorption of peripheral regions by an expanding capitalism’ (Cleary, 1993: 331). They argue that such a thesis allows too much of a ‘tendency towards homogeneity in economic structure and social relations in the cycle of frontier development’ (ibid.; see also Harrell, 1995). Indeed, this case study will show that, by taking a horizontal, transboundary focus, as noted by Smyer Yü in this book’s introduction, we can appreciate how local frontier communities often react to, rework, and resist such homogeneity in nuanced ways.

Living at a distance from their respective state seats of power, ethnic minorities in the physical and economic frontiers of China and Vietnam are often considered to be located on the cultural margins, frequently deemed culturally less evolved than the Han in China (Harrell, 1995; Nyíri, 2006) and as backwards, marginal, or lazy in Vietnam (Koh, 2002; McElwee, 2004). These minorities are currently navigating a number of important livelihood choices, but their marginal position complicates their options. While some upland minority individuals have remained guarded about altering traditional practices in response to these opportunities and challenges, others have been more eager to pursue new livelihood options and alternatives.

One such livelihood opportunity gaining popularity among ethnic minority residents in this frontier area – and which will be the focus for this chapter – is the cultivation and trade of the non-timber forest product cardamom. Demand for black cardamom (*Amomum aromaticum*),¹ a high-value commodity which must be cultivated under the forest canopy, has risen steadily over the last two decades (Tugault-Lafleur, 2007). As such, a number of ethnic minority farmers on both sides of the border have seized the opportunity to begin expanding the cultivation of what was historically a perennial plant growing wild in the forest. For those now cultivating this spice in Vietnam, intermediaries transport large sacks of the (usually dried) spice to the lowlands or, more commonly, export it to China along complex commodity chains. Across the border in China, commodity chains for the Vietnam-sourced product merge with those coming from frontier cultivators in Yunnan. On both sides of the border, these commodity chains are enmeshed with highly uneven power structures, which in turn create widely varying economic returns among the actors involved. This chapter sets out to explore these uneven structures and returns and to interpret how they reflect the dynamics of this frontier region more broadly.

This chapter is based on yearly fieldwork focusing on upland livelihoods in northern Vietnam since 1999 and in southeast Yunnan since 2008; the time spent in the field totaling

¹ Within the ginger family (*Zingiberaceae*), two main genera named as forms of cardamom are *Elletaria cardamomum* (commonly called cardamom, green cardamom, or true cardamom), and *Amomum aromaticum* or *Amomum tsao-ko* (also known as black, brown, or false cardamom as well as other localized names; see Buckingham, 2004). It is the latter, known as *Amomum tsao-ko* (草果, *cao guo*) in Yunnan and *thảo quả* in Vietnam, which is the focus of this chapter (Aubertin, 2004; Lim, 2013).

approximately three years. The focus in Yunnan Province has been on the counties of Jinping and Hekou in Honghe Prefecture, and on Maguan and Malipo in Wenshan Prefecture. In Vietnam, the focus has been on the provinces of Lai Châu, Lào Cai and Hà Giang (Figure 1). Conversational interviews have been completed with over 200 ethnic minority farmers, trade intermediaries, and wholesalers, along with over a dozen semi-structured interviews with state officials including market managers, border control officers, agricultural extension officers, and forest rangers. Interviews with ethnic minorities have been predominantly undertaken with the help of research assistants of that same ethnicity, while those with state officials have been completed with a Vietnamese interpreter or alone.



Figure 1. The Sino-Vietnamese borderlands - a transnational space and a key site for the cultivation of cardamom by ethnic minorities. Map by Produced by Phạm Thị Thanh Hiền and Jean Michaud.

ENGAGING THE MARKET

Black cardamom, a perennial herb, is native to the cloudy, cool, and humid regions of upland Southeast Asia. For centuries, where agro-ecological conditions permit, this plant has been one of many forest products that uplanders have collected for household use. Users of traditional Chinese medicine value cardamom for its ability to cure digestive problems, dysentery, and other ailments. Not surprisingly, this forest product therefore has a long history of being traded throughout the Chinese empire and its environs (Aubertin, 2004). Historically in Vietnam, both

French colonizers and then the independent Vietnamese state sought to develop a domestic pharmaceutical industry, facilitating the trade of cardamom. During the subsidy period (*thời bao cấp*) in Vietnam (1975-1986), legal as well as underground, informal cardamom trade networks existed as both state and non-state actors tried to benefit from this trade. Since the mid-1980s, cardamom has shifted from being a product only periodically traded in the Sino-Vietnamese frontier to an enormously influential commodity. Today, as one of the world's most expensive spices by dry fruit weight (close behind saffron and vanilla), cardamom's medicinal qualities are sought by millions of potential consumers in Asia, and its culinary uses are in demand across the globe (Buckingham & Tu Minh Tiep, 2003; Choocharoen et al., 2013; Omanakutty & Joy, 2007).

