

Wood villages in the context of market integration

Status and policy options for sustainable development

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Acknowledgement

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Summary

There were more than 300 wood villages in Vietnam where tens of thousands of households and hundreds of thousands of laborers including both household and hired labor are involved in manufacturing process of timber-products. The wood villages, thereby, play an important role in the livelihood of the villagers including many poor households. The changes in markets as well as policies related to the manufacturing and trading activities in the wood villages will impact on a large number of laborers including many poor people.

This report on *Vietnam wood village in the context of market integration: Status and policy options for sustainable development* focuses on the status of manufacturing, trading and processing timbers in five wood villages. These wood villages are typical in using imported precious timbers, facing a high legal risk in producing high-value wood products, serving wealthy customers in the domestic market (La Xuyen, Van Diem, Dong Ky) and export market (Dong Ky). Some villages (Lien Ha and Huu Bang) use input timbers from low-risk and environment-friendly sources, including imported timbers from the US, EU, timbers from domestic plantation forests and various types of artificial boards to manufacture the wood products for domestic customers.

In recent year, there were clear signals indicated the transition of using timbers towards environment-friendly sources. The transition was observed in two aspects: (i) The number of precious-endangered timber species with high legal risk from imported sources has decreased, while environment-friendly timber species have increased; (ii) the use of high risk species has decreased in volume instead of increasing the volume of environment-friendly species. There are many reasons for this transition, including: (a) the tightening of export policies in the countries that are supplying timber materials, particularly precious timber species from the Greater Mekong Sub-region countries; (b) the domestic timber supplies as well as imported timber supplies from low-risk resources (the US and the EU) have increased with diversified species; (c) the changing of demands, and preferences of consumers in the domestic and export markets of Vietnam timber products, especially in China market. This transition is a positive signal, which reflects the status of Vietnam timber industry in general and wood villages in particular towards more sustainable and environment-friendly use of timbers.

In addition to the positive transition, the households in wood villages are facing the risks and challenges because the trading and manufacturing activities in the wood villages have been spontaneously occurring, mainly relying on the market demands and consumer preferences. Households have the weakness in understanding of or not interested in the legality of timbers, regulations on labor use, labor safety, environment, fire prevention, and the latest policies, that have enforced or will directly relate to their activities. The transactions between timber sellers and manufacturing households, between manufacturing households and furniture buyers are verbal agreements. There is no legal evidence to prove the legality of timbers and timber products.

The poor awareness of households regarding the timber legality in wood villages is partly due to the weakness of law enforcement, especially at the communes and districts. Until now, the interactions between households and the State authorities have still been limited. The interactions, if any, belongs to the groups of companies and timber traders, who own much larger scale of business compared to the households. The manufacturing and trading activities of households have not yet attracted attention of the State authorities due to small scale and lack of role in generating revenue for the State budget.

The risks, challenges and poor awareness of the households regarding timber legality (e.g. legal timber sources, compliance with the regulations on labor use, environment, and fire prevention) in the wood villages are the critical characteristics of an informal economy. The activities of households in wood villages have been informal because the trading and manufacturing activities of households in wood villages have not been recognized officially by the current legal system. For instance, 74.5% of the surveyed households in five wood villages do not have legal registration for their own businesses, 64% of the surveyed households have no production site and have to use the living space instead, 100% of laborers are hired by

village households via oral contracts, about 90% of transactions between buyers and sellers (e.g. between manufacturing households and suppliers of timber materials, and between the households that sell processed products and buyers), lack evidence of timber legality, are the basic aspects reflecting the informal businesses in the wood villages. However, informal activities are not necessarily illegal. For instance, the current legal framework only stipulates that households must register their business if their income exceeds the low income threshold set by the provincial People's Committee. The current framework also allows households to hire employees for short-term and part-time activities without written contract. However, there is evidence that some households subjected to legal business registration, and use full-time labors do not comply with this requirement. This makes the manufacturing and trading activities of households illegal. Consequently, it indicates the illegality of household products.

The Voluntary Partnership Agreement (VPA), which was agreed by the Vietnamese government and the EU in May 2017, aims to remove illegal timber from the supply chain. The agreement provides specific regulations on the legality of timber products including those produced by the households in the wood villages. These regulations require households to meet the legal requirements for transporting, trading and, processing timbers, as well as to fulfill the tax and fee obligations. In view of the current status of the household businesses in the wood villages, most of the households in the surveyed villages cannot meet these regulations.

The international studies on the informal economic sector have shown that there are four perspectives on policy options in dealing with the informal economy. The first perspective is that the State authorities do nothing; according to their point of view, informal entrepreneurs are an important basis for the establishment of formal businesses at a later stage. The second perspective is that the formation of informal economic sectors is due to overly high legal requirements for running a business; the entrepreneurs cannot meet these requirements and become informal components. In line with this view, the State authorities needs to lower legal requirements for informal entrepreneurs. The third perspective states that informal activities include many illegal activities, thus it is necessary to eliminate informal entrepreneurs. The final perspective indicates that it is necessary to have supportive measures to formalize informal entrepreneurs because the transition to formal activities will help improve working conditions, quality of goods and services, and thus generate revenue for the budget.

This report recommends that the best policy option for households in the wood villages, especially in the context of integration, shall be the supportive measures to formalize these households. Formalization is the basis for meeting the requirements of the VPA, including compliance with current regulations on various aspects such as the use of input materials, labor, and measures for environmental protection. The formalization will provide the opportunities to improve working conditions, to meet the legal requirements of wood products, and to generate revenue for the national budget.

The formalization of household businesses in the wood villages requires a combination of strong government interventions with the supportive and incentive measures. The strong measures aim to eliminate the illegal behaviors and household activities under the transitional conditions to take advantage of the present mechanisms for their individual benefit. The encouraged and supported measures motivate households to voluntarily participate in the transformation. The transformation of households to formal activities also requires the assistance from development organizations, vocational organizations, business community and especially the efforts of the households themselves. The input sources, including information of new policies, will directly impact on the performance of wood villages, play an important role in helping households recognize the benefits of the transition. The formalization helps establish the formal legal position of households, thus helps households access the Government resources as well as the other resources to run their businesses towards the sustainable direction.

