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IMPLICATIONS FOR SUSTAINABILITY AND LIVELIHOODS

TIMBER MARKETS AND TRADE BETWEEN LAOS AND VIETNAM:

A COMMODITY CHAIN ANALYSIS OF VIETNAMESE DRIVEN TIMBER FLOW

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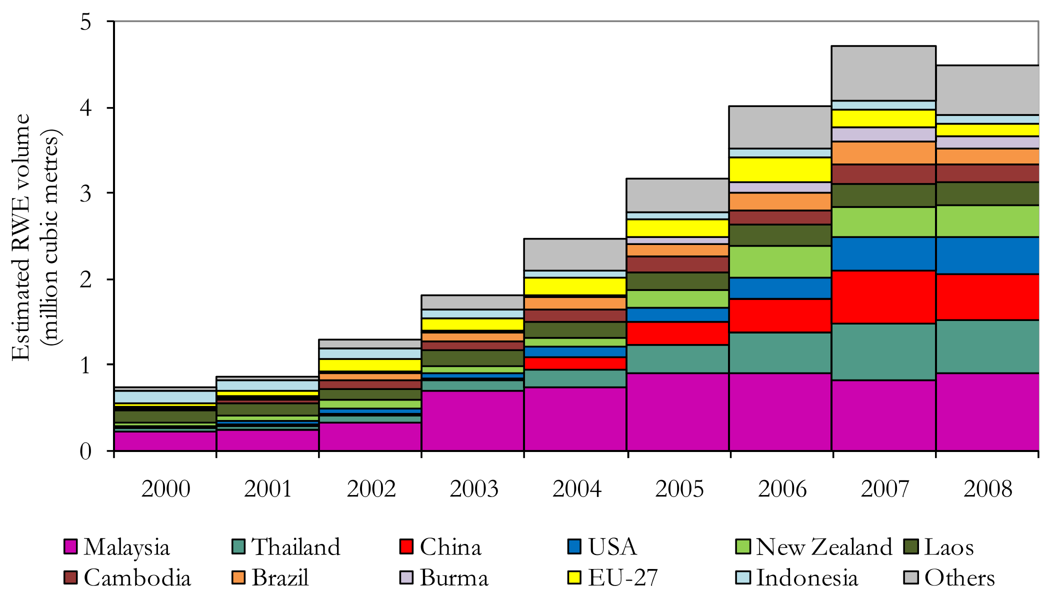
SUMMARY

In the past few years, Vietnam has become one of the largest furniture export countries in the world. In 2008 furniture export revenue alone was valued at approximately US$2.8 billion, the fifth largest source of export revenue for the country. 80 percent, or about 4.5 million cubic meters (m^3), of the raw materials needed for this export-oriented industry were imported from other countries around the world. While official statistics estimate that approximately 250,000 m^3 per year are exported from Laos to Vietnam (Hewitt compilations, 2008), the Environmental Investigation Agency and Telapak (2008) estimated that Laos exports about 600,000 m^3 of wood to Vietnam per year – or 20% of Vietnam's officially recorded imports. When these statistics are broken down according to market segment, however, it becomes clear that Laos' natural forests are very important for Vietnam's processing industries which produce higher quality, expensive indoor furniture – largely for markets in East Asia but also further abroad. With little in the way of mature, fast-growing plantations, Laos is less important for Vietnam's outdoor wooden furniture industry, which largely uses plantation timbers (some of which is FSC certified), and which are sourced regionally from countries such as Malaysia, and further afield. Vietnam's demand for Laos' natural forest wood products has a strong influence upon how Lao forests are managed, and how forest revenues are controlled and distributed. This has significant implications for over 80 percent of Laos' population who are poor and who rely on forest resources for their livelihoods (Food and Agriculture Organization and The Nature Conservancy, 2008).

Figure 1: Vietnam's Imports of Timber Products (million m^3) 2002-2008



Source: US ITC Trade data, Eurostat, Trade Statistics of Japan, Korea Customs Service, Taiwan Directorate General of Customs, Chinese customs data and UN Comtrade, as compiled by James Hewitt

Despite the Government of Laos' official commitment to the sustainable management of the nation's forest ecosystems and the forest communities which are dependent upon them, many concerns remain regarding the country's forest management and governance situation. Issues include unsustainable harvesting levels, illegal and over-quota logging, insufficient local participation in decision-making and forest management, and inadequate benefit-sharing with local communities. Within Laos itself, the new regulations and policies related to timber logging and export aim to conserve existing natural forests and shift the country towards participatory, sustainable forest management, are seen as welcome developments— if they can be implemented effectively.

This study examines the timber trade between Laos and Vietnam, exploring power and political dynamics of the trade between the two countries. The study has adopted a commodity chain framework to identify the actors participating at each node of the chain, as timber passes from Lao's natural forests to wood processing/furniture producing companies in Vietnam. Of particular interest is the pattern of benefit distribution among involved actors and mechanisms adopted by them for benefit derivation. Fieldwork was conducted at the end of 2008, primarily in the Central Highlands of Vietnam, and in Attapeu province of southern Laos. In Attapeu, interviews were primarily conducted in Vietnamese language, with Vietnamese companies.

Major findings include:

1. Within Laos itself, Vietnamese firms and a Vietnamese labor force play an important role in the logging, processing and export processes. The industry operates without significant Lao employment. Most companies in the survey area (Attapeu province, Laos) are joint-ventures with both Vietnamese and Lao investors, as stipulated in the Lao's Law of Foreign Investment. In reality, however, many of these joint ventures exist only on paper. All of the companies interviewed were primarily run by Vietnamese managers, using Vietnamese labor, with Lao partners mainly responsible for paper work.

Some Vietnamese companies in Attapeu specialize in timber logging and extraction, and the transport of wood from Laos to Vietnam. These companies use Vietnamese seasonal loggers brought in by the Vietnamese company, sometimes without a labor contract or necessary legal documents.

Once logged, the roundwood is shipped to Vietnamese processing factories located in Attapeu, and/or directly to Vietnam. There are many Vietnamese-owned wood processing factories in Attapeu, with processing capacities ranging from less than 1,500 to 10,000 m3 per year, with a range of simple to sophisticated machinery. Vietnamese investments of US$1 to $20 million are common. Most use predominately Vietnamese labor, contrary to the Lao Law on Foreign Investment which stipulates that 90% of common laborers need to be Lao nationals. However, Vietnamese laborers are believed to be cheaper and more efficient than Laos workers, and are easier for Vietnamese managers to interact with due to the language barrier.

2. Lao timber is often bartered in exchange for official Vietnamese development support or for official debt-repayment purposes: Special permits, such as the "debt repayment" and "development permits," are often used in Vietnam-Laos timber trade. Debt-repayment logging quotas were designed to facilitate debt repayment to foreign countries, especially former or present socialist allies. Lao officials are often hesitant to negotiate when it comes to these agreements as they do not want to be seen as being unappreciative of the Vietnamese contribution to the revolution (Baird, 2009 forthcoming). Through the "development logging quotas," logs are traded for development support, such as the building of infrastructure, and most often reflects an economic agreement between provincial government and Vietnamese companies. In addition, revenue derived from timber export remains very important for the national budget of Laos.

3. Unclear definition of legality and complex permitting requirements: The structure of the timber commodity chain between Lao and Vietnam is highly complex. Due to loopholes the legal forestry framework, it is not always clear whether logging is legal or illegal in Laos. Virtually all legislative documents of the Lao government contain clauses such as: "unless approved by the government" or "unless determined in special cases to be in the interest of the national community" . This leaves significant room for selective interpretations in the application of the legal framework on forests (FAO and The Nature Conservancy, 2008; Bestari et al., 2006).

Compounding this problem is the fact that the Laos permission process is extensive, with numerous permits required for obtaining logging quotas, and during the harvesting, sorting and transport operations. Each of these provides a potential opportunity for bribes to be given to "facilitate" the process.

Though the Lao Forestry Law bans the export of roundwood, under economic agreement arrangement, most companies strive to obtain special logging permits which allow for exemptions to this ban. Therefore, in most cases, logs extracted are viewed as legal by both Vietnamese and Laos governments.

4. The revenues generated from the Lao-Vietnam timber commodity chain are large, but there is a highly inequitable distribution of benefits amongst different actors and social groups: Lao officials at the national and provincial levels, particularly the ones with decision making power over the Laos logging quota allocation process, reap the largest benefit[1]. Vietnamese factories must apply for annual logging quotas – and usually pay officials to *"facilitate"* logging quotas for them. This "invisible cost" varies according to size of logging quota and one's connections, but usually ranges between US$10,000 to $600,000. Officials at the local level do not have any influence on quota allocation, but oversee the companies at the wood processing and export phases. Additional payments are often needed for officials which conduct inventories and monitor logging, processing and export operations. The mis-classification of timber species or underreporting of volume is common.

[1] For a full report on local system of official benefits from the Laos wood products industry, see Ian Baird's report, 2009 (forthcoming)

Illegal logging and most opportunities for personal benefit of government officials are reported to occur during the logging quota allocation process, and these inventory processes during the harvesting and sorting stages (Baird, 2009 forthcoming). Once logs are transported to sawmills or other processing factories in Attapeu or in Vietnam, any illegally harvested wood has already been laundered and inventoried so as to become officially 'legally harvested wood'.

By contrast, loggers working at the logging site and workers in wood processing companies derive fewer benefits the least from the chain. One logger can earn about 150,000-250,000 Vietnam Dong (VND) or US$ 8-14 a day, but due to the physical demands of the work, is usually unable to work the whole month. The foreman of the company can earn as much as 5-6 million VND (US$220-330) per month. Lao villagers benefit the least.

5. Role of large-scale economic land concessions in Laos- Vietnam trade: Large-scale agro-business projects for cash crops or plantations, often 10,000-50,000 hectares, or mining and hydropower development projects, play a large role in the availability of wood from Laos natural forests. Timber must be harvested from the land prior to such development projects. Companies, many of them Vietnamese, can obtain huge benefits from the timber harvested from the allocated land and then may sell the landt to a third party; the development project may or may not ever get developed. In these cases, the land concession has become a legal means to justify logging outside of the normal logging quota system. The social impacts of these programs have generated considerable concern and attention in recent years and are unlikely to be in compliance with Equator Principles or other criteria that plantations should not be developed on land cleared expressly for that purpose.

