Illegal timber logging in Vietnam: Who profits from forest privatization connected with a logging ban?

To Xuan Phuc and Thomas Sikor Junior Research Group on Postsocialist Land Relations Humboldt University, Berlin

Abstract: This paper examines how forest land allocation and a logging ban influence the distribution of income from illegal timber logging in northern Vietnam. The Vietnamese government implemented forest land allocation in the 1990s, granting rural households legal rights to forest land. At the same time, it issued a logging ban in the early 1990s, criminalizing virtually all timber logging. Yet because of the demand for timber in lowland markets, illegal timber logging still takes place in many upland forests. Using commodity chain analysis, this paper examines the distribution of benefits derived from small-scale illegal logging among various actors as well as the mechanisms creating and maintaining access to timber for those actors. The paper shows that the benefits derived from timber are distributed unequally among different actors along the chain. Villagers and hired woodcutters are the ones who benefit least, in contrast to a village trader, a wholesaler, a number of local state officials, and two 'lawmakers'. These results indicate that forest land allocation may have granted villagers legal rights to forest, but in the presence of the logging ban, the actual distribution of benefits largely reflects actors' control over markets and power derived from state positions.

I. Introduction

Vietnam's forest policy has undergone radical reform over the past decade and a half (Sikor 2001). The 1993 Land Law created the legal option to allocate forest land to rural households and organizations. As a consequence, local-level authorities transferred some 2.9 million hectares of forested land to households and collective organizations until the end of 2004. At the same time, the Vietnamese government issued a logging ban in 1993, halting the exploitation of natural forests throughout the country. The Vietnamese government, therefore, has chosen a similar approach to forestry reform as its Chinese counterpart (cf. Weyerhäuser et al. forthcoming). Both governments combine the privatization of forests with a restrictive logging ban in an effort to protect existing forest.

This approach has not curbed logging activities in Vietnam, however. Reports of illegal logging in the uplands abound in Vietnamese newspaper (McElwee 2004). Ogle et al. (1998, cited in McElwee 2004) estimate that about one million cubic meter of wood is logged illegally in Vietnam every year. The common explanation of illegal logging is that weak state capacity prevents effective law enforcement. In addition, state officials may be involved in the illegal activities, as they derive benefits from those (McElwee 2004).

In this paper, we examine illegal timber logging in Vietnam by way of a case study from the northern mountains. We perform a simple commodity chain analysis (Ribot 1998) to map the distribution of benefits along a particular commodity chain and examine the mechanisms by which various actors derive benefits from the logging. The focus of the analysis will be on the segments of the chain from the point of extraction to timber wholesalers in the Red River Delta. The fieldwork was conducted in 2000 and in late 2004/early 2005. It included in-depth

interviews with local woodcutters, a household survey in one village, and open-ended interviews with individuals involved in the commodity chain at various points.

We find that there are a number of actors involved in illegal logging and trading. Overall benefits derived from timber logging and trading are unequally distributed among these actors. Woodcutters are the ones who benefit least, although they hold land certificates for the forest land from which they extract timber. A village trader, wholesalers, and a large number of state officials receive a large share of overall timber benefits even though they do not hold claims on the timber sanctioned by Vietnam's forest legislation. The results of our study, therefore, indicate that power based on control over timber markets and derived from state positions plays a much larger role in shaping the distribution of timber benefits than the legal assignment of property on forest. In fact, in the presence of the logging ban, the very assignment of individualized property titles on forest may solidify the foundations upon which the control of powerful private agents and state officials rests.

This paper is organized as follows. Section II introduces Vietnam's forestry reform and the case study. Section III identifies the actors involved in the commodity chain. Section IV analyzes the vertical distribution of benefits among them. Section V analyzes the mechanisms adopted by these actors in order to maintain and control their access to timber benefits. Section VI discusses links the observed distribution of timber benefits to the forest land allocation policy and logging ban. Section VII concludes the paper.