1. Background

In order to prevent illegal imports of timber into the European Union (EU), in 2003, EU introduced the Forest Law Enforcement, Governance and Trade Action Plan (referred to as FLEGT Action Plan). The plan consists of some measures including the Voluntary Partnership Agreement (VPA). When the VPA is signed, partner countries should design and implement the measures as well as the policies, what so-called the Timber Legality Assurance System (TLAS), in order to ensure timber and wood products exported from these countries to EU are legal products. The VPA applies a broad definition of timber legality, whereby the timber products on the market are considered to be legal if the harvesting, processing and trading activities comply with all of the regulations of the partner country, including environmental regulations, liability for taxes, fees, employment, labor safety, etc.

The EU is the third most important market for Vietnam timber products in turnover. Annually, Vietnam achieves about US\$ 800 million from export wood products to this market. In order to maintain the stability with the expectation of expanding this market in the future, Vietnam Government has officially participated in the VPA negotiations with the EU since 2010. The negotiation process ended in late 2016, and the Agreement between the EU and the Government of Vietnam was initialed in May 2017.

The VPA, which was initialed between EU and Vietnam, regulates that the TLAS shall apply to all organizations and households for the export and domestic consumption products. This means that in the future, when the TLAS is officially in operation, all households in the supply chain should ensure that their products are legal.

Vietnam has more than 300 wood villages where tens of thousands of households and hundreds of thousands of workers involved in manufacturing, processing and supplying wood products to export and domestic markets. When the VNTLAS is put into operation, all of the households in wood villages will have to comply with the requirements of this system.

In order to identify the present status of households in the wood villages in terms of using timbers, labor, technology and measures to protect the environment, in 2012, when the VPA negotiation process started, Forest Trends and Vietnam Timber and Forest Products Association (VIFORES) had done the study on trading, manufacturing and processing activities of households in five wood villages, including Dong Ky, Huu Bang, La Xuyen, Lien Ha and Van Diem. The 2012 study report indicates that most of the manufacturing and trading activities of the households in these villages had spontaneously occurred and did not comply with current regulations regarding timber legality (To et al. 2012). The report described the status of households in the wood villages that they will be not able to meet the requirements of the VPA in the future. The report recommends that in order to avoid negative impacts on the wood villages, the Government should undertake an in-depth assessment of the status of all wood villages; and the VPA negotiation process should consider these aspects carefully. Besides, in order to prepare for policy changes in the future, the households in the wood villages should be accessed to information on new policies and mechanisms, including the VPA FLEGT.

When the VPA negotiation process ended, Forest Trends and VIFORES reassessed the status of trading and manufacturing activities of the households in five wood villages that were previously studied. The 2017 assessment aims at understanding the changes of households (if any) in these villages, the reasons for the changes, and the ability to respond to new VPA regulations in the future.

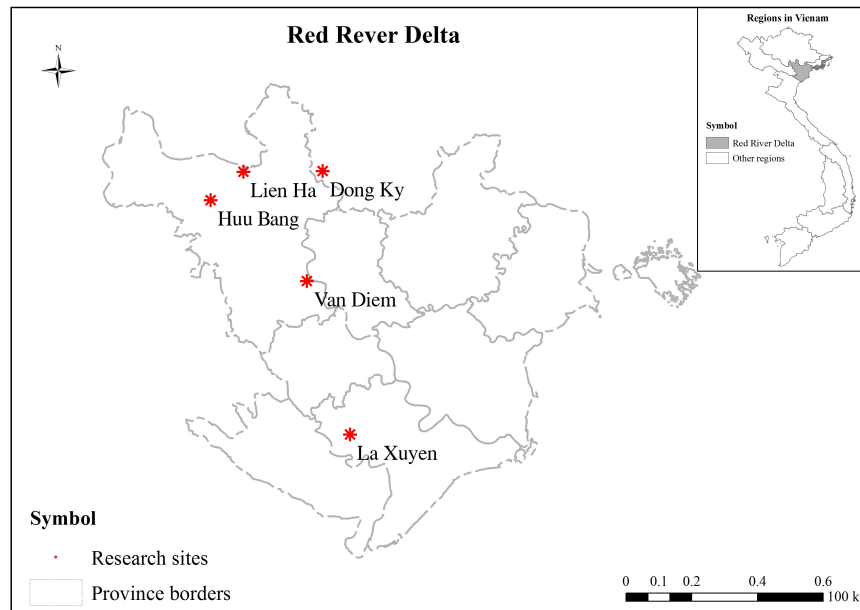
This report consists of seven parts. After the background (Part 1), Part 2 describes the research methods and study sites. Part 3 presents the general characteristics of the five wood villages. Part 4 provides information on recent changes in raw materials and products of wood villages. Part 5 lists the State authorities, the roles of these authorities for the various stages of the supply chain. Based on the actual status of the wood villages, Part 6 discusses related policies, and Part 7 concludes the report.

2. Methods and study sites

The study on wood villages was conducted by Forest Trends and VIFORES in 2012. The study focused on five wood villages in the Red River Delta, including Dong Ky, Lien Ha, Huu Bang, Van Diem and La Xuyen (Figure 1). Research was conducted on the status of wood villages in terms of timber sources, types of products, markets, product legality, economic benefits and environmental issues.

In the five selected wood villages, Dong Ky, Van Diem and La Xuyen represent the wood villages which use timber from natural tropical forests to produce fine-art timber products and traditional wooden furniture with high value; Lien Ha and Huu Bang represent the wood villages which use timbers from plantation forests and use artificial boards to manufacture the popular products with lower value.

Figure 1. Study sites in Red River Delta



The VPA formal negotiation process has ended. The households which take part in manufacturing, processing and trading businesses in wood villages are directly regulated under the VPA. Appendix 2 of the VPA (Definition of Legal Timber) provides seven principles of timber legality regulated to the households, of which Principle IV (Compliance with Timber Transport and Trading Regulations), Principle V (Compliance with Timber Processing Regulations) and Principle VII (Compliance with Tax Regulations) are directly related to the household businesses in the wood villages. Article 16 of the VPA (Social Security) clearly states that *"In order to minimize possible adverse effects of this Agreement, the Parties agree to assess the impact on ... local communities concerned and on their way of life, as well as on the households ..."* Article 16 also states the following: *"... take reasonable steps to mitigate any adverse effects. The parties may agree on additional measures to address any adverse effects."*

In the first half of 2017, Forest Trends and VIFORES reassessed the above five wood villages. The study aimed to examine the current status of household businesses, which includes the ability of households to meet the new requirements proposed by VPA. The results of this study are expected to be an important information source for policy makers in order to make policies and reduce the negative impacts that can occur to households in the wood villages when the VPA is implemented in the future.