6. Autonomy of provincial actors: In both Vietnam and Laos, provincial governors are given relative autonomy to pursue their own diplomatic and trading links. According to the Lao Land Law (2003) and the Forestry Law (2007), concessions on areas up to 3 hectares (ha) can be approved at district level, less than 100 ha at provincial level, and less than 10,000 ha at central level, while land concessions of greater than 10,000 hectares require National Assembly approval. But numerous reports are now documenting that land concessions that have been allocated under fuzzy circumstances circumventing the legal authorities (see GTZ-NLMA, 2009[2]; NLMA-FER, 2009[3])

7. Continued perception of legality and economic importance by both Laos and Vietnamese governmental authorities: Despite documented inconsistencies and problems with forest governance in Laos, the timber trade between Lao and Vietnam is generally perceived as legal across the board, or at least legitimate, by both governments. As a significant proportion (approximately 11 percent according to Global Development Solutions 2006) of the total tax revenue in Laos comes from timber royalties, efforts to change this stance face political complications and barriers. Questionable logging practices in Laos is continuing, backed by both governments and often disguised under large development mega-projects like hydro-energy development or plantation crop

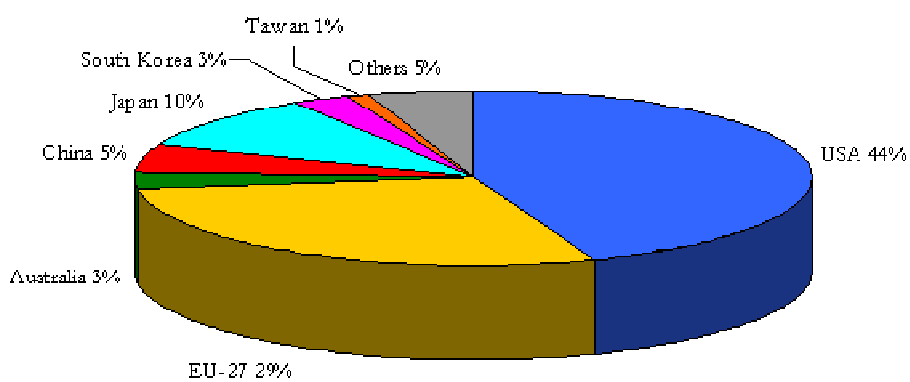
[2] Findings of the State Land Lease/Concession Inventory Project in the Pilot Province of Vientiane, Lao PDR
[3] Research evaluation of economic, social, and ecological implications of the programme for commercial tree plantations: case study of rubber in the south of Laos PDR

production projects. Neither the Vietnamese companies nor the government are ready to give up their wood sources from Laos.

This will complicate efforts to define "legality" under any Forest Law Enforcement, Governance and Trade (FLEGT) Voluntary Partnership Agreement (VPA) between the European Commission (EC) and the Government of Vietnam.

8. Impacts of the financial crisis: Prior to the recent financial crisis, a number of Vietnamese companies were able to make substantial profits from the trading of timber from Laos. However, in 2008, due to the economic crisis, the nature and structure of the industry has been transformed. Small-scale companies producing furniture mainly for domestic markets have been most affected. In 2008, risk-averse Vietnamese banks refused to lend money to small-scale forest processing firms, or to companies who, they suspected, may not be able to repay the loan. Companies were not able to procure wood, and, as domestic-oriented firms, were not eligible for VAT exemption which increased their production costs and reduced their ability to compete. Eventually, many of these Vietnamese wood processing companies went out of business or reduced their production. By contrast, middle and large-scale companies had less difficulty in accessing loans and were eligible for VAT exemption, but ultimately were also hit by an estimated 30-40 percent decline in demand for wood product exports as compared with 2007 levels (see Figure 7 for the country's furniture export venue in 2007).

Figure 2: Vietnam's Export of Forest Products, 2007, by Value



Source: US ITC Trade data, Eurostat, Trade Statistics of Japan, Korea Customs Service, Taiwan Directorate General of Customs, Chinese customs data and UN Comtrade, as compiled by James Hewitt

9. Shifts due to increasing EU and US requirements for "due diligence" in sourcing of legal materials: Emerging public procurement policies and purchasing preferences in the European and North American markets, as well as new import legislation such as the revised US Lacey Act and emerging EC due diligence legislation, have caused difficulties for Vietnamese furniture exporters. They have been gradually shifting away from EU and US markets to less environmentally sensitive markets, particularly Eastern Europe, including Russia, and the Middle East, while at the same time maintaining tradition markets in Asia. It is widely known that certain Laos natural forest species (e.g. rosewood) and wood products retain special attraction to Asian markets. This is of particular relevance to any Vietnamese – EC FLEGT VPA process. Unless designed to cover not only across the entire supply chain (including country of origin), and applied to all markets (not just EU markets), the VPA process may have little discernable impact on the legality of wood sourced from Laos.

At the same time, however, large-scale "elite" Vietnamese exporters to EU and North American markets are changing strategies. These Vietnamese companies want to continue to export to EU and North American markets report that they no longer acquire wood from Laos due to reputational risk. These companies have been trying to obtain chain of custody (CoC) certification. Currently, about 170 processing companies out of 2500 companies (less than 7 percent) have obtained a recognized CoC certification – but it remains to be seen whether the lack of legally verified or certified forests will create a bottleneck at the first production stage for Vietnam-based firm.

Recommendations

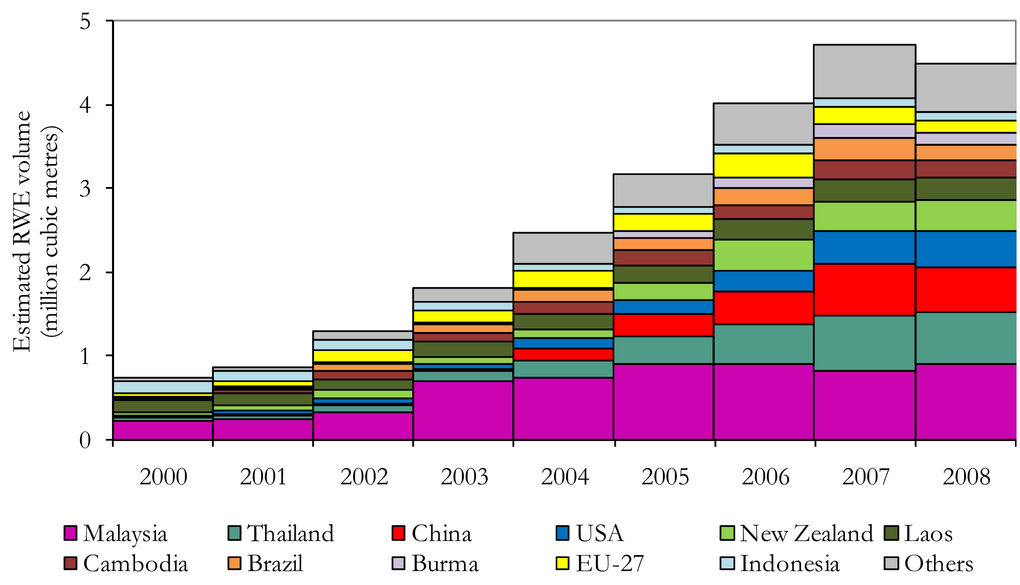
To improve the existing situation, international NGOs and the donor community may have to work with the governments of both countries to agree on international agreements to mitigate the problems in the timber trade between the two countries. National campaigns on sustainable forest management may also help in raising the public's awareness. A network involving NGOs, local communities, and independent units from the government for wood-sourcing verification and certification to oversee the extraction and export would be important. Strengthen the resource tenure and rights system for marginalized local villagers in Laos, is also very important. In addition, stronger enforcement mechanisms on the ground would increase the barriers and costs of rent-seeking activities by officials at various levels, and might also provide more job opportunities for Lao villagers. Vietnamese and Lao migration policies and labor laws should be enforced to protect the Vietnamese loggers, particularly those without a labor contract, in order to protect them from job insecurity and risks related to their work.

I. INTRODUCTION

Vietnam and Laos share a border of more than 2,000 km (Figure 1) and have long had a close relationship. Between 2001 and 2005, the total import-export turnover between the two countries reached US$687.8 million (Vietnam Ministry of Foreign Affairs, 2008). By the end of 2008, Vietnam had 157 investment projects in Laos, totaling about US$800 billion (Vietnam News, 2009). In the first half of the 2008-2009 fiscal year, Vietnam became the top investor in Lao with 32 new projects totaling approximately US$1billion, surpassing even China and Thailand (Lao New Agency, 2009). The focus of Vietnamese investments has been hydro-power projects (accounting for 55 percent of all amount invested), cash crop plantation (29 percent), as well as food processing and mining (The Gioi Vietnam, 2008) with most of the projects are located in central and southern Laos. The Laos government continues to seek ways to raise investors' interest in the industrial plantation sector.

The Vietnamese export-based wood furniture-manufacturing industry has expanded rapidly in recent years. In 2007, total earnings from furniture exports accounted for about US$2.8 billion, making it the fifth largest contributor to the country's income from exports (Le Khac Coi, 2008). This trend continued in 2008, with furniture being exported to 120 countries in Europe, North America, and the Asia-Pacific region. Currently, there are more than 2,000 wood-processing and 450 wood export companies in Vietnam, employing more than 250,000 people. However, this sector is heavily dependent on imports with 80 percent (2.4 million m^3 per annum) of raw materials imported from abroad (Agroinfo, 2009; figure 1).