II. Vietnam's forestry reform and the case study

Vietnam's National Assembly passed the new Land Law in July 1993. Government officials and foreign observers heralded the new law as the cornerstone of a new strategy for rural areas and people. The law substantially widened the bundles of rights accorded to the holders of land in comparison with the previous legislation, although it did not grant them full ownership rights (Sikor 2004). The so-called 'use rights' not only included the right to use the land, but also to dispose of its product, to exclude others from using the land, to use the land rights as bank collateral, to pass them on to one's heirs, and to alienate the 'use rights' to third parties. State control over land, in turn, was confined to the rights to collect taxes on the land, check its proper use, and withdraw the 'use rights' under narrowly circumscribed circumstances.

The new Land Law applied to all kinds of land, including forestry land, i.e., land that was designated for forestry use. Decree 02 specified that the 'use rights' would have a duration of 50 years for forestry land. The Decree also called upon local authorities to allocate forestry land to households, organizations, and state units. These would receive 'land use right certificates' as evidence of their legal claims to the land. The new legislation and land allocation, therefore, implied a radical change in Vietnam's forest policy. A large part of the country's forests were expected to be transferred from the previously dominant State Forest Enterprises to households and local organizations. The state withdrew from the direct management of forests to a regulatory role.

Just as Vietnam's government initiated forest land allocation, it increasingly curbed the commercial exploitation of forests. In early 1992, the government completely stopped granting new export permits and withdrew already granted export permits for roundwood and lumber. In 1993, it increased its control over the transport and export of timber exploited from natural forest. Decree 462-TTg, issued in September 1993, finally implied the "closure

of forest gates", as the policy is commonly known in Vietnam. The Decree banned timber exploitation in protection, special use, and poor-quality forest completely. It also reasserted the export ban and further tightened the state's supervision over the transport of wood. As a result of the policy, thousands of check points spawned along Vietnam's highways to put government control into practice.

Ban Chanh, our study village, is located in Tan Da commune of Bac Minh district of Hoa Binh province¹. Presently, there are 50 Dao (ethnic minority) households in the village, making up a population of Dao 247 people. All of them derive their livelihoods from agricultural practice and forest products for their livelihoods. Since wet rice land is not sufficient, villagers have to rely on swidden cultivation despite the government's ban on swidden practice in the forest. Most of households in the village lack food from 2-4 months per year. As a result, many of them have to use cassava root to make up their meals. The main sources of household's income are from forest products particularly timber and bamboo shoot they extract from the forest around the village. Livestock production is not developed.

Prior to the forest land allocation, forest around Ban Chanh was managed by Tu Ly forest enterprise, an organization of Department of Forestry of the province. The enterprise merely focused on timber exploitation to fulfill the log quota sent down by its boss. By the end of 1980s, the enterprise stopped extraction of timber in the forest around Ban Chanh. As mentioned early, the Vietnamese government started to ban timber logging in the early 1990s. The logging ban substantially reduced the supply of timber in the lowland market. As a result, timber price in the lowland market accelerated, which in turn created an incentive for illegal timber loggings in the upland forests. In Ban Chanh, right after Tu Ly enterprise left, the state control over forest resources was very loose. Consequently, illegal timber logging sprang up in the village despite the government's ban. Villagers were very free to exploit timber in the forest where they found convenient. Muong (ethnic minority) people in near by village also came to Ban Chanh to work with villagers to log timber. Timber exploited by the villagers was sold to private traders who came from the district center. Traders then brought timber to district center to sell to saw mills and to the lowland market in Huu Bang of Ha Tay province (see Figure 1).

Forest land allocation reached Ban Chanh in 1995. Under the allocation, each household received 11.6 ha of forest land on average. In principle, the forest around Ban Chanh is subject to high level of protection. Households are not allowed to exploit timber in the forest for commercial purpose. In 1997, all land recipients in the village were granted land use certificates by local authorities of the Bac Minh district.

¹ For confidentiality, we change the real names of the village, commune and district; instead, we use pseudonymous names.