In Yunnan, cardamom is most heavily cultivated in Xishuangbanna (Li et al., 2010). It also grows – either naturally as a pioneer species on former swidden land, or purposely intercropped among alder trees – in Jinping and Hekou Counties in Honghe Prefecture and Maguan, Malipo, and Xichou Counties in Wenshan Prefecture (Guo Huijun, Xia Yongmei & Padoch, 2007). As suitable land for cardamom production in Yunnan has become increasingly scarce since the early 2000s due to forest regulations and competing land uses, Vietnam and Laos have become important source areas (Aubertin, 2004; Choocharoen et al., 2013). On the Vietnam side of the border, cardamom is particularly common in the Hoàng Liên mountain range and in other forested areas of Lào Cai and Lai Châu Provinces. Though the rocky terrain east of Lào Cai is less suited for the production of this forest product, in Hà Giang and Cao Bằng Provinces Hmong farmers, and to a lesser extent Dao (Yao), have also been attempting to cultivate it where possible (Novellino, 2000). To the west, cardamom cultivation has also been increasing in Phongsaly Province, Laos, due to rising global demand (Aubertin, 2004; Ducourtieux, Visonnavong & Rossard, 2006).

Cardamom is an appealing cash crop for upland residents, and the process of cultivating cardamom is comparatively simple compared to terraced rice farming. While land does need to be prepared to some extent, this is in the shade of forest trees, and the process is not as meticulous as rice field preparation. Furthermore, no animal labor is required, the harvesting season usually complements other upland agrarian work, and the process of drying the cardamom pods is long-established indigenous knowledge handed down through generations. Many Hmong (Miao), Dao (Yao) and Hà Nhì (Hani, also known internationally as Akha) ethnic minority households have made the leap from just collecting the plant in the wild to actively cultivating and trading it. Dried cardamom's high value-to-weight ratio is an additional appealing characteristic and an important consideration in a rural region where many cultivators lack access to reliable transport (cf. Sowerwine, 2004a, 2004b).

Cardamom commodity chains originating in Lào Cai Province, Vietnam

The small-scale gathering of cardamom has long been practiced by Hmong and Yao households in Lào Cai Province, the province with the greatest cardamom production in Vietnam. However,

it was not until the 1990s that households began to intensify their cultivation efforts. The economic liberalization policies of *Đổi Mới*, enacted in 1986, abolished collectives and opened up access to market trading. After Vietnam banned opium production and restricted the logging industry in 1993, upland residents who had previously been reliant on these channels for income found themselves in need of alternative cash sources (Socialist Republic of Vietnam, 1992, 1993). Moreover, since 1998-99, the Vietnamese state has been attempting to increase food production and homogenize agriculture in the uplands using hybrid varieties of rice and maize. This switch to hybrids has had important repercussions for livelihood strategies, as farmers are now obliged to purchase (infertile) hybrid rice and maize seeds annually as well as chemical pesticides and fertilizers (Bonnin & Turner, 2012). This has increased the need for cash income among local farmers considerably, especially for fertilizer. As word spread about cardamom's growing demand and prices in China, it quickly became a promising crop due to such rising cash needs.

Now deliberately planted beneath forest canopies, cardamom is harvested from September to November and then dried for several days over a wood fire, often in the forest. Depending on the size of a household and how much cardamom it has grown, cultivation may rely upon reciprocal labor agreements between local families. This work is carried out primarily by men, since periods of time must be spent in the forest guarding the maturing cardamom pods from the risk of theft, and this is not deemed culturally appropriate for women. With June and July often being difficult months for Hmong and Yao subsistence farmers, when some households experience yearly food shortages; cardamom cultivation has allowed households to enter into relationships with trade intermediaries who provide access to cash advances.² In sum, cardamom income is now acting as a significant cash buffer to insure against seasonal hunger and to pay for hybrid rice seed and fertilizer. For those who can harvest significant quantities, it can also help pay for water buffalo, weddings, and funerals.