During the survey, data and information were collected through group discussion and face-to-face interviews with households. The focus group discussions were conducted with commune and village leaders in each wood village. The information collected from focus group discussions comprises the general information of trading and manufacturing activities in each village, the socio-economic status, the roles of timber processing and trading activities for local livelihoods, the changes in wood villages recently and the

policies related to manufacturing, processing and trading households in the five villages. The face-to-face interviews via questionnaires were conducted with 146 households who directly involved in trading and processing activities in the five villages. The information collected from household interviews included input timbers, labor, investment capital, technology, equipment, environment, changes, pros and cons of household businesses.

In addition, the research team collected the necessary information from several import-export companies operating and some cooperatives in the wood villages to finalize the supply chains of wood villages.

3. The characteristics of five wood villages

3.1. The general information about wood villages

The surveyed wood villages are basically different from each other in terms of the production scale, the role of the timber industry in household livelihoods, the sources of input timbers, the types of materials, the main products and the output markets (Table 1). Dong Ky, La Xuyen and Van Diem wood villages use imported wood, tropical timbers from Africa, Laos and Cambodia, to manufacture the products with traditional designs. Huu Bang and Lien Ha wood villages use various types of timbers including artificial boards, domestic timbers and timbers imported from US and EU.

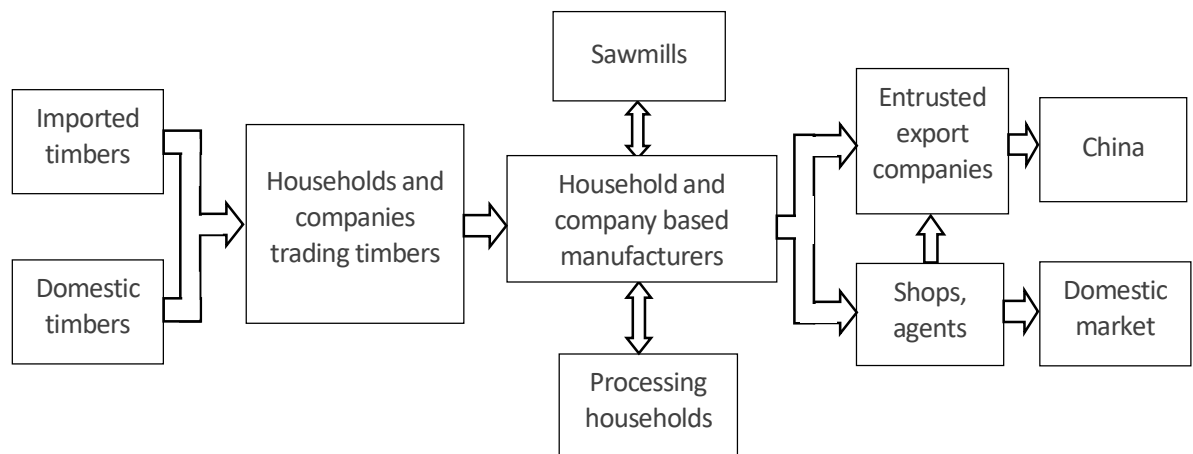
Table 1. The main characteristics in the surveyed wood villages

Wood village	Total households in the wood village (proportion of households working in timber industry)	Income from timber industry/ gross income of wood village (%)	Total volume of timbers used in a year	Major species of timber	Source of timbers used	Main products	Output markets
Dong Ky	3,500 (86%)	90	35,000 – 40,000 m ³ (80% from Africa, 20% from Laos, Cambodia)	Burma Padauk, Siamese Rosewood, Burmese Rosewood	Laos, Cambodia, Africa	Table, chair, bed, wardrobe... traditional style	China (20%), domestic (80%, mostly demanding customers regarding the design and product quality)
La Xuyen	2,000 (100%)	100	45,000 – 54,000 m ³ (70% from Africa, 30% from Laos, Cambodia)	Burma Padauk, Ipil, African timber species	Africa (mostly), Laos, Cambodia	Table, chair, bed, wardrobe... traditional style	Domestic market (100%), requirement for design and product quality is lower than Dong Ky customers
Van Diem	2,000 (70%)	70	36,000 – 45,000 m ³ (90% from Africa, 10% from Laos, Cambodia)	Burma Padauk, tali, Ipil	Mostly Africa timber, some from Laos, Cambodia	Table, chair, bed, wardrobe according to traditional style (mostly), several products belong to modern style	Domestic (100%), the buyer requirement is similar to La Xuyen
Huu Bang	4,250 (74%)	80	225,000 m ³ , including fiberboards and timbers (85% from EU and US, 10% from domestic forests, 5% from Africa)	Ash, beech, oak, acacia, cinnamon, Burma Padauk, tali, fiberboards	EU, US, domestic forests, Africa	Table, chair, bed, wardrobe, dressing table, tivi cabinet	Domestic (100%), modern designs, used by young customers
Lien Ha	1,600 (33%)	55	120,000 m ³ , including fiberboards and timbers (49% from domestic forests, 39% from Africa, 10% from Laos, Cambodia, 2% from EU and US)	Fiberboard, ash, walnut, beech, acacia, cinnamon, Burma Padauk, surian, pasak, Ipil	Domestic forests, EU, Africa, Laos, Cambodia	Bed, wardrobe, dressing table, tivi cabinet	Domestic (100%), modern designs, used by young customers

3.2. General supply chain of five wood villages

Figure 2 shows the general supply chain (from timbers to finish products and markets) of five wood villages. The chain begins with timber material sourced from imported wood and domestic forests. The timbers are supplied to the household manufacturers through timber traders (both household and company based), that transported to the processing site of households and companies. Before manufacturing the timbers are processed into designed pieces in accordance with the product specifications. Many households in the wood villages do not directly invest in manufacturing a finish product; they only produce a part of timber products for other manufacturers in the wood villages. Output products would be exported or sold in domestic market. Regarding export market, as the households in wood villages have not been authorized to directly export the timber products, they often assign a representative to sign the entrusted export contract with the export company. In domestic market, the products are manufactured by households in accordance with the orders from customers directly or from shops, agents, dealers in wood villages and other places.