Map compiled by Daniel Muller

III. Actors involved in illegal logging and trading

Forest land allocation granted the villagers of Ban Chanh exclusive 'use rights' to the forest. Yet there were many other actors seeking to benefit from the *khao* timber extracted from the forest. These included the furniture industry and retail sector as well as consumers in the lowlands, which are not the focus of this article. They also included a number of actors involved in the *khao* commodity chain before the logs reached the furniture industry, which are the subject of this section (see Figure 2).

Dao villagers

Khao timber trees are illegally cut and sawn by villagers. They are strong men in the age from 15 to 60 years. Currently, almost all strong male villagers engage in timber logging. Some village women also help their husbands and/or sons bring timber from the forest to the village. After sawing, woodcutters haul off the timber with the help of water buffaloes and hide those at secret places in the village in order to conceal them from commune officials and forest rangers.

Muong woodcutters

Woodcutters from a nearby village in the neighboring province Phu Tho help the villagers in Ban Chanh. The woodcutters do not belong to the Dao but Muong ethnic group. Usually, migrant woodcutters are strong young men, in the age from 20 to 40 years. They come to Ban Chanh to work for villagers as hired laborers, or to cooperate with them as partners. Villagers need to hire migrant woodcutters or collaborate with them, because the cutting and sawing of timber trees requires a group consisting of at least two persons.

Village trader

Villagers sell the timber to a village trader, Anh Ngan². Although Anh Ngan owns a big house in the district town, he also built a temporary house in the village near the main road. He uses this temporary house to gather timber and communicate with woodcutters. Anh Ngan owns two trucks, which he uses to transport timber to a market in the lowland commune of Huu Bang (see Figure 1). There, he sells the sawlogs to wholesalers. Besides Anh Ngan, there are also other outsiders coming to Ban Chanh to buy logs. Yet the woodcutters prefer to sell logs to Anh Ngan.

Wholesalers

There are about 30 wholesalers in Huu Bang commune, which is located in Thach That district of Ha Tay province, about 20 km away from Hanoi. Huu Bang commune is widely known for its market for legally and illegally exploited logs brought from various regions of the country and even Laos. The commune is also known as a furniture producing area. Some 80 percent of all households living in the five villages of the commune are active in furniture-making.

Local state officials

Besides the villagers, woodcutters, village trader, and wholesalers, there are many local state officials involved in the trade with *khao* sawlogs. They work in law enforcement agencies at commune, district, and provincial levels. Their task is to enforce Vietnam's forest legislation in order to halt timber exploitation and conserve forests. The primary approach taken to enforce the law is to control the transport and trade of illegal logs.

On the way from Ban Chanh to Huu Bang the truck with the *khao* timber has to pass a series of check points, requiring the complicity of many state officials. This begins right in the village, where the village and commune chairmen, the commune security officer, and the local forest ranger have the mandate to monitor and check wood transports and trade. After leaving the village, the truck has to pass through the district town. The district town holds four check points run by different agencies: the Department of Forest Protection (DFP), the district police, the traffic police, and the tax division. Each check point is manned by three to four officers, including the head of office plus two or three regular officers.

After leaving the district, the timber reaches the provincial township of Hoa Binh. The truck with the timber has to maneuver its way through several check points again. In comparison with the district town, the system of check points is more complicated in the provincial township, because it involves fixed and mobile check points not only by various provincial government agencies but also by multiple branches of the township administration.³ The provincial agencies maintaining check points include the police for economic affairs, emergency police, DFP, and the traffic police. The branches of the township administration staffing check points consist of the police for economic affairs and DFP. Again, there are about three to four officials in each agency directly involved in roads checks.

On its way to the lowlands, the truck has yet to pass through two more districts in Hoa Binh province. In each district, the truck has to pass through a fixed and a mobile check point established by the police and DFP. The situation remains the same once the truck leaves Hoa

² We use pseudonymous name for the trader. In Vietnam, "anh" is used to address men.

³ Administrative system of the township is under direct control of People's Committee of the province. Its function is to deal with issues within provincial township area.