Figure 1: Vietnam's Imports of Timber Products, 2002-2008, by Volume



Source: US ITC Trade data, Eurostat, Trade Statistics of Japan, Korea Customs Service, Taiwan Directorate General of Customs, Chinese customs data and UN Comtrade, as compiled by James Hewitt

With approximately 11 million ha of forest, Laos continues to serve as an important supplier of timber for Vietnam's wood industry. While official statistics estimate approximately 250,000 m^3 per year, the Environmental Investigation Agency and Telapak (2008) estimated that Laos exports about 600,000 m^3 of wood to Vietnam per year. If this estimate is accurate,[4] Lao timber would account for 16-25 percent of Vietnam's wood imports from abroad. When these statistics are broken down according to market segment, it becomes clear that Laos' natural forests an even more important for Vietnam's industries producing high quality, expensive indoor furniture – likely for export markets in China and elsewhere. Laos, with no certified, fast-growing plantations is less important for Vietnam's outdoor wooden furniture industry, which largely uses FSC plantation timbers sourced regionally.

Despite the Government of Laos' official commitment to the sustainable management of the nationa's forest ecosystems and the forest communities which are dependent upon them, many concerns remain regarding the country's forest management and governance situation. Of particular interest is how the burgeoning timber trade with neighboring countries such as Vietnam impacts the forest sector in Laos. These worries have focused on unsustainable harvesting levels, insufficient local participation in decision-making and forest management, inadequate benefit-sharing with local communities, and corruption involving government officials. Various organizations have attempted to quantify the levels of legal versus illegal wood products exported from Laos, but the structure of the timber commodity chain between Lao and Vietnam is highly complex. Due to loopholes in the legal forestry framework (Food and Agriculture and The Nature Conservancy, 2008; Bestari et al., 2006) it is not always clear whether logging is legal or illegal in Laos (ibid.; Global Development Solutions, 2005). It is clear, however, that despite documented inconsistencies and problems with forest governance in Laos, the timber trade between Laos and Vietnam is generally perceived to be legal, or at least legitimate, by both governments. Unsustainable timber logging, by definition contrary to Laos law, continues in Laos backed by both governments.

II. OBJECTIVES OF THE STUDY

This study analyzes the flow of timber from Laos to Vietnam with specific focus on the area in the Central Highlands of Vietnam and the Southern Lao. It adopts a commodity-chain and resource-access framework[5] which examines three aspects:

i. key actors in different segments of the commodity chain;

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[4] The release of this report triggered hot debates in the forestry sector in Vietnam. Vietnamese policy makers criticized the report, accusing the authors of using incorrect data. Some Vietnamese scientists joined forces with the policy makers, questioning the accuracy of method used to collect data. Examples of these accusations can be found on the website of the Vietnam Trade Office in the US in the article "Vietnam: wooden industry sourcing illegal wood" (http://www.vietnam-ustrade.org/index.php?f=news&do=detail&id=92&lang=english; 3 July 2008). Another article was published online by VietnameseNet Bridge: "Vietnam denies using illegal timber" (http://english.vietnamnet.vn/social/2008/04/778688/; 16 April 2008)

[5] As outlined by Ribot (1998) and Peluso (2003)

ii. major patterns of benefit distribution amongst these actors; and

iii. mechanisms adopted by these actors to benefit from the timber trade.

For the purpose of this study, the commodity chain begins in Laos' frontier forests, where the trees are logged, and ends in Vietnam where furniture is prepared for export. The study focuses on a distinct segment of the timber commodity chain, during a specific time period (November through December 2008) and in a specific location (Central Highlands of Vietnam and in Attapeu province of southern Laos (Figure 2). The study does not follow the product all the way to the consumer markets. Though not able to present an overall picture of timber markets between the two countries, the study is able to reveal some dynamics of this market which highlight important policy implications.

Figure 2: Map of the Study Area

III. METHODS AND SCOPE OF THE STUDY

The data for this report was collected from November to December 2008 in the Central Highlands of Vietnam and in Attapeu province of southern Lao (Figure 2). The study focused primarily on several Vietnamese wood-processing/export companies (eight large processing/export companies in Kon Tum and Gia Lai provinces in Vietnam[6] and five wood-processing companies in Laos[7]). These companies were purposely selected on the basis of the snow-ball techniques and personal connection of the author and the companies. These large-scale companies each utilize between 4,000 and 15,000 m^3 of roundwood per year. In addition, a few small-scale companies and traders in both countries were interviewed, each of which processes approximately 500 to 1,000 m^3 of roundwood per year.

Box 1. Selecting a distinct segment of the Laos-Vietnam timber commodity chain

More than 20 wood species in various forms (roundwood, preliminarily processed or semi-processed) are imported from Laos to Vietnam (see Annex 1). Each of these products may follow different paths in the commodity chain with different entities benefiting. As a result, the timber commodity chain in these two countries is not a single chain, but a web of chains . A single chain of a single product will therefore only reveal a small portion of the overall commodity flow in any given sector.

Laos' forestry policy and regulatory frameworks including those for wood pricing, tax, and quota allocation have changed over time (Bestari et al., 2006; also confirmed by our interviewees) which has strongly impacted the timber commodity chain between Laos and Vietnam. In addition, the recent global economic downturn has increased raw material and labor costs and has caused a decline in exports (Vietbao, 2008) which has substantially affected price structures, benefit distribution, and the mechanisms actors use to benefit from the timber trade. These fast-changing economic circumstances make any study of a commodity chain challenging.

In Vietnam, data on wood import and export volumes were obtained from government agencies in Hanoi, including the Departments of Taxation, Customs, and Forest Protection. In addition, Vietnamese newspapers were important sources for secondary data. As it was difficult to access Lao

[6] The eight companies in Central Highlands are Trung Dong, Hoang Thai, Lao Viet Joint Stock, Quoc Vy, Ngoc Hoai, Kon Tum General Import-Export, Duc Long, and Hoang Anh Gia Lai

[7]The five companies in Attapeu are Hoang Anh Gia Lai Attapeu, Xuan Phuc, San Lien, Formach, and Doanh An.

government agencies owing to the language barrier and limited time, the study only consulted donor reports and web-based newspapers to obtain secondary data.

Kon Tum and Gia Lai provinces in the Central Highlands of Vietnam and Attapeu province in southern Laos were selected as sites for the data collection. Kon Tum is the province where Bo Y, an important international border post between the two countries, is located.[8] Also, a large number of wood companies are located in Kon Tum and Gia Lai, that use wood imported from Laos through Bo Y. In addition, in the early 2000s, the Vietnamese government provided funding for Laos' government to improve Road 18 which starts at the Mekong town of Pakse, crosses Attapeu Province in southern Lao, and merges into Road 14 in Kon Tum. The opening of the road in April 2006 started to facilitate the flow of goods, including timber, between the two countries through Bo Y (see also Table 1).

Data from the Department of Customs at Bo Y also reveals that in 2008 about 30 Vietnamese companies—most of them located in the Central Highlands and the coastal area of Vietnam—utilized Lao timber from 24 different wood species that was imported through the Bo Y border (Annex 1). Due to the proximity of Attapeu province to the Central Highlands of Vietnam, many Vietnamese companies have established branch wood-processing operations in Attapeu, so that logs are extracted and processed in Laos before they are brought to Vietnam.

Table 1: Volume of Woods Imported to Vietnam through Bo Y, 2006-2008

Type of Wood	**2006**	**2007**	**2008***
Roundwood (m^3)	9,495.984	45,890.291	220,669.956
Sawnwood (m^3)	19,379.362	28,843.588	20,744.559
Total (m^3)	**28,893.346**	**74,733.879**	**241,414.505**

Source: Vietnamese Department of Customs at Bo Y. **Until October 15, 2008.*

[8] Other important border posts are La Lay and Lao Bao in Quang Tri province—with Road number 9 connecting the two countries; also Cha Lo in Quang Binh province (Road 12), and Cau Treo in Ha Tinh province (Road number 8). In early 2009, some members of the LaoFAB listserve (an online forum focusing on natural resource management in Laos observed a number of trucks loaded with roundwood as they were about to cross the Cau Treo border post.

IV. THE TIMBER COMMODITY CHAIN

IV.1 THE FLOW OF WOOD

The Laos permitting process is extensive, with numerous permits required for obtaining logging quotas, and during the harvesting, sorting and transport operations. Along each step of the way, clearances are required by multiple forest officials as well as local government – each a potential opportunity for bribes to be given to "facilitate" the process.

Allocation of logging quota: The timber commodity-chain flow from Laos to Vietnam typically begins with the allocation of a logging quota. In Laos, there are many different kinds of logging quotas, regulating all types of logging such as those for subsistence level housing construction, government infrastructure development and fundraising, "debt-repayment" logging, plantation development, and the export market. An extensive series of authorizations are required to obtain and implement each type of logging quota, offering multiple opportunities for government officials to receive bribes or other benefits from interested parties. However, it is often not perceived as corruption[9] by the actors involved, but instead considered in terms of "patron-client relations[10]. Of particular importance is the fact that government officials often have incentives to over-state the volume of allowable harvesting prior to the logging quota process, not only facilitating the "laundering" of wood from other sites but also in the long-term leading to over-optimistic estimations of the volume and state of Laos forests.