Figure 2. General supply chain in wood villages



The wood villages are characterized variously by timber sources and timber species, product designs and output market (Table 1), thus the supply chain in each village has its own characteristics.

3.3. Livelihood and business status of the households in wood villages

The manufacturing, processing and trading activities of timbers and timber products play an especially important role in the livelihood of households living in the surveyed villages. Except for Lien Ha, where only one-third of households involved in timber manufacturing and processing businesses (the remaining two-third take part in other jobs), the proportion of household income from manufacturing, processing and trading timbers accounts for 70-100% of gross village income (Table 1).

In the wood villages, households are categorized into various groups; each group is responsible for a stage in the supply chain. These groups include:

- Group of households specialize in trading timber materials;
- Group of households doing both trading and manufacturing the timber products;
- Group of households with sawmills;
- Group of households processing a part of timber products;
- Group of households completes the product assembly;
- Group of households spray painting;
- Group of households specialize in trading timber products.

The proportion of households doing both trading and manufacturing timber products account for 70-80% of all households engaged in timber industry of wood villages.

Most of the households in wood villages do not register their-own businesses (Table 2).

Table 2. Status of business registration of households in the wood villages

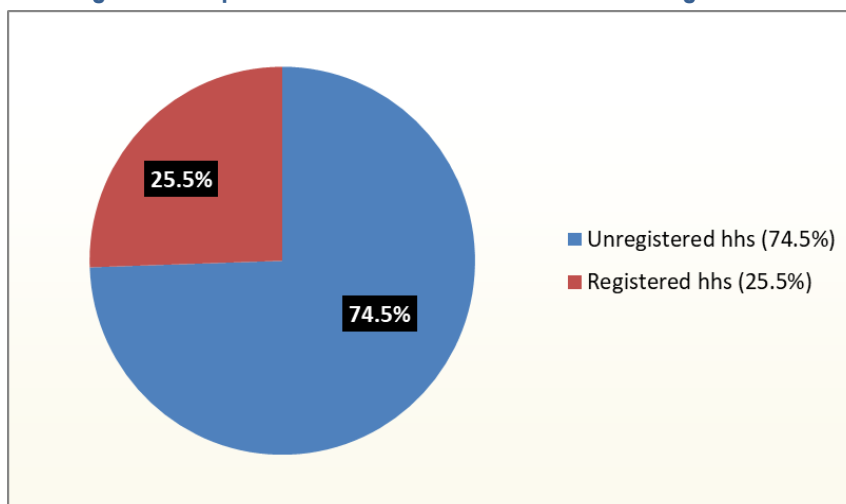
Name of wood villages	Number of households with business registration	Number of households without business registration	Proportion of households with business registration in the wood villages (%)
Dong Ky	800	2,200	73.3
Van Diem	678	722	51.6
La Xuyen	600	1,400	70.0
Huu Bang	268	2,882	91.5
Lien Ha	226	294	56.5
Total	2,572	7,498	74.5

Source: Survey data in 2017

Decree No.78¹ (2015) issued by the Government on the requirements for business registrations regulated that the households engaged in agriculture, forestry, fishery, salt production, etc., with low income do not have to register their own businesses and running a business as an independent legal entity in accordance with the Law on Enterprises (2014). According to this decree, the provincial People's Committee regulates the level of household income. The households with income exceeding the regulated level shall register their own businesses accordingly. Decree No.78 stipulates that if the registered household regularly used 10 or more laborers must register as an enterprise and operate the business in accordance with the Law on enterprises.

According to the research results in five wood villages, the number of households with business registration accounts for 25.5% (Figure 3). Most of these households involved in trading timber products, doing both trading and manufacturing timber products at home or at their shops. The households using many machines also need to register their businesses to use three-phase electric power.

Figure 3. Proportion of households with business registration



Source: Survey data in 2017

¹ (<https://thuvienphapluat.vn/van-ban/Doanh-nghiep/Nghi-dinh-78-2015-ND-CP-dang-ky-doanh-nghiep-290547.aspx>)

Unregistered households account for 74.5%; most of them are small-scale household manufacturers and do not use much machinery. These households have no retail store so that they only produce a part of timber product and not much interested in the local regulations for tax and fee.

The ratio of registered households directly engaged in market transactions (households trading timbers or timber products) is much higher than those in other groups.

In addition to a large number of households involved in trading and manufacturing timbers, many companies and cooperatives (hereinafter referred to as "enterprises") have been established and are directly involved in these activities in the wood village. In Dong Ky, there are 170 enterprises and most of these directly cooperate with Chinese partners. In Van Diem, La Xuyen and Huu Bang, the number of enterprises is less (13 enterprises in Lien Ha, 40 enterprises in La Xuyen, 30 enterprises in Huu Bang and 10 enterprises in Van Diem).

All enterprises in the wood villages have business registrations and operate their businesses in line with the Law on Enterprises.

3.4. Labors in the wood villages

Business activities in wood villages do not only play an important role in creating jobs for household members but also attract a large number of labors from other places (Table 3).

Table 3. Laborers in the wood villages

Name of wood villages	Population in each village	Number of village laborers work in the timber industry	Number of hired laborers	Total number of laborers in each village
Dong Ky	16,000	8,000	7,000	15,000
Van Diem	8,000	3,570	6,230	9,800
La Xuyen	10,000	6,000	4,000	10,000
Huu Bang	18,000	12,403	15,947	28,350
Lien Ha	8,000	2,600	3,120	5,720

Source: Survey data in 2017

Except for Dong Ky, where the quantity of village laborer (laborers from the households) is larger than the number of laborers hired from other place, the other villages have a number of hired laborers larger than the household laborers