Binh and crosses into Ha Tay province. The truck has to pass through another two districts before it reaches its final destination in Thach That district. Each of the districts brings along another two road checks run by the DFP and traffic police. Only then have the timber reached the wholesalers of Huu Bang commune.

"Lawmakers"

Yet the timber would not pass through all the check points if there were not the services of another type of actor involved in the commodity chain: the "lawmakers", as they are known in Vietnam.⁴ The two "lawmakers" active in the trade of *khao* timber from Ban Chanh play an extremely important role by making sure that the truck with the timber is not stopped at any check point. They "make law" by brokering the relations between the village trader and the many state officials in the various agencies at district and provincial levels. Just as many other traders, Anh Ngan hires their services to bribe the state officials as needed. Anh Ngan hires Anh Mot to smooth things in Hoa Binh province and Anh Hai to deals with local officials in Ha Tay province.



Figure 2. Relationships of actors the chain of sawlogs

Source: Field research 2004-05.

⁴ "lam luat" in Vietnamese.

IV. Distribution of income among actors

There are many actors involved in the *khao* commodity chain, as the discussion in the previous section has demonstrated. Nevertheless, the risks, expenses, and benefits associated with illegal timber logging are unequally distributed among the actors. Table 1 presents an overview of the risks and expenses accruing to each actor along the chain as well as their benefits.

	Social risks	Labor expenses	Cash expenses	Cash benefits
Villagers	Punishment and physical injury	120 labor-days	0.15 million VND for buffalo rental. 2.4 million VND for hiring woodcutters	6 million VND in total; 3.45 million VND as net income. Return to a labor day is 47,900 VND
Migrant woodcutters	Punishment and physical injury	48 labor-days	None	Return to a labor day is 50,000 VND
Village trader	High risk of being caught; legal prosecution	1 night for transport, 3-4 days for preparation	6 million VND for purchase of timber; 0.4 million VND for loading fee; 4 million VND for bribes in Da Bac district; 3.5 million VND for lawmakers; 1.2 million VND for gasoline. Total expense: 14.7 million VND	Total cash revenue from timber sale is 16.8 million VND; net profit is 2.1 million VND
Wholesaler	Checks on origin of logs by various government agencies	Usually, it takes about 3-5 days to sell off 6 m ³ of timber	16.8 million VND for buying 6m ³ of timber. 0.05 million VND for bribing agencies. Total expense is 16.85 million VND	Total cash revenue from sale is 21 million VND; net income is 4.15 million VND
Local state officials	Detection of corruption	No labor cost involved	No economic expense involved	7 million VND
"Lawmakers"	Detection of corruption	No visible labor required	2.5 million VND as bribes	Net income is 1 million VND

Note: The calculations are made for a truck load of six cubic meters of *Khao* timber. One US Dollar is equivalent to about 16,000 VND.

A comparison of net income indicates that the three major groups involved in the *khao* commodity chain – villagers and migrant woodcutters, the village trader and wholesaler, and state officials and "lawmakers" – receive similar shares in total net income (see Figure 3). Yet a closer look reveals that the distribution of benefits is actually highly skewed in favor of the state officials and "lawmakers".



Figure 3. Distribution of net income among actors

Source: Field research 2004-2005

Villagers and woodcutters are the actors who benefit the least as they have to work the most to receive their share in total income. Even though they receive some 29 percent of overall income, the returns on the expended labor are low. For each working day, a villager makes about 47,900 VND from timber logging. A Muong woodcutter gets paid 50,000 VND per day. In addition, both villagers and woodcutters face significant risks in timber extraction. They may be injured when they fell trees or haul off logs. They may also be fined for illegal forest exploitation by local state officials.

More importantly, the villagers depend on the income from timber extraction much more than any other actor. The income derived from timber logging accounts for 65 percent of total cash income in the village, making it the most important source of cash income. Virtually every village household participates in the logging, with the exception of only who is busy in the bamboo trade. On average, each household derives about four million Vietnam Dong (VND), or about \$250 US from timber logging per annum. Without the income from *khao* extraction, villagers would not even be able to cover their own subsistence needs.