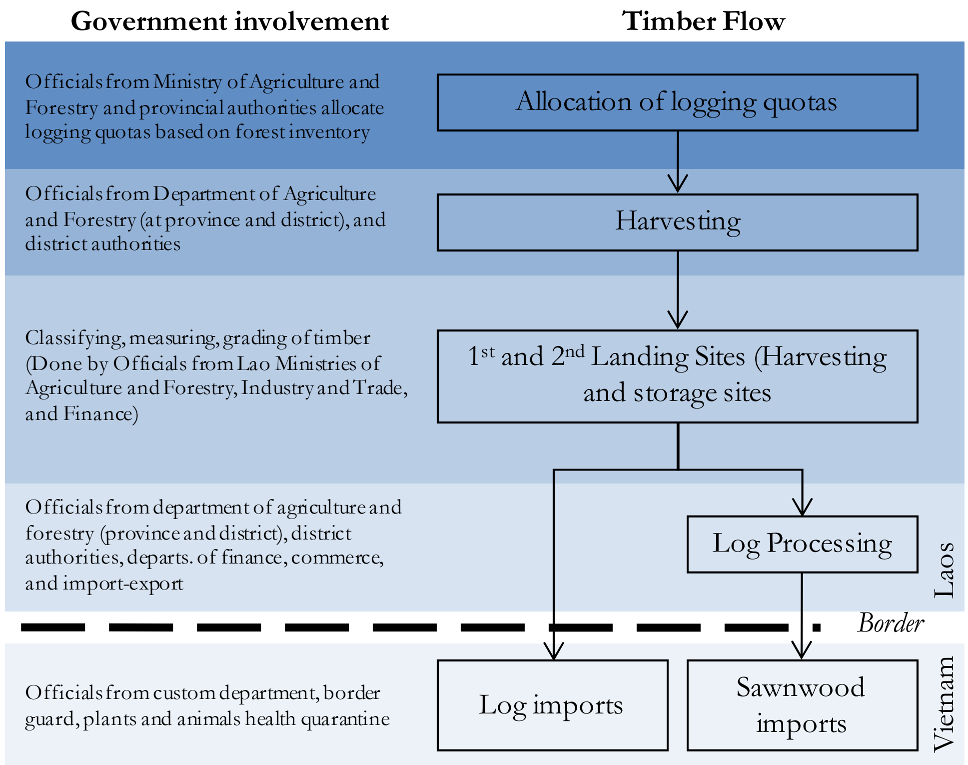
Harvesting and Sorting: Technically, Vietnamese logging companies are not legally allowed to have logging concessions in Laos (although Vietnamese workers can work for Laos companies). In practice, however, the forests of southern provinces are mainly cut by Vietnamese loggers brought in by Vietnamese logging companies on a seasonal basis (dry season, October to May). However, at times provincial authorities may grant access to the forest after October and withdraw it before May.[11]

A single logger can cut as much as about 30-50 m^3 of wood per day with his chainsaw.[12] Logs are collected by haulage machines and bulldozers, and excavators make the roads accessible for the haulage. All logs are then brought to the first landing place (log yard I). When the volume of logs in log yard I reaches around 2,000 m^3, the company invites the relevant officials from the Lao Ministries of Agriculture and Forestry, Industry and Trade, and Finance (usually three officials from each ministry) to measure the logs, classify them according to wood species, and to record them in a log

[9] Corruption (*'so lat bang louang'* in Lao) is generally defined as the use of public office for private gain (Callister 1999) often divided into 'grand' and 'petty' corruption, with the former being seen as involving politicians or large amounts of money, and the latter involving either small amounts of money or junior officials (Callister 1999). Clientalism is the dyadic (two-sided) exchange relationship between unequal parties (Clapman 1982).
[10] For a complete description of Laos' logging quota allocation processes, please see Ian Bair, 2009 (forthcoming)
[11] When this research was being conducted in Attapeu at the end of December 2008, the local government of Attapeu had not yet opened the forest for logging, apparently due to complex administrative procedures at the provincial level.
[12] It takes longer to cut hardwood trees than other types of trees. Usually, loggers work in teams.

list. Logs are then assigned a price. Our informant from Doanh An company in Attapeu stated that round logs from the same species are priced the same regardless of the tree diameters, i.e., Ven Ven in Vietnamese (Mai Bat in Lao; or Madiuca fordiana) was priced at US$79 m3 regardless of whether their diameter was 25-30 cm or 70 cm.

Figure 3: The Flow of Timber from Laos to Vietnam and Official Government Oversight



After the logs are measured, classified, recorded, and priced, they receive a stamp from the Department of Forestry to certify their origin and legality. The company has to pay royalties, which are calculated based on the species and volume harvested, and is then allowed to take the logs out of the forest.

Most opportunities for personal benefit of government officials are reported to occur during the logging quota allocation process, and these inventory processes during the harvesting and sorting stages (Baird, 2009 forthcoming). Once logs are transported to sawmills or other processing factories, any illegally harvested wood has already been laundered and inventoried so as to become officially 'legally harvested wood'.

Processing: Government regulations require the processing of roundwood within Lao itself. However, a company with a special logging permit[13], which allows for value-added processing exemptions prior to export, may transport the logs to another log yard before export to Vietnam (for example, near Bo Y checkpoint (Figures 3 and 4)). But for those without such a special permit, the logs transported to Vietnamese owned processing facilities were they are sawn into different sizes, dried, etc. In Attapeu, this work is primarily performed by Vietnamese migrant workers at Vietnamese owned mills. It is the responsibility of officials from the Lao Department of Forestry, at times in collaboration with officials from the district government office, to ensure that the factories do not use illegal logs derived from other sources (see Figures 3 to 8).[14]

Export transportation: To transport wood from Laos to Vietnam, trucks pass a number of checkpoints on both sides of the border. In Laos, these checkpoints are set up by various agencies such as the Immigration Department, the police, and the weighing station. In Vietnam, the checkpoints start at Bo Y and are set up by the border guard, the Immigration Department, the Customs Department, and the Tax Department. In addition, the police have checkpoints for enforcing traffic laws.

Figure 3: Logs Stockpiled near Bo Y on Laos' Side

Figure 4: A Truck Loaded with Logs Ready to Enter Vietnam

[13] There are various kinds of special logging quotas, or *'quota phiset'*, including deadwood, debt repayment, development, military and plantation preparation logging quotas.
[14] Photographs in Figures 3 to 8 provided by Phuc Xuan To

Figure 5: Sawing Logs in a Factory in Attapeu

Figure 6: Semi-Final Products Ready for Export to Vietnam

Figure 7: Final Products (Flooring Boards) Ready for Export to Vietnam

Figure 8: Final Products on Containers Traveling to Vietnam

When this study was conducted, all Vietnamese processing companies in Attapeu delivered their roundwood and sawnwood to their parent companies located in the Central Highlands or the Central East Coast of Vietnam, where they have access to seaports. Here they are be further processed and packaged for export[15] (figures 9 and 10). This study was unable to locate any products which were processed and packaged for final export within Attapeu itself.

The Lao logs were used predominantly to produce both indoor and outdoor furniture for export. About 70 percent of Laos' 500 export companies are specializing in indoor furniture and the remaining 30 percent are focusing on outdoor furniture (GRAIN, 2005). Valuable timber species such as *Giang Huong* (*Pterocarpus pedatus*), *Trac* (*Dalbergia nigra Allen*), and *Cam Xe* (*Xilya dolabriformis)* are often used for indoor furniture which is exported mainly to Asian countries such as China, Hong Kong, Taiwan, and Singapore. Outdoor furniture products are typically made from less valuable

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[15] The Da Nang and Quy Nhon seaports are close to the Central Highlands.

timber species, such as *Dau* (*Dipterocarpus Sp*) and *Ven Ven* (*Manglietia fordiana*), and are mainly exported to Germany, France, Australia, and North America.

Figure 9: Products Ready for Export

Figure 10: Dining Table and Chairs for Export to Australia

IV. 2 PATTERNS AND MECHANISMS OF BENEFIT ACCESS AND DISTRIBUTION

A number of different actors are part of this timber commodity chain, ranging from loggers and drivers, workers at processing factories, officials of various types in both Vietnam and Laos, transporters, companies, and company management, etc. The next section analyzes patterns of benefit distribution amongst these actors.

The potential benefits from the Lao-Vietnamese timber trade are substantial. For example, during the study period, Duc Long Company located in Gia Lai province purchased 1 m^3 of *Cho Chi (Parashorea stellata Kurzy)* at about US$400; the company produced around 50 chairs from this material, each of which was sold at US$23.63 freight on board (FOB) price at Quy Nhon sea port, an increase in value of US$781. Related costs (see table 5) are about 18 percent. However, the profits are highly unevenly distributed amongst the involved actors.

IV.2.1 Vietnamese Companies in Laos

Harvesting and Transport Operations

In Attapeu, except for Hoang Anh Gia Lai Attapeu, which has 100 percent foreign-owned capital, all companies in Attapeu are joint-ventures with both Vietnamese and Lao investors, as stipulated in the Lao's Law of Foreign Investment. In reality, however, all investments in the factories belong to Vietnamese investors. As a result, all companies are primarily run by Vietnamese managers, and Lao partners are mainly responsible for paper work.

The Vietnamese companies obtain a logging permit directly from Laos' government at national or provincial offices, or purchase them from other companies. For example, logs are traded for development support, such as the building of infrastructure such as roads, schools, hydropower plants, and most often reflects an agreement between the two governments.

Almost all the loggers are Vietnamese, which are brought from Vietnam during the dry season (October to May) are strong men mainly from the Central Highlands or the coastal regions of Vietnam. They may or may not have a labor contract. Loggers with a labor contract are usually considered formal employees and therefore eligible for social benefits such as social and health insurance. After the logging season ends, these loggers are assigned other jobs within the same company. Loggers without a labor contract, however, are only temporarily employed and are not eligible for benefits other than a monthly salary.

Both groups of loggers are paid according to the volume of log (m^3) they harvest, at about 50,000 Vietnamese Dong (around US$3) per m^3. One logger can earn about 150,000-250,000 Vietnam Dong (VND) or US$ 8-14 a day. Due to the physical demands of the work, however, loggers are usually unable to work the whole month. The foreman of the company can earn as much as 5-6 million VND (US$220-330) per month.

Injuries and death associated with logging are not uncommon in Attapeu. A logger with a labor contract is eligible for compensation from the company and other social service sources as stipulated in the Vietnamese Labor Law. Loggers without a labor contract, however, are not eligible for such benefits. In one case, the family of a logger who lost his life and did not have a contract received only US$350 in compensation from the company. "They [the company] value a logger less than a cow", remarked one interviewee. In another example, a Vietnamese logger who lost both legs received only a small amount of cash from the company, just enough to pay the hospital costs. Economic difficulties in Vietnam force them to accept these risky logging jobs in Laos.

Vietnamese companies do not want to employ Lao laborers, particularly ethnic minority villagers, to work near the logging area. According to the companies, Lao workers are unskilled and unable to harvest the timber effectively and are considered less diligent than Vietnamese workers. Also, most local people do not speak Vietnamese and are thus unable to communicate with Vietnamese company managers. Thus companies feel justified to hire Vietnamese workers to do the harvesting as well as other jobs. As a result, Lao villagers are largely excluded from employment opportunities in their own backyards. However, there are indications that sometimes local villagers and/or leaders of local villages are paid small amounts of money to not speak out against the logging by the companies (Baird, forthcoming). While this study was unable to substantiate this, Shi (2008) points out on the ground investors often bypass the law and local people, not paying anything to the latter.