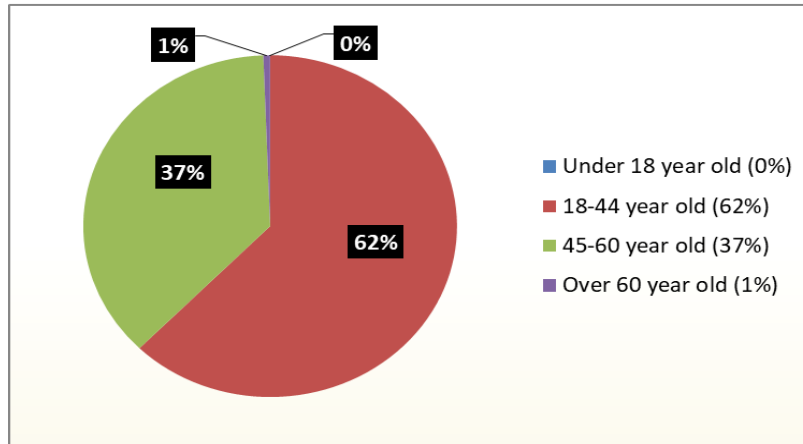
On average, each household has about 5-10 employees, including both household and hired laborers. The households in Lien Ha and Huu Bang employ more laborers, about 10 employees per household. The households in La Xuyen and Dong Ky employ less laborers (5 employees per household).

All employees are hired by households without official contracts, but through verbal agreement between the household owner and the employee. This form of oral contract is chosen by both sides because of several advantages. First, the employees in wood villages are seasonal laborers with demanding from market (e.g. near Tet holiday). Thereby, households, who hire laborer, do not want to sign long-term contracts with employees. Second, most of the employees are farmers and thus only available during their leisure time. They go back to farming if needed (e.g. planting, harvesting periods). Many households in the wood villages complain about labor shortage in these periods. Third, many employees claim that without formal contract they gain higher income because they do not have to pay compulsory expenses such as social insurance and health insurance as regulated by the law. Finally, both employees and households choose verbal agreements because both sides do not want to have any legal constraints when hiring and using laborers.

According to the labor characteristics in wood villages, the number of employed laborers in these villages is not stable. Survey data in La Xuyen shows that the employees often changes in the first months of the year, before and after Lunar New Year. The number of employees starts increasing after lunar January.

About 60% of employees in the studied villages are between 18 and 44 year old; the remaining proportion is mainly between the ages of 45 and 60 (Figure 4).

Figure 4. Labor rate by age



Source: Survey data for 2017

Several households have taken advantage of family labor at the age of 60, but this proportion is not significant, comprising about 1% of the labor force in the wood villages.

Males are employed more than women because males are considered to be able to participate in many stages of manufacturing process such as sawing, carpentry and spraying paints which are heavy and toxic jobs thereby considered to be not suitable for women. In addition, the timber manufacturing activities need skilled workers, and these jobs are mostly man-made. Females usually engage in easy works such as sanding and polishing products.

Regarding household laborers, men often undertake the specialized works of the carpentry such as selecting, purchasing timber materials, working with the sawmilling machine, and worker management, while women often in charge of financial management, selling products and managing the shop, or involve in sanding and polishing products.

About 68% of the laborers in the wood villages are male, and the remaining proportion (32%) is female.

Due to the labor division, the men and women workers are paid by different wage forms. The salaries of hired workers in the wood villages are paid in the form of product packages, working days or by month. According to the research results, the average wage of male laborers is from VND280 thousand to 300 thousand per day, while the average wage of female laborers is only VND170 thousand to 190 thousand per day. The monthly income of male is VND7-11 million per month, while the income of female labor is about VND4-7 million per month.

3.5. Raw materials, products and consumption markets

The wood villages use different species of timber materials to make various products for many groups of customers (Table 1).

Dong Ky, Van Diem and La Xuyen mainly use high-value natural timbers with imported sources (Table 1). In these three villages, one common feature is the use of Burma Padauk which imported from Africa to manufacture tables and chairs. In Dong Ky, several households use Siamese Rosewood and Burma Padauk, which imported from Laos and Cambodia, mainly to manufacture products then export to China. In La

Xuyen, *Sindora* from Laos is used to manufacture the products for domestic market. The wood villages use a large volume of timbers, about 30,000 - 50,000 m³ per year for each village.

The wood products of Huu Bang, Lien Ha are very different from those in other villages. Specifically, the manufacturing entrepreneurs in Huu Bang mainly use timbers from Europe and America, such as ash, beech and oak, to produce furniture for domestic market. Several entrepreneurs use artificial boards to occasionally manufacture beds, cabinets and dressing table. In Lien Ha, 50% of products are made from artificial boards, and the remaining (50%) is made from woods including ash, walnut, beech, burma padauk, surian, pasak and ipil, which originated from the EU and Africa, and a small quantity of wood imported from Laos and Cambodia. In these two villages, there are a number of households using timbers from domestic plantation forests, such as acacia and cinnamon.

In general, the products made in the studied villages were mainly wooden furniture comprising tables, chairs, beds, cabinets, dressing tables, TV shelves and altars. Dong Ky, La Xuyen and Van Diem manufacture all kinds of fine art wooden furniture with various decorative patterns on the products. The process of manufacturing products in these wood villages often passes many stages and consumes a lot of labors. For instance, a household in Dong Ky with 3-4 workers takes 2-3 months to complete a set of tables and chairs including one table, four chairs and two stools. The households in Huu Bang and Lien Ha mostly manufacture products with modern designs, with few patterns and decorations on the products, so that the manufacturing process is simpler and easier to use machinery with less skilled workers than other villages.

The timber products exported to China are often higher quality and better design than the products sold in the domestic market.

The legal risk for input timbers in wood villages is very high. In three wood villages using precious imported timber, all transactions between timber traders and household manufacturers lack legal evidence of timber (e.g. origin of timber, name of species, sales invoice, harvesting permit, transportation, tax etc.). According to the trading and manufacturing households, if required by law, they can request these documents from timber suppliers. However, this opinion of the household implies several problems. First, the current legislation requires evidence of the timber legality, but these regulations have not yet been enforced in the wood villages. This may be due to households lacking this information. Second, many legal documents required by law are very difficult or even impossible to get, and the risks associated with counterfeit documents are enormous. The survey results in the wood villages show that only 10% of households that purchase timbers from trading households require some kind of evidence on the legality of timber materials. Third, except for the export products that require documents, up to the present, most local buyers have not been aware of legality of timbers, which is why the trading and manufacturing households do not acquire legal documentation of timbers. According to the surveyed households, only 27% of the products sold by households have the documents showing the legal aspects of products, of which 26% is sale invoice and 1% is certified by the Forest Protection authorities for the origin of timber material.