The village trader and wholesaler capture a slightly smaller share in overall net income compared to that of the villagers and woodcutters. Yet they expend much less labor and do not incur any risk to their own physical health. The wholesaler is better off than the village trader because his share is twice as much as the share of the village trader. In addition, the wholesaler is involved in the trade with timber from various sources, not just the timber from Ban Chanh.

Local state officials and 'lawmakers' get the biggest piece in the pie (40 percent). In addition, they expend relatively small time on their involvement in the *khao* trade, do not need to invest any cash, and are also involved in the illegal trade of timber from other localities. The two types of actors, therefore, may be considered the primary beneficiaries in the timber chain. Nevertheless, a comparison between the two also indicates that the share accruing to local state officials gets divided among 23 individuals. The share of the 'lawmakers' is split into two parts only. The 'lawmakers', therefore, are benefited the most in the *khao* commodity chain, even though their share in net income does not reveal that right away.

The analysis of risks, expenses, and benefits, therefore, has shown that those are distributed very unequally among the actors involved in the *khao* commodity chain. How the different

actors are able to capture their respective shares in benefits and accommodate the associated expenses and risks is the subject of the next section.

V. Access control and access mechanisms

There are many mechanisms that shape access to timber benefits, i.e., actors' ability to benefit from timber logging (see Table 2). Actors gain and maintain access by way of direct control over trees, control over labor and draft power (buffaloes), control of access to markets and leverage on prices, and control of sawlog supply and distribution networks. In the terms of Ribot and Peluso (2003), both legal and relational access mechanisms play a role.

	Mechanisms for appropriation	Mechanism of access control and maintenance
Villagers	Control of access to timber trees	 Labor capacity and buffalo ownership Social ties with trader Technical skills
Woodcutters	Control of access to labor	Social ties with villagersTechnical skills
Village trader	 Control of access to market and leverage the price Control of access to sawlogs 	 Social ties with wholesaler Truck for transportation Social ties with local officials Social ties with 'lawmakers' Risk bearing Misinformation Collusion on pricing Close economic ties with villagers (e.g. free interest loan, selling goods on credit) Encroaching on the forest of other villages
Wholesaler	Access control to distribution to retailer/carpenter	 Social ties with retailers Ownership of physical assets (storehouses, store, capital) Selling logs on credit Collusion on pricing
Local officials	 Access to market regulation enforcement 	Threat of fines and punishmentMobile and fixed check points
'Lawmakers'	Access to local officials	 Social ties with local officials Kinship relations with high-ranking officials Suppression of competitors in their 'market territories'

Table 2: Mapping access to timber along the commodity chain

In Ban Chanh village, villagers have direct control over forest holdings and the timber trees on the holdings, even though they would require the permission of the Forest Protection Department according to legal guidelines. Yet there is no legal institution in the place that would be strong enough to prevent villagers from cutting the trees. In addition, villagers do not recognize the allocation of forest to individual households, as implemented in 1995. There is no dividing line between individual rights over forest resources among households in Ban Chanh, making access to timber open for all villagers in an equal manner. Villagers go to the forest and cut trees in any place they find convenient. Legal rights on the forest, therefore, do not guarantee a corresponding benefit from timber for individual households. What matters for households is that they have sufficient labor to fell trees and possess a water buffalo to haul them back to the village.

Although access to the forest is shared among all villagers, outsiders face several constraints if they want to access timber on Ban Chanh territory. Any outsider trying to cut timber from Ban Chanh's forest encounters immediate action by villagers refusing access to the forest. Referring to the legal titles granted by the state, villagers claim that the trees are theirs. In this way, villagers are very clever using the legal claims given by the state to control and maintain their access to timber trees. As a result, Muong woodcutters cannot organize themselves to work on timber logging even though they have sufficient labor and water buffaloes. Muong woodcutters have to work for villagers as hired laborers or cooperate with them, although their benefits would be higher if they worked on their own. To maintain access to timber, the woodcutters have developed long term relationships with villagers.