Logging operations also involve groups of Vietnamese machine drivers who operate haulage trucks, bulldozers, and excavators. All drivers are employed by the company under labor contracts and, unlike loggers, earn a fixed salary of about US$120 per month during the off-season and US$300-360 per month during the logging season. The work is also risky and a few drivers have lost their lives while working in Laos.

Processing Factories

In Attapeu, almost all Vietnamese wood-processing companies operate ten to eleven months per year. All skilled workers in the processing factories are Vietnamese and are paid around US$260-360 per month, often twice as much as if they worked in their own country. Their social benefits are much better than those of loggers. Usually, the companies provide them with free housing and meals in order to promote the workers' loyalty to the business. As the loggers, however, workers in processing factories are not protected through legal mechanisms while working. Their jobs are risky, particularly when they are working with sawmills, planing machines, and boiling tanks and indeed worker accidents were documented during the data collection for this study.

Export Stage

To export wood to Vietnam, a company has to follow a complicated export-clearing procedure that usually takes about 12 days. This process directly involves four ministries (Agriculture and Forestry, Finance, Commerce, and Industry) as well as their branch offices at the local level (Global Development Solutions, 2005).

Table 2: Costs Associated with Logging, Processing and Export of Wood

Costs	**Value**
Processing cost	About US$18-40/$m^3$ depending on wood species and type of product
Royalties to Lao government	Depending on wood species
Company income tax	20% of the total income
Company profit tax	30% of the total profit
Export tax[16]	30% (20 x 30 cm-plank); 20% (≥ 10 x 20 cm); 10% (≥ 6 x 12 cm); 0% (< 6 cm)
Cost for doing paperwork	Around US$300-500/month to hire a person (usually Vietnamese hiring a Lao worker) for translation and export paperwork
Paying officials to obtain logging quota	US$15,000 -100,000 per logging quota, up to US$600,000 as an extreme case recorded
Paying other officials who oversee logging and processing	Amount varies (also see Baird, 2009)

[16] This tax is imposed by the provincial authority of Attapeu as of 1 May 2008. Different provinces may have different regulations concerning tax for wood exports.

Source: Interviews with Vietnamese companies in Attapeu

The export procedure can be delayed at any time, especially if "facilitation" payments to officials have not been made. Officials overseeing the various processes on site (e.g. processing, loading wood) can receive about 100,000 LAK (around US$12). If supervision takes place on weekends, this amount can be twice as high. On average, payments made to officials at various levels amounted to about US$13/m^3 of timber exported to Vietnam. For species likes Manglietia Fordiana, this is equivalent to 16.5 percent of the wood price. If Laos exports about 600,000 m^3 to Vietnam, as EIA/Telapak report indicates, the payments to Lao state officials would total US$7.8 million per year.

Data derived from the survey with the Vietnamese companies in Attapeu (see table 2) reveal that the average profit a company would derive from doing business is about 6 to 10 percent. The highest profit recorded is 15 percent.

Vietnamese Transporters

Roundwood is shipped from Laos to Vietnam by trailers (figure 4) while sawnwood is shipped in containers (figure 8).[17] When transporting roundwood logs, the processing companies in Attapeu hire Vietnam-based transport companies with operations in Laos to bring the wood from the factories to the border area. Then, another transportation company in Vietnam is hired to take the wood to its final destination. This means that the logs have to be unloaded and re-loaded as they cross the border. Although this seems to be a complicated process, it helps the transportation company to reduce the required paperwork since trucks can only travel in their registered country. For sawnwood, the companies in Attapeu hire transportation companies based in Vietnam that have appropriate containers to load the sawnwood. As of December 2008, transportation cost for a container transporting 25 m^3 of sawnwood from Attapeu in Laos to the seaport in Quy Nhon province of Vietnam was about 25 million VND (US$1,500). Usually, it takes 1-2 weeks for the container to get from Attapeu to Quy Nhon. However, it can take up to four weeks if the transport and export documents are not sufficient. For a truck loaded with 38-40 m^3 of roundwood, the transportation cost from Bo Y to the port on Da Nang province is 22 million VND (US$1,330). Usually, it takes 5-7 days for trucks to get from Bo Y to Da Nang. Table 3 shows the details of the costs associated with the transportation of logs.

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[17] However, sometimes containers are also used for roundwood as observed in other areas in Laos (Pers.com. with Vernon, 2009).

Table 3: Lao-Vietnam Timber Transport Costs

Item	Cost estimate		Percentage
	Million VND	USD	
Gasoline	7	390	31.8
Loading wood on truck	1	56	4.5
Meals and beverage for driver (1) and assistants (2) per week	3	160	13.6
Unofficial payment for officials stationed at 8 checkpoints charged with traffic law enforcement[18]	3	160	15.9
Unofficial payment for officials at Da Nang sea port	0.5	28	2.3
Unofficial payments for officials at Bo Y	0.6	33	2.7

Source: Interview with a Truck driver in Bo Y.
Note: Calculation relates to a truck loaded with 40m³ of roundwood. It takes a week for this truck to get from Bo Y to Da Nang.

The transportation company makes a gross profit of about 7 million VND (US$424) from each truck loaded with 38-40 m^3 of roundwood. This includes labor costs for the driver, his assistants and the depreciation of the truck. If these and maintenance costs as well as taxes are subtracted, the transportation company makes a net profit of about 3 million VND (US$180) for one trip.

Truck loaded with roundwood and/or sawnwood from Laos has to pass a number of checkpoints before I reach to the destination in Vietnam. Truck drivers often must pay officials at checkpoints and other organizations (see, for example, table 3) at both sides of the border – so-called as "invisible costs". The invisible costs may add up to 15 percent of the price of a final product, as calculated by one informant in Kon Tum province. In addition, officials directly overseeing the importing procedures, tax payments, etc. benefit from the timber trade. As shown in Table 3, such "invisible costs" account for 20.9 percent of the transportation fee; they facilitate the import of wood from Laos to Vietnam and the export of furniture to markets abroad. The Vice President of a large wood-processing company in Kon Tum province indicated that the company sometimes has to make substantial payments so that provincial officials enable an expedient export of their products.

[18] There are six checkpoints in Kon Tum province, two in Quang Nam, and four in Da Nang. Usually, a provincial official receives twice as much as a district official.

IV.2.2 Vietnamese Companies Operation in Vietnam

Though not directly involve in the logging in Lao*, there are* at least four different types of Vietnamese companies are involved in the timber commodity chain within Vietnam (Figure 12). They differ in the ways they procure the wood and how they market their products, as well as in the costs and benefits related to their business.

Figure 12: Categories of Companies in Vietnam

Company Type A – Traders • Procures sawnwood from Laos from either company owned factory, or other Laos-based factories • Imports sawnwood to Vietnam to sell to other companies
Company Type B – Small-scale Processor • Procures sawnwood and roundwood from other companies based in Vietnam and Laos • Imports wood products from Laos or purchases imported wood in Vietnam for processing in company owned Vietnamese factories, for domestic and international use
Company Type C – Large Scale Processor • Procures sawnwood and roundwood from company owned factories or other company factories in Laos, Malaysia, Indonesia and other countries in the region • Imports wood products to Vietnam for processing in large-scale, company owned factories • Produces mostly furniture for export internationally
Company Type D – Pseudo-Agribusiness • Purchases land-concession intended for agricultural use • Profit is made by either harvesting logs from land and then selling the agricultural concession, or by selling the concession after completing the long, bureaucratic purchasing process

Company Type A: This type of Vietnamese company procures wood from Laos either through their own wood-processing factories in Laos or via other companies. They do not have processing factories in Vietnam and merely focus on the trading of wood.

Ngoc Hoai Company in Kon Tum province is an example. In 2008, the company imported sawnwood from its processing company in Pakse province in Laos and sold it to other companies in Vietnam. On 10 May 2008, for example, the company imported 275 m3 of sawnwood of Cam Xe and Sao Xanh from Laos through Bo Y to Hue province in central Vietnam. Table 4 shows the description and prices of sawnwood at Bo Y. On 12 June 2008, the company sold a shipment of *Cam Xe* and *Sao Xanh* to a company in Hanoi for US$480/m^3 and US$390/m^3 respectively. After paying all associated costs (tax, warehouse fees, transportation cost, health quarantine fees, plant quarantine fees, customs fees, loading and unloading fees), the company's net profit was merely 2-3 percent. The company's accountant noted that the company would sell wood as long as the net profit from the sale exceeds one percent. The accountant, however, was not sure about the true benefits from the trade, as her company bought the wood from a factory belonging to the company's director located in Laos. Thus, the price the company paid for the wood may not necessarily represent the true market price. As mentioned earlier, all the companies in Attapeu that were interviewed for this study have parent companies in Vietnam, thus, such procedures may be common practice among these companies.

Table 4: Wood Species and Prices at Bo Y

Imported Wood Species	Description of Sawnwood	Price US$/$m^3$
Cam Xe (*Xilya dolabriformis Benth*)	1.3-30 cm x 9-39 cm x 1.8-4.5 m (depth x width x length)	450
Huong (*Pterocarpus spp*)	1.3-30 cm x 9-39 cm x 1.8-4.5 m	600
Sao Xanh (*Homalium caryophyllaceum Benth*)	19 cm x 2-21 cm x 2.2 – 4.5 m	360

Source: Interview with Ngoc Hoai Company.

Company Type B: These companies have processing factories in Vietnam, and purchase their wood from other companies in Vietnam (for example Ngoc Hoai Company) or Laos. Usually, these companies buy both sawnwood and roundwood and produce furniture for both domestic and export markets.