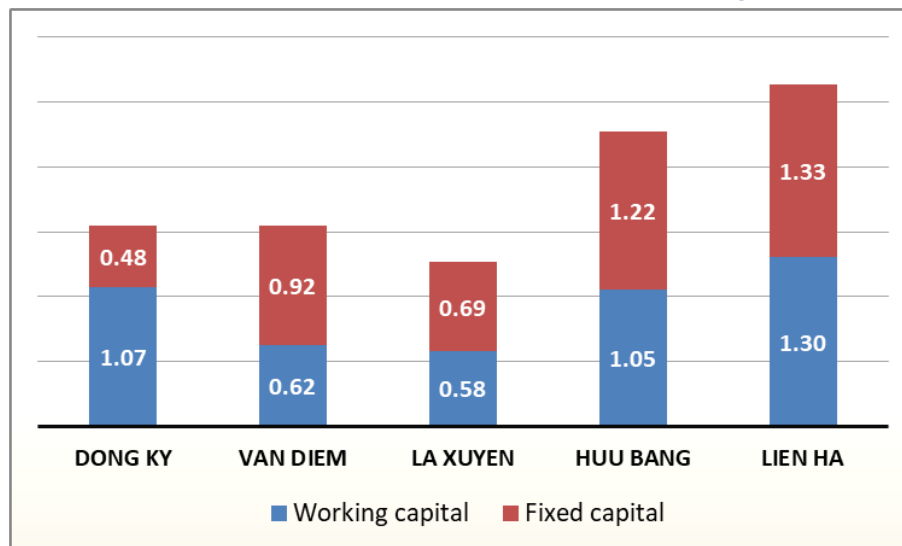
In Huu Bang and Lien Ha, the risk of legality of input timbers is lower because many households use imported wood from the EU countries, the United States and domestic timbers from plantation forests. In general, these species of wood have a clear legal source. However, similarly to Dong Ky, La Xuyen and Van Diem, the transactions of timber materials in Huu Bang and Lien Ha often lack evidence of the timber legality. This raises the legal risks of wood products traded on the market.

3.6. Investment capital for manufacture

The average investment for manufacturing by the households in the wood villages is about VND1-2 billion per household; the ratio between fixed capital and working capital is relatively balanced (Figure 5). Although this capital is small, for the scale of thousands of households which are involved in manufacture in each village, the whole investment capital of households in the wood villages is not small.

According to households, accessing capital is not a problem. Households can borrow capital from banks by using the collateral they have (e.g. red book). However, this is a commercial loan with a normal commercial interest rate and it is not a priority source. In addition, the time of loans is usually short, about 2-3 years, and it cannot be used for the long-term investments (e.g. purchasing equipment, machines, factory investment). As a result, 89% of surveyed households used their own capital or loans from their friends and relatives for the investments of manufacture. The remaining 11% borrow from banks.

Figure 5. Investment capital scale of households in the wood villages (in billion VND)



Source: Household survey in 2017.

The investment capital scale of the enterprises in the wood villages is much larger than that of households. The average capital of each enterprise is about VND32.5 billion, of which working capital and fixed capital are nearly equal. Despite the large capital scale, the enterprises still use their own capital or mobilize capital from their friends without using loans (the proportion of bank loans only accounts for 6% of the whole investment capital of enterprise).

3.7. Status of manufacturing areas

Except for Lien Ha, the production site of households is located in the industrial zone; most of the households in the other villages do not have separate production sites but using residential areas instead (e.g. housing land or gardens). Many households use their houses directly as production sites. In the 146 surveyed households, 52 households have manufacturing sites separated from their house, accounting for 35.6% of the surveyed households. The remaining proportion (94 households, 64.4%) uses their houses as the manufacturing site (Table 4). This indicates the lack of production sites in the wood villages.

Table 4. Status of manufacturing sites

	Huu Bang	Dong Ky	Van Diem	La Xuyen	Lien Ha	Total
Manufacture at home (household)	26	26	17	25	0	94
Separated site (household)	3	3	14	3	29	52
Total surveyed households (household)	29	29	31	28	29	146

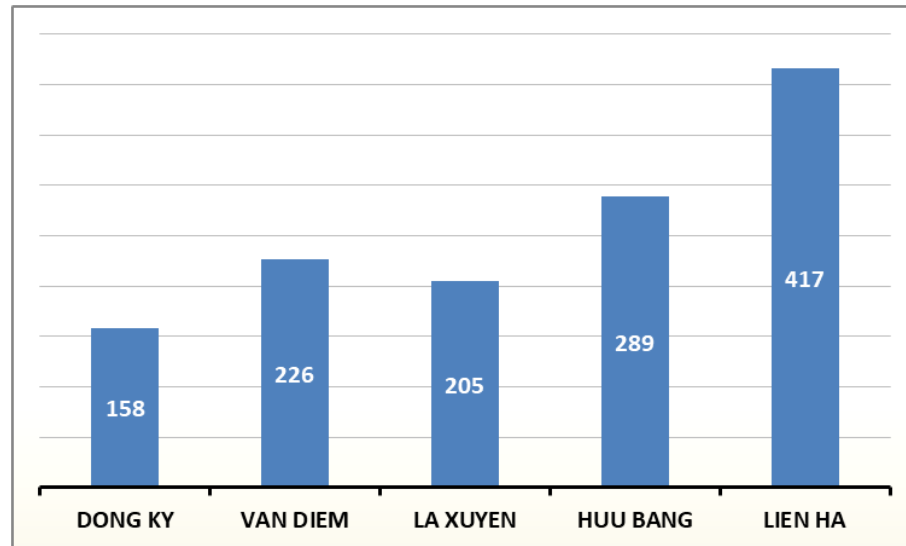
Source: Survey data for 2017

Because the production site located in residential areas, the manufacturing area of households is very limited (Figure 6). Thanks to the separate production site, the households in Lien Ha, on average, have much larger production area (417 m² per household) than that of households in the other wood villages.

Among the wood villages, the households in Dong Ky face the most challenge of manufacturing area, with an average of 158 m² for each household.