The village trader derives benefits from timber by controlling access to the market for timber, exerting leverage on the price, and monopolizing the supply of timber from Ban Chanh. He uses his own truck to transport timber so he does not have to depend on the service of others. He maintains strong social and economic ties with the wholesaler. Usually, when he makes a deal with the wholesaler, the wholesaler advances cash to him to finance the purchase of timber. As for his relations with state officials, the village trader understands very well that he faces the risk of severe punishment for being involved in illegal timber logging and trade. He therefore invests in long-term relationships with a number of local officials, even though these cannot eliminate the risk of being caught totally. He bribes local officials every time he transports timber. He also brings them special "gifts" – usually envelopes stuffed with cash – during special occasions such as the New Year and Independence Day.

The village trader has been able to develop relations with villagers that are very advantageous for him for several reasons. First, working hand in hand with the wholesaler, the village trader is able to determine the price he pays to villagers for logs. As villagers have no information on the price of logs in the lowland market, they have little bargaining power. Second, the village trader has fostered his personal ties with villagers as a way to ensure a steady supply of logs. He has set up a store selling rice, salt, fertilizers, and other essentials to villagers. He lets villagers buy on credit, even if they have not paid back their outstanding loans for one or even two years, as it is the case with a few households. The village trader also entertains villagers at his house, showing movies on his color TV set and offering tea. This practice has gained the trader a positive reputation in the eyes of villagers, strengthening the social ties between him and villagers. The village trader has even provided interest-free loans to some villagers when they needed to purchase rice or fertilizer but were too busy with farming that they had no time for logging. Villagers pay back all loans not in cash but in sawlogs. In this way, the trader has been able to establish himself as the local 'timber patron', securing a steady timber supply by way of patron-client relationships with the villagers.

The wholesaler bases his benefits from timber on his access to the distribution network for sawlogs to retailers and carpenters. The wholesaler has developed good personal relationships with many retailers and carpenters. In addition, the wholesaler has accumulated significant financial capital in order to buy logs from different traders and to sell wood to retailers on credit. The wholesaler also possesses physical assets, including a store, a warehouse, and a saw mill. He is in a position to determine the price paid for logs to village traders.

A large number of local officials from various law enforcement agencies benefit from timber by virtue of their official position and readiness to ignore their official duties. They see bribes as a regular instrument to generate additional income from their government positions and actively pursue suitable opportunities. They seek bribes both directly the actors engaged in the trade and from the 'lawmakers' as intermediaries. The state officials would not get a share in timber benefits if they did not work in law enforcement institutions.

The 'lawmakers', finally, benefit from timber by serving as middlemen between local officials and the village trader. Similar to the village trader, their position is founded on long-term relationships with local officials, for which they have expended large amounts of money and energy. In addition, both 'lawmakers' enjoy strong political backing by fathers in high-ranking positions in the administrations of Hoa Binh and Ha Tay provinces. As they work in the provincial administration, they can use their official positions to make the communication with local officials at district and commune levels easier.

The practices commonly employed by the 'lawmakers' remind one of the Mafia. The 'lawmakers' usually operate in hidden and clandestine ways, contacting local officials through the phone or secret visits. They have also established their own 'market territories' within which they are able to monopolize control over illegal trade and transport of logs. If traders or transporters want to bring sawlogs to a lowland market, they have to use the services of the 'lawmaker' controlling the particular market territory. Otherwise, the illegal transport would be reported, resulting in the confiscation of logs by law enforcement officers. The exclusive control over a market territory and access to legal enforcement agencies has allowed the 'lawmakers' to derive huge benefits from timber. It is not uncommon that the 'lawmakers' would guarantee safe passage for dozen trucks at once, each of them loaded with illegal logs. The trucks would drive in convoy from the northwestern mountains to Huu Bang through many check points without being checked at any of them.