Table 5: Price Structure of a Wood Chair at Quy Nhon

Items	Percentage
Raw material (wood)	70
Other materials (screw, hinge, oil, etc.)	12
Labor and management	5
Transportation (from Gia Lai to Quy Nhon)	0.4
Customs fees, billing fee storage	0.1
Risk prevention fund	0.1
Total Costs	**87.6**
Gross profit	**12.4**

Source: Interview with Duc Long Company

Duc Long Company in Gia Lai province is one example. This firm began importing wood from Laos in 1995. From 1998 to 2003, the company focused primarily on export markets. It produced both indoor and outdoor furniture and exported to European markets, Singapore, China, and Taiwan. However, since 2003, there has been increased competition in exports due to the soaring number of export companies in Vietnam. Since then, the company has shifted focused to the domestic market and produces products for its own real estate projects. By 2008, 60 percent of company products were sold in domestic markets. The company has three factories in Gia Lai province which employ about 500 workers. For its 2008 production, it used 7,000 m^3 of imported Lao roundwood and another 1,500 m^3 of sawnwood of *Cho Chi* (*Parashorea stellata Kury*) and *Dau* (*Dipterocarpus spp*) from a company in Nha Trang province in Vietnam. *Cho Chi* was brought at US$424-450 m^3 and *Dau* at US$330–390 m^3. The company used *Cho Chi* and *Dau* to produce outdoor chairs for export. Table 5 shows the price structure for one such chair made from 0.017 m^3 of sawnwood. This chair is sold at US$23.63 FOB at Quy Nhon seaport.

The total gross profit the company derives from the export is 12.4 percent and the net profit (after tax) is about 5-6 percent.

Company Type C: These companies have very large processing factories in Vietnam and produce furniture primarily for export markets. They procure both roundwood and sawnwood from their own factories or other companies in Laos or from companies in other countries such as Malaysia and Indonesia.

Table 6: Price structure of a Final Product

Items	**Percentage**
Raw material (wood)	60
Fees (health quarantine, plant quarantine, customs)	1
Log yard fee (at Bo Y)[19]	3
Transportation cost (from Bo Y to the company's factory in Kon Tum	12
Management cost	7
Costs associated with wood procure at the log yard in Bo Y[20]	3
Value added tax (VAT)	10
Other	2.5
Total cost	**98.5**
Profit	**1.5**

[19] This fee is set at 3% of the total value of wood imported to Vietnam. The fee is collected by the provincial Department of Taxation.

[20] In order to procure wood in the log yard near Bo Y, the company needs to send 12 employees there, one manager, three skilled workers to measure the wood, and then two workers each to do the recording, complete the paperwork (for import/export), and to collect other data.

Source: Interview with Trung Dong Company

Trung Dong Company in Kon Tum province is an example. From 2001 to 2007, Trung Dong imported on average about 20,000-30,000 m3 roundwood from Laos per year. Since 2008, when the provincial government of Attapeu started to impose new export tax regulations, the company has switched to importing sawnwood from its own Lao factory exclusively. In 2008, it imported 7,800 m3 of sawnwood from Laos, mainly Sao Xanh (Homalium caryophyllaceum) and Cam Xe (Xilya dolabriformis Benth) and produced furniture for export to Singapore and China. Table 6 shows the price structure in a final product.

The company's profit seems to be small (1.5 percent); however, as all products were exported, the company is eligible for a VAT return. Eventually, the company's net profit after tax, depreciation, and "invisible costs" is about 7-8 percent, as the company's Vice President estimated.

Company Type D: These companies benefit from wood logged in Laos in different ways. They often start with agribusiness investment projects in Laos, mainly involving cash crop plantations (rubber and cashew). As noted by a senior economist of the Asian Development Bank, Laos is a very good place for investment in plantation (cited in Lang and Shoemaker, 2006). The company prepares project documents and submits them to the Lao government, requesting land for the establishment of tree plantations of about 5,000-10,000 ha.[21] Once the projects are approved, they pay the land rent and establish their plantations after harvesting the logs. However, some companies, after receiving permission from the Lao government and securing the concession rights, do not follow through on their original plan and sell their concessions to other companies at a substantial profit, as in the example of BV Company.[22]

BV Company is a private company located in Binh Phuoc province in the central coastal region of Vietnam. In 2006, BV submitted a project proposal to the provincial authorities of Attapeu province, requesting 20,000 ha of land for the establishment of rubber and cashew plantations. It took the bout two years to be approved by the Lao government. To facilitate the approval, the BV Company needed to liase with the local authorities of Attapeu; and present confirmation from a bank in Vietnam that documented the provision of funding (US$27 million) . BV Company had to obtain approval not only from the local authorities of Attapeu province but also the Lao Committee for Planning and Investment at the national level. Securing these approvals cost BV Company approximately US$300,000 including "invisible costs".

BV Company itself was not able to complete all the work and had to collaborate with TT Company, an import-export and construction business, located in Ho Chi Minh City, which acted as its legal

[21] Hoang Anh Gia Lai Attapeu, for example, obtained 30,000 ha from the Lao government for the establishment of rubber plantations.

[22]All information related to this example is based on the project proposal and various contracts signed between the five companies involved in the business. To maintain confidentiality, all names companies in this example have been changed.

advisor. Another company, Cana Joint-Stock, acted as its partner and shared the "invisible costs" for operating in Laos. In May 2008, these three companies signed a contract detailing the rights and duties of each entity. According to the contract, TT Company, as the project's legal advisor, did not have to contribute any financial resources to the project. Cana Joint-Stock, on the other hand, was expected to participate in all activities related to project management and implementation. The contract also stipulated that Cana Joint-Stock was responsible for the land/forest surveying fee (US$5/ha, or US $100,000 for 20,000 ha) to be paid to the Lao government and also for the US$50,000 to cover the costs associated with transportation, lodging, food, and the "invisible costs" for the survey team from the Lao government. In addition, Cana Join-Stock was to reimburse BV Company for part of the money BV Company had laid out to get the project approved. As per benefit distribution, BV Company was entitled to 40 percent, TT Company to 15 percent and Cana Joint-Stock to 45 percent of the project's profits.

All 20,000 ha of the land granted to BV Company was forestland; half of the land had standing trees with marketable value. In November 2008, Cana Joint-Stock signed a contract with HT Company in Kon Tum province, with whom it had a close relationship, assigning HT to log all timber trees on 10,000 ha of the land allocated to the project. While it is not known how much HT paid Cana Joint-Stock to obtain the contract, it is possible that it was a substantial amount as immediately after signing the contract, HT requested a loan of US$375,000 from a local bank in Kon Tum.

Table 7: Payments from XP to HT

Wood Species[23] Log Size	Wood in Group I (US$/m^3)	Wood in Groups II and III (US$/m^3)	Wood in Groups IV and V (US$/m^3)
Logs with diameter (Φ) < 29 cm	3	3	3
Logs with Φ of 29-45 cm	50	35	20
Logs with Φ > 45 cm	55	40	25

Source: Contract between HT Company and XP Company

The situated was complicated further when HT Company passed the logging contract to XP Company in Gia Lai province which also has a factory in Attapeu. A contract was signed between HT and XP, stipulating that XP Company had to (i) extract and buy all logs from the 10,000 ha of forestland; (ii) pay royalties to the Lao government; and (iii) pay HT Company for all the costs related to obtaining of logging quota. Table 7 presents the amount of money XP Company would

[23] Wood species are divided into eight different groups, depending on color, smell, weigh, and durability. The first group include the precious species with beautiful color, good smell, and most durable. By contrast, the eighth group comprises the species which is light and not durable, susceptive to termite and moth

have had to pay HT based on the volume and species of wood XP would have harvested from the forest.[24]

The contract between XP and HT also stipulated that, if the volume of logs harvested by XP exceeded 15 percent of the volume measured by Lao officials, XP would have to pay HT the difference in cash based on the wood's market price, possibly because under-measuring is a common practice among logging companies (Jonson, 2006).[25] The contract further states that HT Company had to (i) bring workers and machineries needed for logging to Laos, (ii) obtain permission and all necessary documents from Lao authorities to bring logs with a diameter below 45 cm to its wood factory in Laos and logs with a diameter over 45 cm to Vietnam.

Cases as the one above appear to be quite common (Shi, 2008). Our example reveals that land concessions are being used for logging purposes in Laos, as logging will bring more profit. A posting from a wood-processing company in Ho Chi Minh City found on the internet in October 2008 (Box 1) confirms this.[26]

Box 1 - Partners to Extract Timber in Laos Needed

We have the permission to harvest 200,000 m^3 of timber in Laos. We have machineries and equipments needed for extraction. Currently, we urgently need financial resources for the logging and are looking for partners who have around US$150,000 in cash. Profits from this project will be equally divided between the two partners. We look forward to your cooperation.

Until now, it is not clear if BV Company, TT Company, and Cana Joint-Stock ever intended to establish rubber and cashew plantations in Laos after extracting all timber from the land granted to them. However, it seems that the profits from the timber harvest exceed the payments for obtaining the land concession, so that the companies would benefit from the deal even before plantations were established. Also, there is evidence that some Vietnamese companies (and other foreign firms) start with an investment project as the one above in Laos and discontinue the project after extracting all the logs from the land (Shi, 2008; Bestari et al., 2006). In addition, it is well known that some companies try to get land concessions approved by the Lao authorities and then transfer the concession to other companies, deals from which they make substantial profits (The Gioi Vietnam, 2008).

In sum, different types of companies are involved in the timber commodity chain between Laos and Vietnam. Companies of type A primarily focus on the trading of wood from Laos and thus limit their position for value capture in the chain. Those in groups B and C participate in more segments of the

[24] At the time of the fieldwork, the logging season had not started yet

[25] Jonson (2006:3) reports that "at some landings controls show that original scaling of logs gave too low volumes" and mentions that the discrepancies can be up to 30 percent.

[26] This advertisement was posted on the website www.raovat123.com. It also included the name of the company and contact information, including the cell phone number of the company manager.

commodity chain and also benefit more than companies in group A. Companies in group D primarily focus on benefiting from the timber trade as quickly as possible.

In reality, the companies of the four groups often collaborate with each other. Some companies from group C, for example, import timber from Laos and sell it to companies in groups A and B, and vice versa. Some companies in group B with logging machinery become partners of the companies in group D. These blurred boundaries among the company groups make the timber commodity chain very complex. In addition, the recent global economic downturn has strongly affected the timber commodity chain, as the next section shows.