Due to the shopping demand of consumer for the Tet holiday, timber consumption in the domestic market increased sharply during the months at the end of the year. The households in wood villages need to reserve the timber products for this season while maintaining the manufacturing activities in all months of the year. The lack of production space thereby causes difficulties for households to stock the products sold in Tet holiday.

Figure 6. Average manufacturing area of households in the wood villages (in m²)



Source: Household survey in 2017

The stress on the manufacturing space is particularly high; especially for the timber traders they need space for their timber materials.

The enterprises, especially the companies in Dong Ky village, face the challenges in production space. The average manufacturing area of each enterprise in Dong Ky is only 380 m².

3.8. Environment in the wood villages

As the working place mixes with daily living space, the wood villages are experiencing the serious environmental problems. These problems include solid waste, sewage, noise pollution, dust, chemicals, etc.

The noise pollution in the wood villages is presently caused by sawmills and other woodworking machinery in residential areas. Only Lien Ha has a working place located in the industrial zone; it is isolated from residential areas, and the production activities do not affect the living environment. All of the other villages are subjected to noise pollution. In Van Diem, in order to minimize noise pollution, the local authorities require households with sawmills and CNC machine partitioned for sound insulation, but the noise pollution has not yet been resolved.

Most of the households in the wood villages do not install dust treatment systems. The dust from the manufacturing and processing activities cause the air pollution in the wood villages.

No wood village has sewage system. The wastewater from manufacturing places is directly discharged into the public sewage system then discharged into the general sewage system of the area. In La Xuyen, the wastewater from the processing workshops is poured into the Sat River, which supplies drinking water to households in this area. Since the water treatment system of the village is not good, polluted water sources affect the quality of drinking water of households.

The majority (64%) of households in the survey did not know the environmental regulations relating to manufacturing and processing activities in the wood villages. Only 36% of households knew them. Of these, only 29% of households would be able to meet these requirements if the State authorities required them; the remaining 1% said that the household was only capable of responding in part.

One of the reasons that households are not aware of environmental regulations is weak regulation enforcement at localities. According to the households, the local authorities do not make any environmental requirements on households.

The environmental regulations for processing enterprises are clearer. According to the law, enterprises that process less than 3,000 m³ of products per year must report on the environment status. If the processing enterprise is over 3,000 m³ per year, they must make an assessment report of environmental impacts. Thus, the current State regulations on the environment are only enforced to the processing enterprises. It has not yet been implemented to processing households in the wood villages.

3.9. Firefighting and fire prevention in the wood villages

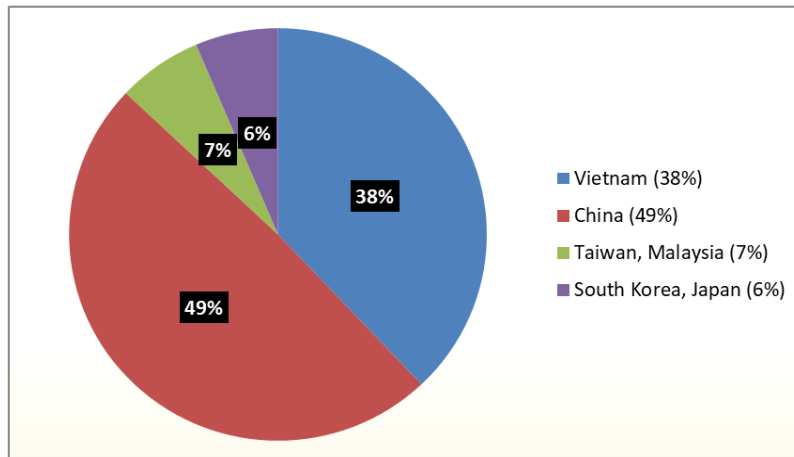
Only Lien Ha, which has its working place located in the industrial zone, has a fire prevention and firefighting system; no households in the other villages have this system.

Many households in the wood villages are equipped with fire extinguishers provided by the local authorities. They also participated in the training courses on firefighting and fire prevention which was organized by the government. However, these training courses are more formal than practical. The working place mixed with living space increases the risk for fire and explosion. The information from the local authorities showed that, from the middle of April and September 2017, there were nine fire workshops; by the end of 2016, there were 7 fires in Huu Bang.

3.10. Production technology

In Dong Ky, Van Diem and La Xuyen, because timber materials are expensive, many households that have sawmills began to use computer-controlled horizontal-band saw machines to reduce the quantity of sawn timber lost. Huu Bang and Lien Ha still use traditional CD horizontal band saw machines; several households in Lien Ha purchased veneer peeling machines for processing raw materials; some households in Lien Ha and in Huu Bang build the wood-drying kiln system.

Figure 7. Origin of machinery equipment



Source: Survey data in 2017

In general, wood processing technology in wood villages, especially own by households, is outdated. The popular equipment that the households used is planes, chisels and hand saws. Some households use simple machines, mostly purchased in Vietnam, or that come from China at cheap prices (87% are used

machines). Only 13% of the surveyed households purchased good quality machinery from Japan, Korea, Taiwan or Malaysia. Figure 7 shows the origin of machines used in the wood villages.

Using machinery in the wood villages to improve labor productivity has helped reduce labor costs as well as production costs. In recent years, households have equipped more machines to improve their productivity. According to the head of Van Diem village, Van Diem has annually purchased several dozen CNC per year. At present, this village owns several hundred of CNC machines. Using the machines has made the changes in manufacturing and processing products. According to a household in Dong Ky, "it took 20 days to make a set of tables and chairs previously, so far it has only taken 10 days." Similarly in Van Diem, a representative of a household said that "Previously one workshop has a skillful worker; one month completes a set of tables and chairs, now there are many machines so a worker can make 10 tables and chairs per month."

3.11. Information access

The households in the surveyed villages have had limited access to information on mechanisms and policies relating to timber industry (e.g. trading, processing, manufacturing and woodworking). Only about 4% of households in the survey have information on policies related to export markets and input materials; the remaining 96% have no information.