Competition and conflicts have been growing among minority households cultivating cardamom due to the limited amount of appropriate land. As more households realize the potential financial rewards, the number of cardamom cultivators has risen and demand for prime forested land continues to grow. As one Hmong cultivator in Bát Xát District, Lào Cai Province, noted, 'the forests around here are now full. We've filled them with cardamom over the last 10-15 years'. Moreover, while official Red Book land use certificates guarantee households property rights over their own housing and agricultural land, cardamom fields are often located in communal forests, and thus ethnic minority farmers seldom possess officially recognized title to the plots they cultivate (cf. Neef, 2001; Sowerwine, 2004b). Though locals are obliged to treat cardamom disputes like any other issue and report them to the local People's Committee, in practice farmers are loath to involve the state in internal conflicts over land that is not even legally protected. In

² From fieldwork in the province, I estimate that about 30 per cent of Hmong and Yao households in Lào Cai Province face food shortages for at least 1–2 months a year (see also Delisle, 2014).

addition, state-appointed village officials often charge hefty fees to act as arbitrators. The frequent disputes that arise over crop theft can therefore escalate into violence instead.

As a result, imaginative solutions are often sought. Households deter theft by making multiple trips to their plots from July onwards, and men frequently sleep in the forest overnight leading up to the harvest to protect maturing cardamom fruit. Moreover, although fully ripe fruit are the most valuable, households that are fearful of theft will sometimes decide to harvest their crop early, hence losing out on potentially bigger financial returns (see Aubertin, 2004; Choocharoen et al., 2013 for discussions of the same concerns in Laos).

Things get even more complicated when one is cultivating cardamom in a national park. Hmong and Yao living within Hoàng Liên National Park, in Lào Cai Province, are in close proximity to old-growth forest ideal for cardamom fields. Despite the fact that many households in ethnic minority hamlets predate the park's establishment, with some families and their ancestors having resided there for over 200 years, conservationist regulations forbid logging, hunting, and collecting flora or fauna. Nonetheless, residents continue to illegally harvest forest products. With their extensive knowledge of the forest, upland farmers are adept at avoiding park officials who lack the resources to fully enforce the law. The farmers' lack of legal access rights to forest land, however, renders cardamom cultivation a rather fragile option. Park officials I have interviewed are aware that Hmong and Yao residents are planting fields in the park, and are concerned about the drying of cardamom over fires – not least because the process requires the illegal collection of fuel wood. But despite the confiscation of other forest products harvested for sale in local marketplaces, park officials have not cracked down on cardamom trading to date; as a result, many – but not all – ethnic minority farmers continue to consider the benefits of illicit cardamom cultivation to outweigh the risks.

In one village within the park's boundaries, the cultivation of cardamom is so extensive – some families collecting over 500 kilograms a year – and the risk of theft so high from village outsiders, that local men have decided to create an informal cardamom protection committee. In this case, a Hmong informant explained that the easiest and most direct route from the villagers' surrounding cardamom fields to the main road that heads towards the district capital of Sa Pa (where the cardamom is taken to be traded) is through the village itself. The informal committee keeps tabs on the flow of cardamom, and villagers pay for the protection provided with a small percentage of their crop. Anyone not known to committee members is stopped and questioned regarding what they are transporting. While this approach has reduced theft, not all villagers subscribe to the idea wholeheartedly, and some transport only a portion of their harvest along this 'official' route, while using forest routes for the rest of their crop to evade the committee and the required payments.³

³ While collusion or bribery between park officials and those involved in the cardamom trade would seem an obvious option given the relatively high prices obtained for this product, I have yet to hear of such arrangements (cf. Hoang Cam, 2007). On the one hand, local state officials at the commune level are often closely entwined with

Moving along the cardamom commodity chain

Ethnic minority cultivators are located at the initial node of these cardamom commodity chains (see Figure 2). From September to November, cardamom buyers – often Kinh (majority Vietnamese) or Giáy based in local villages as small shop traders – purchase the spice from minority farmers. Ethnic minority farmers are not well positioned to take advantage of business opportunities along this commodity chain, and tend to sell their harvests to such intermediaries, with whom they have some amount of interaction and familiarity. These intermediaries then use motorcycles, jeeps, or vans to transport the cardamom to wholesale businesses that are nearly all run by Kinh women in district towns. In addition, in recent years, some minority farmers have purchased motorbikes in order to visit local towns to sell directly to wholesalers.