VI. Discussion: Effects of forest land allocation and logging ban

Recent years have witnessed great efforts by governments in various countries and international donors to promote the notion of private property. The rationale behind is that an economy requires a clear assignment of rights on property objects to individual actors. This rationale presumably applies not only to economic development but also poverty alleviation (de Soto 2000). Formalizing property rights on household assets such as land, houses, and small businesses, capitalism can be made to work for the poor. The World Development Report 2002, for example, suggests that one of the most crucial factors to improve livelihoods of the poor is to give them clearly-defined land rights, and having such rights secured and marketed through sound land markets (World Bank 2001: 35-37).

The primacy accorded to property rights is widely shared among development practitioners and experts, even if those do not agree on the priority given to individual property rights. For example, Meinzen-Dick and Pradhan (2001) emphasize the importance of property rights, suggesting that "of the institutions that effect how people interact with natural resources, none are more influential than property rights" (10). Property rights are important because they "not only affect who may use which resource and in what ways, but also shape the incentives people have for investing in and sustaining the resource base over time" (ibid.).

This emphasis on property rights, in particular private property, has strongly influenced Vietnamese policy. In the 1980s, the Vietnamese government strengthened the rights

accorded to individual households in agriculture. The land law of 1987 and the agricultural reforms of 1988 accorded rural households significant use rights to agricultural land. In the early 1990s, the government extended the logic of private property to the forestry sector. The 1993 Land Law applied to agricultural as well as forestry land. Decree 02 of 1994 explicitly introduced the notion of individualized private property to forest management. The legislation entitled Vietnam's rural households to receive significant use rights to Vietnam's forests, to be implemented by way of forest land allocation. The rationale was that the forests represented considerable assets that would be better managed by households.

Yet the concurrent preoccupation with deforestation has threatened to turn the presumable assets into liabilities. Concerned about high forest loss, the government has effectively banned all commercial exploitation of Vietnam's forests – including those transferred to rural households. The ban requires households to seek permission from local forest officers for any commercial exploitation of forests. It effectively implies a significant reduction in the value of forests to households. The ban and associated forest protection regulations even threaten to turn the assets into liabilities, as households are held legally responsible for the protection of allocated forest from encroachment by other people (cf. Sikor 2006).

Villagers have reacted to both the opportunities and risks associated with the new policies, making sure that they derive some benefit from the local forest. They use their new legal rights to the forest to fend off competing claims by Muong from a neighboring village. They also ignore the legal requirement to apply for permits before any commercial exploitation. In this way, villagers turn their direct control over the forest into an asset yielding benefits to them. These benefits are very important to them, as they lack alternative sources of income.

Nevertheless, other actors are much more successful than villagers in turning the forest into a highly profitable asset. At the end, the villagers of Ban Chanh benefit the least in comparison with the village trader, wholesaler, local state officials, and 'lawmakers'. The distribution of benefits derived from *khao* logging is highly skewed toward those actors, as they control access to markets and derive power from their state positions. Although villagers hold legal rights and control direct access to the trees, they are not able to derive as much benefit as the village trader and wholesaler because those control access to timber markets. Similarly, local officials may not possess any legal rights to the forest, yet their powers of law enforcement create lucrative opportunities for reaping a large share in total benefits.

These insights suggest that forest land allocation and logging ban may not achieve their environmental objectives. The desire to stop deforestation was a strong motivation for the forestry reforms initiated by the Vietnamese government, as discussed above. Yet the local dynamics resulting from the combination of forest land allocation and logging ban appear to drive further forest loss. Villagers depend on the commercial exploitation of the allocated forest because they lack alternative income sources. In addition, they exploit timber at relatively high levels because they receive such a small share in overall benefits. If they received a larger share, they may be able to manage the forest in a more conservative fashion. Local state officials, in turn, have no interest in enforcing the logging ban. The current situation has created previously unknown flows of income for them. The drive to exploit forests has already taken its toll in the forest of Ban Chanh village. Timber of high market value, such as teak and ironwood, has completely disappeared from the forest since the early 2000s.