IV.3 EMERGING MARKET TRENDS

Impacts of the financial crisis: Prior to the recent financial crisis, a number of Vietnamese companies were able to make substantial profits from the trading of timber from Laos. In 2008, due to the economic crisis, however, the nature and structure of the industry has rapidly changed.

Some of these firms primarily focused on the trading of rosewood (*Dalbergia nigrescens kuiz*), a wood species with a very high market value, despite the fact that the harvesting of this species is banned in Laos (FAO and The Nature Conservancy, 2008). In 2007, the price of rosewood in Laos was US$7,000/m^3 and US$12,000/m^3 in China, providing a strong incentive for the harvesting and trade of this species.. A company in Gia Lai province, for example, made a profit of about US$6 million from trading rosewood within three months in 2007, but was severely burned in 2008 when about it bought a large amount f this wood at US$1,000/m^3 but due to the economic downturn, the Chinese demand disappeared and the price dropped to US$5000/m^3. The company went bankrupt. Another example is that of a company in Quy Nhon province that derived US$5.5 million from processing and exporting about 3,000 m^3 of a high-value species in 2007. To prepare raw material for 2008, it sought a large loan from a bank. However, as the wood price plummeted, the company was unable to sell the wood and consequently went bankrupt.

The economic recession has not affected all wood companies equally. Small-scale companies producing furniture mainly for domestic markets were impacted most. In the middle of the crisis in 2008, risk-averse banks refused to lend money to small-scale companies or to companies who, they suspected, may not be able to repay the loan. Companies were not able to procure wood, and, as domestic-oriented firms, were not eligible for VAT exemption which increased their production costs and reduced their ability to compete. Eventually, many of these companies went out of business or reduced their production. By contrast, middle- and large-scale companies had less difficulty in accessing loans and were eligible for VAT exemption.

Still, middle and large-scale companies who export their products were also negatively affected by the recession. Demand for furniture products from export markets had declined between 30 to 40 percent in 2008-1009 as compared to 2007 (interview, President of Vietnam Forest Product

Association (Vifores)). All eight export companies interviewed reported a substantial reduction in their export revenues, with no signs by early 2009 of a recovery.

Demand for "known source" and legally verified wood products: Emerging market trends and new legislative requirements requiring 3rd party verification of legally sourced wood products, or some form of "due diligence" in the sourcing of ones wood products have caused a number of difficulties for Vietnamese furniture exporters. Retailers in Europe and North America are increasingly demanding certified wood product, and European public procurement policies are further increasing demand. In 2008, the US government amended the US Lacey Act, and new "due care" requirements are emerging in EC legislation. While all are relatively different in requirements, all have common elements such as proof of "due care," documentation of origin, volume and species. In response, many Vietnamese export companies have been gradually shifting from EU and US markets to less environmentally sensitive markets, particularly Eastern Europe, including Russia, and the Middle East (Industrial Review of Vietnam, 2008; Vietnamnet, 2008). However, as furniture export revenue derived from EU and US markets accounts for about US1.8 billion, or 64 percent of the total export revenue[27], Vietnamese exporters and their supplies cannot ignore these trends. Some government organizations and wood companies acknowledge that wood of Lao origin is perceived to be illegal; well known large-scale companies such as Truong Thanh Furniture Corporation and Tran Duc Group that export furniture to US and/or EU markets no longer acquire wood from Laos due to the risk to their reputation. In order to improve their access to environmentally sensitive markets, large scale Vietnamese companies have been trying to obtain the chain of custody. Currently, there are about 170 companies out of 2500 companies as total (less than 7 percent) have obtained Chain of Custody – but it remains to be seen whether enough the lack of legally verified or certified forests will create a bottleneck at the first production stage.

IV. 4 MECHANISMS OF BENEFIT DERIVATION

A study by FAO and The Nature Conservancy (2008) highlights that all legislative documents of the Lao government contain clauses such as: "unless approved by the government" or "unless determined in special cases to be in the interest of the national community." Such clauses leave a lot of room for interpretation and allow Lao officials to receive payments from Vietnamese companies. A possible scenario would be a "type D"-company who used their land concession project to justify a logging concession, often called "special logging quota" (*quota dac biet* in Vietnamese).[28] Coupled with poorly defined procedures for sales and export, these clauses as well as overlapping policies, among other things, enable Lao officials who represent "the government"—or at least claim they can

[27] Source: Nguyen Ton Quyen's speech in the Workshop *FLEGT and involved stakeholders in Vietnam* organized by IUCN in Ho Chi Minh City, Vietnam, 28 July 2009.

[28] For a more detailed account of special logging quota, see Baird, 2009.

(FAO and The Nature Conservancy, 2008)—to benefit from corruptive practices (see also Shi, 2008; Jonson, 2006; Lang and Shoemaker, 2006).

Table 8 presents the various mechanisms through which various groups benefit from the timber trade.

Table 8: Mechanisms of Benefit Derivation

Actor	Benefit Mechanisms
Loggers	Physical strength to do the work; connection with other loggers to maintain access to the work, acceptance of risk (in work and job), temporary separation from family when working in Laos.
Machine drivers	Professional skills to drive the machines, job security, acceptance of risk (in work and job), temporary separation from family when working in Laos.
Factory workers	Professional skills to work in the factory, job security, temporary separation from family
Vietnamese companies in Laos	Collaboration with Laos people as joint-venture as required by the Law of Foreign Investment of the Lao government, paying official and unofficial costs to obtain logging quota, etc. Strong capital and infrastructure for extraction and processing activities
Lao officials	Power over logging quota distribution, overseeing the logging, transporting, processing, and exporting activities
Vietnamese transporters	Financial resources (for buying trucks), transporting over-weight, paying official and unofficial costs
Vietnamese officials	Overseeing wood import, transportation, and export
Vietnamese companies in Vietnam	Financial resources and infrastructure (for processing and export), connections with wood suppliers in Laos (either through their own factories or partners), access to domestic and export markets, connections to authorities in both countries

Similar to Lao border officials, Vietnamese officials also benefit from the timber commodity chain based on their oversight of the transportation and export processes. While unofficial payments to the traffic police overseeing timber transport are common practice, only few officials from other agencies such as taxation and customs receive such payments, as they, compared to the traffic police, do not demand them. Companies are willing to pay these officials because they expect that they will receive protection and support from them in exchange.

As described earlier, Vietnamese wood companies have adopted a number of strategies to benefit from the timber commodity chain. In general, these companies have capital and a good infrastructure in place: many have their own factories in Laos to procure wood and are part of national and international business networks. In addition, they have close ties to government officials at different levels. Particularly companies in group D have strong connections to high-ranking Lao government officials from the Office of the Government and the National Committee for Planning and Investments, thus being able to obtain special logging quotas which are usually only granted to investment projects, such as the one of BV Company mentioned earlier. According to the Lao Forestry Law, logging is only allowed in Production Forest Areas that have an approved management plan (see Jonson, 2006), and export of roundwood, sawnwood and semi-finished products is prohibited as is the harvesting of a select list of species (Global Development Solutions, 2005).[29] However, if a company has a special logging quota, it is allowed to harvest and export roundwood of any species regardless of legal restrictions. The data provided by the Bo Y customs department reveal that more than 220,000 m^3 of roundwood from more than 20 species—some of which are banned for export—were imported into Vietnam from Laos in 2008.

Since 2008, a new wood export policy has been implemented in Attapeu province under which the export of roundwood is prohibited and the export of sawnwood is subject to a specific export tax (see Table 2, footnote 16). The introduction of a Lao export tax coupled with the global economic crisis increased the costs of labor and materials; together with a declining access to credit, this has put many companies into a difficult position. However, not all companies have been affected equally. Some have stayed in business and maintained their production almost at existing levels; others have been trying to cut costs and reduce their production; again, others have closed down temporarily until the economy recovers; others again have closed down their business completely. Table 9 presents the strategies several companies have adopted during the global recession and as legal frameworks on wood extraction and export have become more restrictive.

[29] Mai Kha Nhoung (*Dalbergia cochinchinensis*), Mai Kham Phi (*Dalbergia boriensis*), Mai Dou Lai (*Dalbergia cambodiana*), Mai Long Leng (*Cunninghamia sinensis*), Mai Phout Pha (*Gardenia cambodiana*), Mai Ka Cha (?), Mai Tae Kha (*Afzelia xylocarpa*), Mai Ketsana (*Agarwood*), Mai Dou (*Pterocarpus macrocarpus*), Mai Moun (*Elaeocarpus siamensis*), Mai Man Pa (*Fragraea fragrans*), Mai Ket Lin (*Desmodium longipes*), Mai Khonta Xang (*Alternanthera sessilis*), and Mai Champa Pa (*Michelia champaca*).

Table 9: Companies' Coping Mechanisms

Difficulties	Coping Mechanisms
High costs to hire Lao workers[30]	Bring workers from Vietnam to Laos
Restrictions in the Lao labor law (allowing 10% Vietnamese and 90% Lao laborers in joint-venture)	Unofficial payments to officials in both countries to bring workers from Vietnam to Laos[31]
The labor law requires companies to provide protection to the workers when they work on site	Employ temporary/seasonal workers to avoid responsibility in case of accidents, as these workers are not subject to the labor laws in either country
Lao investment law requires Vietnamese companies to collaborate with Lao partners in joint-ventures	Collaborate with high-ranking officials to gain protection for the companies
Lao forestry law bans the export of roundwood	Roundwood is turned into sawnwood;[32] companies try to obtain a special logging quota
Enforcement of tax export regulation by the government	Avoid tax by obtaining a special logging quota; bring request from Vietnam to Laos and produce final products there; bring semi-final products to other provinces in Laos with no export tax policy and then export to Vietnam
High production costs as result of the economic crisis	Reduce royalties by collaborating with Lao officials to under-report the amount of wood harvested and to re-classify wood species from high-value to low-value; not using low- value wood species and small trees

Source: Interviews.

30 According to our informants, the processing cost in Attapeu of Laos is twice as high as in the Central Highlands of Vietnam.