These intermediaries and wholesalers often buy cardamom on credit, giving cash to cultivators before the harvest, as noted earlier. While this suits cultivators by supplying their households with a cash infusion in the lean months of June and July, it also means that their cardamom yield is bought for a hypothetical price that is often set lower than what it might be possible to fetch later the same year. Such agreements allow Kinh and Giáy intermediaries and wholesalers to dictate their rate of return and wield a financial advantage over Hmong and Yao suppliers. For instance, in 2013 and 2014, Kinh wholesalers in one district were offering advance payments of US\$5.30, while prices for cardamom after harvest rose to US\$6-7. During the harvest in 2015, cardamom cultivators again noted a similar US\$1-2 difference over time. These cardamom wholesalers depend on strong networks with larger-scale wholesalers in Lào Cai City, where the product is next transported. During the peak of the harvest season, merchants from Lào Cai City head to a range of district head towns by jeep or truck to collect cardamom supplies, while other district wholesalers who have collected substantial supplies transport their stock to Lào Cai City.

Market knowledge and social networks are important assets in this trade. Neither Hmong and Yao cultivators, nor Kinh and Giáy intermediaries can access the market knowledge and networks that Kinh wholesalers in the district head towns and Lào Cai City rely on to gauge regional, national, and international cardamom demand, supply, and prices, including Chinese trends (Xu Zaifu, 1991). It is therefore Kinh wholesalers who have the human, social, and financial capital required for international negotiations, including well-established cross-border links with Chinese traders. There are fewer than ten such wholesalers in Lào Cai City and, like the wholesalers in district head towns, they also tend to run their businesses from the ground floor of their homes, stacking up piles of large sacks (often 100 kg each) of cardamom from October through February. In the case of Lào Cai City, most of these wholesalers collect their cardamom from the districts of Sa Pa, Văn Bàn, and Bát Xát. Chinese wholesalers then pay a visit to these wholesalers, or *vice-versa*, to negotiate prices and purchase stock, necessitating a

local communities, and this means they often turn a blind eye to activities that many of their own family members are undertaking. On the other hand, officials transferred from elsewhere are sometimes more concerned with showing positive ‘development’ outcomes for local communities via reductions in poverty and improved food security.

trip across the border to or from nearby Hekou, the Chinese frontier town just over the Nậm Thi River.

While most of the stock held by Lào Cai wholesalers is bound for the Chinese consumer market, some stays in Vietnam. For these commodity chains, Kinh traders purchase cardamom in Lào Cai City or sometimes in district head towns and transport it to the lowlands. In Hanoi, one of the main regional wholesale hubs is Đồng Xuân market, where traders sell it on to vendors from smaller neighborhood markets, specialized herbal medicine shops, and restaurant operators. Local customers consume cardamom in their favorite snacks from food vendors and in restaurants throughout the city. These eateries use the spice in Vietnam's beloved national dish, the ubiquitous noodle soup *phở*, and as an important ingredient in *chè*, sweetened porridge, among other dishes.

Cultivation and trade in the Yunnan frontier

Cardamom is also an important non-timber forest product for a number of ethnic minorities on the Yunnan side of the border.⁴ Jinping Miao, Yao, and Dai Autonomous County, located in Honghe Hani and Yi Autonomous Prefecture, is one such cardamom cultivation area in this frontier zone directly across the border from Lào Cai Province, Vietnam. Here, a number of different land access regimes are in place. For instance, in Jinping Fenshuiling Reserve, Honghe Prefecture, farmers can gain legal access to forested land, paying ¥10/mu (US\$19/ha) into an 'ecological compensation fund' (Xu Jianchu, 2005: 17). Yet other cultivators continue to harvest illegally in national forests, where control is limited. Farmers note that if they expand their cultivation areas very slowly, officials are willing to turn a blind eye. Local intermediaries, usually Han Chinese, then buy up the cardamom from these ethnic minority farmers – who are often Hani or Hmong (Miao) – and commonly sell their stock onto wholesalers in Guangxi Zhuang Autonomous Region, with a lesser amount going to Kunming. Transportation is taken care of by freight forwarders, many based in local cities such as Mengzi. From Guangxi, it is a short haul to the lucrative markets of Guangzhou and Hong Kong.