VII. Conclusions and recommendations

Neoliberal notions of property rights put a strong emphasis on individual rights to resources. According to neoliberal theory, economic activity requires the clear definition of property rights for every single property object. Our findings derived from a case study on small-scale illegal logging in Vietnam challenge this notion. Using commodity chain analysis, we find that villagers benefit the least from timber even though they hold legal rights to the timber and control direct access to the trees. In contrast, control over access to the timber market and power derived from government positions play a much larger role in shaping the distribution of benefits derived from timber. The village trader, the wholesaler, and a number of local state officials capture most of the benefits although they do not have direct access to the timber. Our findings, in this way, lend support to the notion of multiple access mechanisms as developed by Ribot and Peluso (2003). Property rights are only one mechanism among many that influence the distribution of benefits from a resource. Property rights may be very poor indicators for the ability of different actors to derive benefits from a resource.

Our findings indicate that the assignment of legal property rights, as effected by the Vietnamese government through forest land allocation, does not guarantee that villagers derive actual benefits from local forests. How can one interpret this insight? One may conclude that the policy does not influence the distribution of timber benefits among actors. The underlying problem is the weakness of law enforcement particularly at the local level, as it erodes the intentions of the policy. In this interpretation, the Vietnamese government may do well by considering the way how policy is implemented on the ground. The implementation process is always embedded in local sociopolitical settings. As a strategy to close the gap between policy intentions and actual outcomes, the Vietnamese government would need to strengthen law enforcement.

Yet one may also conclude that the combination of forest land allocation and logging ban has generated the conditions for local state officials and 'lawmakers' to reap a large share of the timber benefits. The logging ban has put the law enforcement agencies in a very powerful position to control the timber trade. At the same time, forest land allocation has transferred direct control over forest access to relatively powerless actors – villagers. Local state officials and 'lawmakers' have quickly reacted to the power differential, turning the illegal timber trade into a source of income for themselves. In this interpretation, strengthening law enforcement may not be the optimal solution, as it may further solidify the powerful positions of local state officials. The Vietnamese government may be better advised to reduce the legal restrictions on timber extraction and trade.

Bibliography

De Soto H. The Mystery of Capital. London: Bantam. 2000.

- Government of Vietnam. Directive 462-TTg on tightening wood transportation and export. 1993.
- Government of Vietnam. Directive 90-CT on fostering urgent mechanisms to halt deforestation. 1992.

Government of Vietnam. Land Law. 1993

Government of Vietnam. Decree 02/CP on guidance for forest land allocation. 1994.

- McElwee, Pamela. You Say Illegal, I Say Legal: The Relationship Between 'Illegal' Logging and Land Tenure, Poverty, and Forest Use Rights in Vietnam. In: Ramsay Ravenel, Ilmi Granoff, Carrie Magee, Editors. Illegal Logging in the Tropics: Strategies for Cutting Crime. The Haworth Press. New York. 2004.
- Meinzen-Dick, Ruth and Pradhan, Rajendra. Implications of Legal Pluralism for Natural Resource Management. IDS Bulletin. 2001; 32(4):10-17.
- Ribot, Jesse and Peluso, Nancy. A Theory of Access. Rural Sociology. 2003; 68(2):153-181.
- Sikor, Thomas. The allocation of forestry land in Vietnam: did it cause the expansion of forests in the northwest? Forest Policy and Economics. 2001; 2:1-11.
- Sikor, Thomas. 2006. Land as Asset, Land as Liability: Property Politics in Rural Central and Eastern Europe, pp. 106-125 in: Benda-Beckmann, von F., Benda-Beckmann, von K., Wiber, M. (eds.), Changing Properties of Property, New York, N.Y.: Berghahn.
- Weyerhäuser, Horst, Fredrich Kahrl and Su Yufang. forthcoming. Ensuring a future for collective forestry in China's southwest: Adding human and social capital to policy reforms Forest Policy and Economics 7(3).
- World Bank. 2001. World Development Report 2002: Building Institutions for Markets. Oxford: Oxford University Press.