31 According to the President of the Vietnamese-Lao Association in Attapeu, there are about 5,000 Vietnamese workers in Attapeu many of which entered Laos illegally. See also the article Dau Tu Vao Lao: Doanh Nghiep con Tu Phat "Investing in Laos: Vietnamese companies are spontaneous" by the Ministry of Foreign Affairs. http://www.mofa.gov.vn/vi/cn_vakv/ca_tbd/nr040819103029/ns070817104120

32 One interview partner in Kon Tum referred to the wood extracted from Lao as a chicken. He said, "Prior to the logging ban, they [the Lao government] gave us the whole chicken with feathers and meat [referring to the roundwood]. Now, they only give us meat [referring to the sawnwood] and not the feathers." According to him, it is more time- and cost-efficient, given the high processing cost in Laos, for the company to bring the roundwood to Vietnam than to process the wood and bring sawnwood home.

As the economic crisis has increased production costs, companies are now felling bigger logs (with a diameter of 60 cm and larger). A director of a Vietnamese company in Attapeu explained:

> *"If we process 1.2–1.3 m³ of logs with a diameter of 60 cm or bigger we obtain 1 m³ of sawnwood. But to obtain the same amount of sawnwood, we need 3 m³ of logs with a diameter of 30-40 cm. We will run a loss, if we get the small trees. Thus we burn and dump all small trees in the forest."*

Another a director explained why his company has to process high-value wood:

> *"All of us would run a loss if we followed the regulations… Costs, including those for the officials, are so high… if we get low-value species, we will run a loss, so we only focus on the high-value species… In 3-4 years all high-value species in Laos will be gone."*

In Vietnam, the wood industry is very important, both in terms of its contribution to the country's income from exports and the number of workers absorbed by the industry. When they experienced economic constraints, the wood companies, particularly the large ones, requested support from the government. In response, the Vietnamese government lifted the export tax, previously at 10 percent for wood products, to strengthen the companies' competitiveness. In addition, the government has provided long-term loans with favorable conditions to these companies. In January 2009, for example, Hoang Anh Gia Lai Group obtained a loan of US$360 million from the Vietnam Bank of Investment and Development for expanding its range of production, including wood processing and export. Duc Long Company was given a 50 percent tax deduction on imported wood-processing machinery. In addition, the Vietnamese government provides institutional support particularly to furniture export companies to facilitate their access to export markets. Trung Dong Company, for example, received a certification of origin for the wood it procures in Laos from the Vietnam Chamber of Commerce and Industry (VCCI), allowing it to export furniture to Hong Kong and Taiwan, and other markets that do not accept the wood certified by the Lao government. However, the certificate of origin issued by the VCCI does not help furniture export companies to access environmentally sensitive markets such as the EU or the US. Yet, companies could get indirect access to these particular markets by selling their products to other countries that have access to the markets. According to one interview partner, Scancom Vietnam, the Danish firm and one of the largest suppliers of outdoor furniture in the world, has subcontracts with several wood companies that import wood from Laos so long as the companies have a certificate of origin from the VCCI. If this is correct, the wood from Laos still finds its way onto the environmentally sensitive markets in Europe and North America.

VI. CONCLUSION

This study has examined the timber commodity chain between Laos and Vietnam, focusing on. the question of who benefits from the timber trade and how and examined the particular situation of loggers, drivers, officials of different ranks at different agencies, companies and their employees. In general, the timber trade is rather profitable, but the benefits are not equally distributed among stakeholders. Individuals and organizations in powerful positions and with existing financial resources, or those who have close ties to them, generally benefit more while groups or individuals that are already disadvantaged are marginalized. While they live in the area where timber is extracted, Lao villagers—many of whom are ethnic minorities—hardly benefit at all from the trade of timber.

This imbalanced distribution of benefits from the timber trade can be attributed to the status and assets of the various groups and individuals that participate in it and also to the mechanisms through which they benefit from the trade. The Lao officials at the national and provincial level who decide or strongly influence decisions about logging quotas and extraction volumes benefit the most. Officials at the local level do not have any influence on quota allocation, but oversee the wood companies and benefit from the timber trade in this way. The fact that government officials who influence the decision-making processes have been seeking payments has caused livelihood and environmental problems at the local level as they allow the wood extraction to take place (Shi, 2008; Bestari et al. 2006; Jonson, 2006; Lang and Shoemaker, 2006).

This study has shown that usually the timber extraction has taken under different disguises. These practices are partially attributable to the abuse of power by these officials, but are also the results of loopholes in the Lao legal system (FAO and The Nature Conservancy, 2008). Further, as highlighted in this study, the livelihood and the continuing timber extraction at the local level in Laos are the result of the ongoing search for timber by Vietnamese companies due to the high market demand for timber products (see also the report by Yale Program on Forestry and Governance, 2008). An additional factor are the continuous efforts—in form of financial and institutional support—by the Vietnamese government to enable the country's furniture industry to increase its income derived from exports even in the face of raw material shortage. The government's financial support to Hoang Anh Gia Lai mentioned earlier reflects this well.

The global economic crisis has affected the wood industry in Vietnam negatively and consequently also the wood-extracting and -processing sectors in Laos. Controls over the export of roundwood into Vietnam have been more stringent which has caused a number of difficulties for Vietnamese companies sourcing wood from Laos; this, in turn, has negatively impacted the Vietnamese furniture industry. However, this does not necessarily mean that a smaller volume of roundwood is extracted in Laos and imported to Vietnam. In fact, statistics from the Department of Customs in Bo Y show an increase in these imports in recent years. This either indicates the ineffectiveness, if not failure, of Lao forest policies and regulations and their enforcement in reducing the extraction of timber trees from Laos' forests. In practice, policies and regulations are often bypassed by powerful entities, and officials enforcing these policies and regulations are easily succumb to bribery (also see Jonson, 2006).

The findings from this study have implications for the enforcement of initiatives such as FLEGT, the US Lacey Act and the emerging payment schemes like payment for ecosystem service (PES) and Reducing Emission from Deforestation and Forest Degradation (REDD), as well as for the World Bank and ADB-supported forestry programs in Laos.[33] How effective can these institutions and programs be in protecting the remaining forests in Laos or in shaping the forest practices on the ground to sustain the natural forest? So far, there has been no clear evident that these institutions and initiatives will have a positive impact on logging practices (Jonson, 2006; Bestari et al., 2008). Further, it may become more difficult for these initiatives aimed at protecting the nature to be recognized on the ground, given that the timber trade between Lao and Vietnam is seen as legal or at least legitimate by both governments and since benefits from the trade significantly contribute to the governments' revenue. This situation is the reason that logging in Laos is continuing, backed by both governments and often disguised under large development mega-projects like hydro-energy development or plantation crop production projects. Neither the Vietnamese companies nor the government are ready to give up their wood sources from Laos. In Laos, 11 percent of the total tax revenue comes from timber royalties (Global Development Solutions, 2005), which is why the Lao government supports timber exports to Vietnam. My informants mentioned that they do not foresee any changes in forest resource extraction in Laos in the next five years in spite of the global economic crisis and increasing logging and export restrictions. The effort to protect natural forests in Laos seems to be a cul-de-sac.

The current situation is clearly in need of improvement. Due to the official government involvement in the Vietnam-Laos trade, international NGOs and the donor communities nust work with the governments of both countries. National campaigns on sustainable forest management may also help in raising the public's awareness. A network involving NGOs, local communities, and independent units from the government for wood-sourcing verification and certification to oversee the extraction and export would be important. Lao forestry regulations have to be revised so that local villagers are more included in decision-making and forest-extraction processes. Local Lao villagers need to be empowered so that the unbalanced relationship between Vietnamese companies and the Lao officials on the one hand and Lao villagers on the other hand is redressed. A possible way to do so would be to strengthen the resource tenure right system at the local level. A more balanced distribution of power would be helpful in directing more of the benefits of sustainable forest management towards the local level. In addition, stronger enforcement mechanisms on the ground would prevent the rent-seeking activities of the local officials and provide more job opportunities for Lao villagers. Vietnamese and Lao migration policies and labor laws should be strictly implemented to protect the loggers, particularly those without a labor contract, in order to protect them from job insecurity and risks related to their work.

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[33] The World Bank and the Finnish government have supported the project entitled *Sustainable Forestry and Rural Development Project*, aiming at enhancing multiple-purpose management of natural forests designated to production purposes (see more in Jonson, 2006). ADB has funded the tree plantation project aiming at rapidly expanding tree plantation area in the country (Lang and Shoemaker, 2006).

ANNEX: LIST OF WOOD SPECIES IMPORTED TO VIETNAM THROUGH BO Y IN 2008

No	*Vietnamese name*	*Lao name*	*Scientific name*
1	Sao	May khan	Homalium caryophyllaceum Benth
2	Tếch	May sac	Tectona grandis Linn
3	Giáng Hương	May đen	Pterocarpus Pedatus Pierre
4	Lim	May đeng	Erythrophloeum spp
5	Pơ Mu	May long leng	Cunninghamia konishii Hayata
6	Sồi	May chit	Castanopsis spp
7	Trắc	May khan nhung	Dalbergia Nigrescens Kuiz
8	Thông	May pet	Pinus spp
9	Táu	May hang	Vatica spp
10	Gõ	May to he	(not available)
11	Cẩm Lai	May da đong	Dalberia spp
12	Dổi	May cham pa	(not available)
13	Sến	May ca nham	Fassi spp or Fosree spp
14	Cà Chít	May chit	Shorea Obtusa Wall
15	Chò chỉ	May xi	Parashorea stellata Kury
16	Cóc đá	Kin nga	(not available)
17	Bằng lăng	May puôi	Lagerstroemia Angustifiolia
18	Dầu	May nhan	Dipterocarpus sp
19	Sao xanh	May khen hua	Dipterocarpus spp
20	Căm xe	May đen	Xilya dolabriformis Benth
21	(not available)	Sang May	(not available)
22	Kiền Kiền	(not available)	Hopea pierrie Hance
23	Vên Vên	May bac	Anisoptera cochinchinensis.
24	Gỗ tạp	May hao	Undefined wood (usually with low market value)

Source: Department of Customs of Bo Y.

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