The frontier commodity chains merge

The Chinese pharmaceutical industry consumes the majority of the cardamom grown in Vietnam and China. In Kunming, the capital city of Yunnan, and Nanning City in Guangxi Province, Han traders distribute dried cardamom to processors who grind it into powder or press it for oil before it is mixed into various pharmaceutical products sold to consumers across East Asia. It is at this commodity node that Vietnamese cardamom is frequently mixed with local Yunnan cardamom. The Chinese pharmaceutical industry buys an estimated 2,000 tons of cardamom annually, half of which is produced domestically, with the remainder imported from Vietnam, Laos, and Burma

⁴ In this chapter I only summarize brief findings from the Yunnan side of the border, as this is the focus of a much larger research project currently underway.

(Xu Zaifu, 1991). Indeed, when contacting spice wholesalers and traders in the United States, few knew whether the black cardamom they traded was from Vietnam or China.

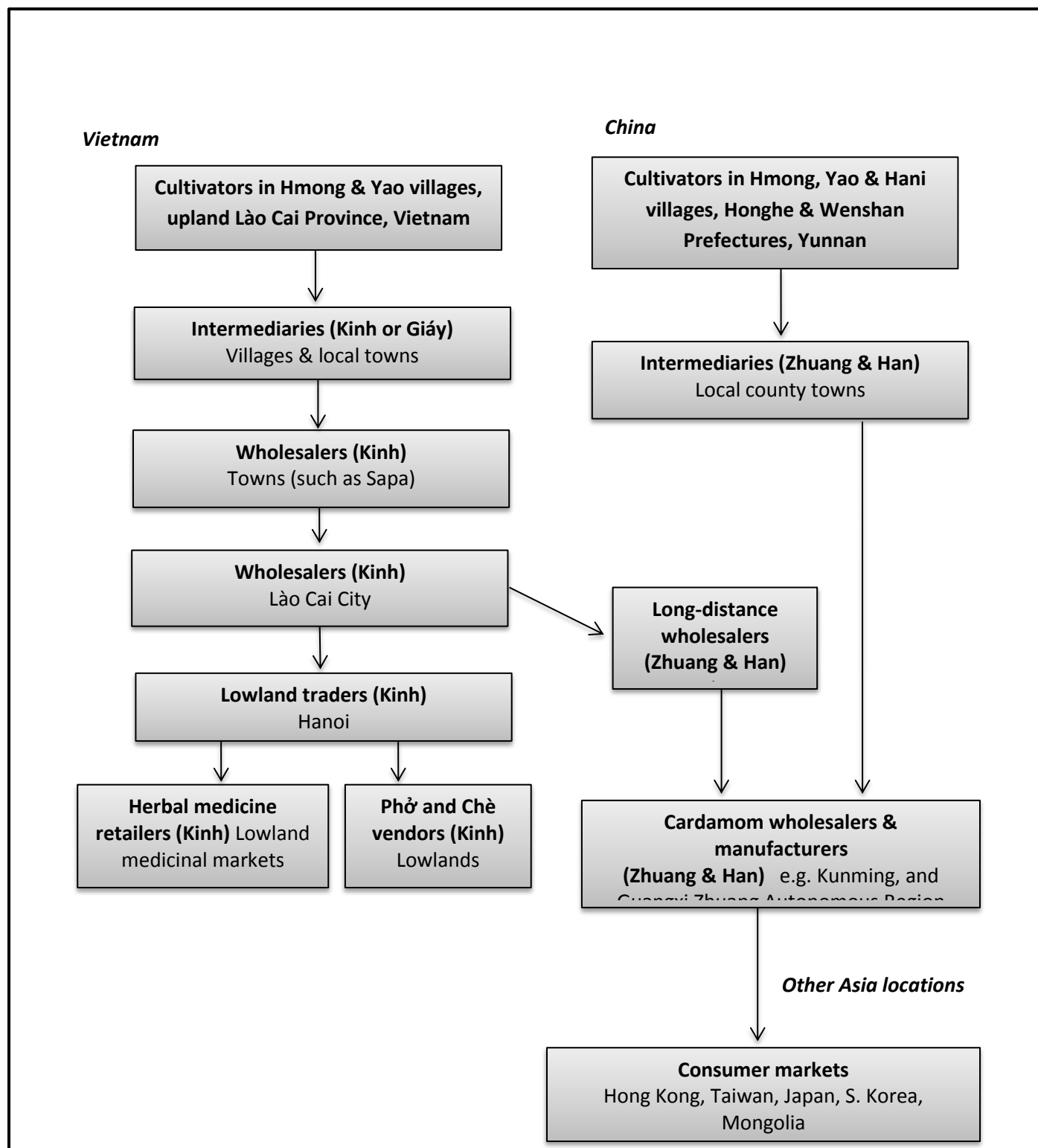


Figure 2. A stylized commodity chain diagram for cardamom, with a focus on the main flows originating from upland Vietnam.

BALANCING THE ACCOUNTS OF A CASH CROP TRADE SYSTEM – THE CASE OF VIETNAM

As cardamom has evolved from a wild forest product gathered for household use into an international commercial commodity, an increasing number of intermediaries have become involved in its trade across the Sino-Vietnamese borderlands. The growing complexity and spatial expansion of networks originating in the uplands has created a situation where some actors profit significantly more than others. Here I take a closer look at what is happening in the Vietnamese frontier.

Hmong cardamom: Modest yet significant incomes

Wild cardamom plant densities are relatively low, but by carefully propagating young rhizomes, one hectare of cultivated cardamom may yield 50 kilograms of dry fruit per year (Kvitvik, 2001; Aubertin, 2004). Included in the income equations for ethnic minority households cultivating cardamom are the labor and transportation costs that they incur while tending and trading their crop. Prices that households then receive vary from year to year and district to district. In Vietnam, cardamom seems to have first dipped and then risen in value from 2005 to 2015. In 2005, cultivating households were receiving US\$4.10-4.50 per kilogram of dried cardamom. This dropped to US\$3.30-5.00 in 2010, and in November 2015 was standing at US\$5.60-7.00. The higher of these two recorded prices each year reflect prices obtained by farmers able to wait two to three months after the harvest to sell their crop, rather than selling at the same time as everyone else, immediately upon harvesting. At 2015 prices, households producing 70-100kg of dried cardamom could earn roughly US\$392-560 – a substantial cash inflow to their overall livelihoods. Interestingly, when interviewed in 2015, one ethnic minority woman was fairly scathing about the ability of people from her ethnic group (which I will not name here) to carefully consider the potential financial benefits of stockpiling their harvest. She noted: ‘My people are useless at waiting to sell at a higher price. They see that they can get money now [during the harvest period], and so they sell now. That’s always the problem, they can never wait, they want to buy a motorbike now.’

In Sa Pa District, households in Lao Chải and Tả Van Communes cultivate 70-100kg of cardamom per year on average, while some in Bản Khoang, Bản Hồ and Sáo Mý Tỷ Communes gather up to 200-500kg annually. Other ethnic minority households continue to maintain only a small plot of cardamom for household use and emergency cash, gathering as little as 20kg. In these cases, households sometimes decide not to dry the cardamom pods before trading, deciding that the effort of finding enough firewood is too labor-intensive.

The unpredictable climate in the Sino-Vietnamese borderlands causes yearly yields to fluctuate widely, while natural disasters can also wreak havoc. The maturing fruit can be damaged by extreme weather during the summer rainy season, or due to winter cold spells. Households in Bản Khoang Commune, in Sa Pa District, suffered heavy losses from frost and hail storms in 2011 and from an early, cold winter in 2013. Snow in high altitude areas on both sides of the

border in late 2014 and 2015 has caused serious declines in cardamom yields for 2015 and 2016 (Figure 3). Other natural events can also impact harvests, such as when forest fires struck Hoàng Liên National Park in February 2010, and again in 2014. One young Hmong woman had her entire cardamom crop destroyed by the 2014 fires. As she recalled, 'The fire was huge and it took 4-5 days for them to put it out. They had to bring in a helicopter and take water from the lake behind the dam. My cardamom is all gone. The forest there is all gone. Now it's only good to grow maize'. Farmer incomes from cardamom are therefore unstable due to a diverse range of direct and indirect factors.



Figure 3. Cardamom recovering from a harsh winter in Bản Khoang Commune, Lào Cai Province, Vietnam (photo: Sarah Turner).

Sizeable returns for intermediaries and wholesalers

Along cardamom commodity chains, intermediaries and wholesalers collect far higher profits than ethnic minority cultivators. Village-based Kinh and Giáy intermediaries can earn profits of around US\$0.30/kg and can be moving up to five metric tons of cardamom per year. This amounts to US\$312 per ton traded, a significant amount even after accounting for transportation, packaging, and storage costs. Even more money can be earned further along the chains. In 2006, one Kinh wholesaler based in Sa Pa Town had an annual flow of 30-40 metric tons per season, yielding revenues of just over US\$10,000 (Figure 4). While profits are a well-kept secret, I estimated from discussions with Lào Cai City wholesalers in 2012 that on average, they could earn at least US\$18,000-20,000 annually for moving about 300 metric tons, since Chinese wholesalers were buying cardamom that year for around US\$6.80-\$7.00/kg.

On the Chinese trade site Alibaba.com, six Vietnamese trading companies offered Vietnamese black cardamom for sale in 2015. Each presented a range of qualities, with the average lowest price being US\$5,520 per metric ton, and the highest average price being \$47,300 (US\$5.52-\$47 per kilogram). After the involvement of numerous intermediaries, black cardamom can then retail for a staggering US\$105-\$918 per kilogram on North American websites for boutique spice stores.⁵



Figure 4. Sorting cardamom for a Kinh wholesaler in Sa Pa town, Lào Cai province (photo: Sarah Turner).

Who benefits from this frontier opportunity, and how?

At the different nodes in these commodity chains originating in Vietnam, actors are able to access widely varying types and amounts of financial, physical, and social capital. Kinh traders in regional urban centers like Sa Pa Town and Lào Cai City possess numerous advantages over ethnic minority producers who reap comparatively small profits. The motorbikes, jeeps, and vans of Kinh traders provide them with direct access to markets and cross-border opportunities, while their extended networks based on shared ethnicity, family ties, language, and economic status facilitate trade links founded on trust and reciprocity. Kinh wholesalers heavily rely on networks of relatives and friends among intermediaries to buy cardamom in the uplands and then sell it in

⁵ These are the lowest (allspiceonline.com) and highest (wholespice.com) prices found across ten US-based websites selling black cardamom pods. However, it is not specified on such websites whether this cardamom is from China or Vietnam. Four stores contacted for follow-up questions confirmed that their cardamom was 'from China', although two noted that they could source Vietnamese cardamom if sufficient quantities were requested. One store noted that their popular 'Phở spice kit' contained Vietnamese cardamom, with this kit retailing at US\$3.98 for a 42 gram kit (the equivalent of US\$94 per kilogram, 2015 prices).

either China or the Vietnamese lowlands. Moreover, these wholesalers benefit from their ability to access up-to-date information on supply, demand, and market prices.

Ethnic minority cultivators remain spatially separate from these traders, lacking access to both financial capital for investments like vans and social capital in the form of ethnic affiliation and trust relations with Kinh/lowland networks. Currently, minority cultivators cannot compete with better-connected traders further along these commodity chains, and the financial returns for ethnic minority harvesting efforts remain comparatively marginal. Whether they are satisfied or not with this situation, and whether they are even tempted to involve themselves on the broader stage, becomes the next question.

Though the Kinh, Giáy, and Han merchants operating in Lào Cai Province reap far greater profits from their role in the cardamom trade than Hmong and Yao cultivators, even the small amounts that minority growers receive are crucial for their households' food security. For both Hmong and Yao, endogenous definitions of wealth are based on a household's ability to feed itself through the entire year from home-grown rice or maize without facing food shortages, to possess a house that can accommodate all who are expected to live there, and enough water buffalo to plough the rice fields (if situated in the appropriate agro-ecological conditions) (Turner, 2012; Turner, Bonnin & Michaud, 2015). For those struggling to meet these criteria, the significant cash value of their cardamom crop acts as insurance against shortfalls in rice and basic consumption goods.

Financially secure households – those meeting the criteria above – may spend cardamom income on annual festivals and lifecycle rituals or invest in land-use certificates, construction materials, agricultural inputs, or mobile phones, televisions, and motorbikes. Séo Mí Tỷ Village, in Sa Pa District, has such large returns from cardamom that most village households are now able to buy such additional commodities. On the whole, however, households prefer to direct any extra cash towards securing the continuation of their customary livelihood activities rather than being enticed to expand cash crop portfolios or pursue employment as traders. Instead of luring Hmong and Yao uplanders into a new economic niche, this cardamom boom seems to have been indigenized as a supplemental opportunity to gain necessary capital, while preserving their preferred principal livelihoods based around rice and/or maize production.

While farmers across this frontier are skilled at identifying new economic opportunities, they take care that such adaptations do not endanger core elements of their cultural identities and livelihoods. Indeed, ethnic minority cultivators in northern Vietnam cite three main concerns regarding cardamom's potential as a source of cash. First, households are finding that they must plant new plots deeper and deeper in the forest as competition for suitable land rises; not only does this make tending the cardamom plants more difficult in terms of sheer walking distances, but it also exacerbates growers' lack of control over fields to which they do not hold legally protected rights. Second, households with fewer able-bodied male members or labor sharing options are at a disadvantage considering the physically demanding nature of cardamom

harvesting. Finally, uplanders are wary of a commodity whose value is dictated by national and global market forces over which they have no control.

Ethnic minority interviewees express reluctance to continue farming cardamom if the challenges – such as the risk of theft without legal recourse, low returns on labor, and uncertain weather conditions – become too burdensome. Cardamom is a supplemental, complementary crop, and at all times remains secondary to their main subsistence-based agrarian livelihoods. In Lào Cai and Lai Châu Provinces, the all-important wet rice crop remains crucial as an indicator of household wealth and a secure source of nutrition even though cardamom has the potential to be grown on a larger scale. Ethnic minority Hmong and Yao work to ensure that traditional household-based economies are enhanced rather than replaced by their involvement in the profitable but potentially fragile cardamom trade. Though the expansion of government-funded hybrid rice and maize programs are pressuring uplanders to enter the cash economy to buy yearly seed, fertilizer, and pesticide inputs, ethnic minorities appear to be striving to protect the core elements of their customary livelihoods as long as possible.

CONCLUDING THOUGHTS

Across this frontier region, undergoing rapidly changing market imperatives and opportunities, a range of property rights coexist. I have briefly introduced some of these, from illegal harvesting in national parks to communal forests, to legal provisions for harvesting in state-sponsored arrangements. Clearly, power dynamics with regard to state policies come into play here to determine farmer access to potential cardamom cultivation sites. Yet a much broader range of relations, not only with state officials enacting (or ignoring) policy, but with other cultivators, intermediaries, and wholesalers, also shapes the possible livelihood outcomes for those at the initial nodes of these commodity chains. Moreover, livelihood decisions – and specifically the degree of engagement with cardamom trade opportunities – are made with an eye to the costs and benefits of negotiating cardamom thefts, dealing with intermediaries that are not of the same ethnicity and that are suspected of rigging prices, coping with a rising number of extreme weather events, and juggling other household priorities.

In Vietnam, ethnic minority residents find themselves increasingly ‘under the state’s gaze’ as they are progressively incorporated into national visions of agrarian transformation and circuits of commodity production. The increasing need among ethnic minority farmers for access to cash is having profound implications on upland livelihoods and ways of life. Yet as Barney (2009: 147) notes, a frontier region can also ‘be understood as a contested and complex empirical ‘reality’. This is where scale is important in an analysis of frontier relations. If one focuses on the household, one begins to understand that these farmers are operationalizing opportunities in ways that fit their own needs, and their contemplation of possible rewards does not necessarily result in them jumping on a resource extraction bandwagon. Will this remain the case in the future? It is hard to tell, and further research on the Chinese side of the border may reveal a different story again. For the time being, however, ethnic minority cardamom cultivators in

northern Vietnam are drawing upon a particular agency that creates a distinctive narrative at the household level, and one that does not reflect a purely extractionist mindset across this frontier. Yet it is important to reiterate that, in contrast to a fairly persistent state discourse and national majority mindset in China and Vietnam, upland Yao and Hmong farmers are far from static and inflexible. When their livelihoods are at stake, they adapt, using their agency to the best of their ability. Historical trade routes across the border are hence being strengthened by this cardamom trade, and long-term networks are not being severed by a state-created borderline. Instead, horizontal, transboundary trade maintains, reshapes, and diversifies relations among communities, and across ethnicities.

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