Information sources are provided by partners such as timber importers, exporters or shipping companies. According to the survey results, only 5% of households have heard of government regulations on the legality of input timber materials; 2% of households know about the Voluntary Partnership Agreement (VPA). Nevertheless, the households who have heard of the VPA said that they do not need to pay much attention to the implementation of the Agreement; according to them, the Agreement does not affect the wood villages because the products of wood villages are not exported to the EU market.

4. Recent changes in raw materials and outputs of wood villages

The study results of wood villages in 2012 and 2017 showed that the wood villages are changing. These changes consist of input timber materials, output markets, technology and labor.

4.1. Changes of using timber materials

Table 5 shows the changes of timber materials used in Dong Ky, La Xuyen and Van Diem in the period of 2011-2016. There are three wood villages using timber materials which belong to precious natural species imported from Africa, Laos and Cambodia.

Table 5. Timber materials used in Dong Ky, La Xuyen and Van Diem in 2011-2016

Unit: Percentage (%)

Timber species	Dong Ky		La Xuyen		Van Diem	
	2011	2016	2011	2016	2011	2016
Sindora	12	17	78	54	51	9
Burma Padauk	49	64	16	41	11	72
Siamese Rosewood	27	4	1	-	-	-
Burmese Rosewood, ebony, Ipil	-	15	-	4	-	19
Others	12	-	5	1	38	-

Source: 2011: Forest Trends and Vifores, 2013; 2016: Survey data in 2017

Note: "-": Low rate, less than 1%

Generally, the use of precious timber species, especially Siamese Rosewood, tended to decrease. In Dong Ky, Siamese Rosewood fell from 27% of input material resources in 2011 to 4% in 2016. In La Xuyen, this species is almost no longer used. One of the reasons for the decrease in using Siamese Rosewood is that it was included in the appendix of the Convention on International Trade in Endangered Species of Wild

Fauna and Flora (CITES). By the beginning of 2015, CITES Vietnam stopped granting the permits for Siamese Rosewood imported from Cambodia and Thailand, and only considered granting permits for Siamese Rosewood imported from Laos if they were certified for the legal origin of Siamese Rosewood by the CITES of Laos.

However, the use of Burma Padauk in the wood villages tended to increase. Among the imported timber species, this species has high demand both in the domestic and export markets. In Dong Ky, the current export products are mainly made of Siamese Rosewood and Burma Padauk. The proportion of Burma Padauk increased from 49% in 2011 to 64% in 2016. The upward trend in the use of Burma Padauk was also observed in La Xuyen (16% in 2011 to 41% in 2016) and Van Diem in particular (11% to 72%).

However, the origin of Burma Padauk used in the wood villages has changed. In the mid of 2016, the Laos government implemented a ban on the export of logs and sawn timber, so the quantity of natural wood from Laos used in the wood villages, including Burma Padauk, declined significantly. Instead of that, wood villages used timber species from Africa (*see details about changes in the imported timber supplied into Vietnam from the Report on imported timber materials of Vietnam by To Xuan Phuc et al. in 2017*).

The use of imported timbers from legal sources such as the EU and the United States, the use of artificial boards and timbers from plantation forests tended to increase in Lien Ha and Huu Bang (Table 6). In particular, in Huu Bang, oak and ash which were imported from the EU were not used much before, accounting for only 8% of all timber used in 2011. In 2016, timber imported from the EU (ash, oak and beech) accounted for 85% of total quantity of timbers used in Huu Bang.

Using natural wood such as surian, Burma Padauk imported from the tropical region tended to decrease in both Huu Bang and Lien Ha villages.

In Lien Ha, the use of planted wood such as acacia, cinnamon and artificial boards tended to increase. This is in contrast with the trend of using these timber species in Huu Bang. The difference in the trend of using these materials in these two villages is due to the dissimilar proportions of various timber products in these villages.

Table 6. Timber materials used in Huu Bang and Lien Ha in 2011-2016.

Unit: Percentage (%)

Timber species	Huu Bang		Lien Ha	
	2011	2016	2011	2016
Oak, ash, beech	8	85	12	2
Surian, Burma Padauk*	13	5	64	39
Acacia, Cinnamon	12	6	1	15
Boards	27	4	17	34
Others	40	-	6	10

Source: 2011: Forest Trends and Vifores, 2013; 2016: survey data in 2017

Note: "-": Low rate, less than 1%

***": Burma Padauk from Africa used in Lien Ha accounts for about 1% in 2016*

4.2. Changes in output markets for products

The output market of products in the wood villages has changed dramatically in recent years, especially from China. In the survey villages, Dong Ky is the wood village which had significantly changed. In the past,

60% of Dong Ky's products were exported to China (*To Xuan Phuc, et al. 2012*); in 2016, this proportion only accounted for 25-30%. Due to the decline of the demand in Chinese market, the households in Dong Ky have changed to manufacture timber products for the domestic market.

The demand for products in the domestic market has also changed recently. Specifically, the products with traditional designs, which use valuable imported timbers from natural forests, are being replaced by more popular products made of imported timbers from plantation forests, artificial boards and various types of domestic timbers from plantation forests. This trend is shown considerably in Huu Bang and Lien Ha.

The shift in the output structure of products has happened due to many reasons comprising of the changes in export policy of timber materials supplied to Vietnam, change in consumption demand for precious wood products in China, and policies of Vietnam which related to the production, processing and marketing of wood products. Specifically, the timber materials sourced from Laos (and Myanmar) have so far been lost completely. The supply sourced from Cambodia seems to have increased, but this source is unstable, and the increase is not enough to offset the lost supplies from Laos and Myanmar. The supply sourced from Africa has increased, with the expectation that timber species from this source could replace the lost species due to the ban of Laos Government (and the instability of the Cambodian supply). However, the imported wood species from Africa are different from those imported from Laos, Myanmar and Cambodia and mainly used in the domestic market. According to several companies, domestic consumption of imported wood species from Africa is likely slowing down.

The changing of timber products in the wood villages, especially in Dong Ky, is due to the declining of consumption demand for precious wood products in China. According to households in Dong Ky, Chinese customers previously rushed to their villages to order products. This situation has no longer happened in recent years. Presently, only few Chinese customers come to the village. According to households, the decline in demand in China is due to the government enforcing anti-corruption measures, which reduced the demand for expensive and luxurious products including furniture made of precious wood.

The policy of Vietnam has increasingly encouraged the use of wood products made of artificial boards and timbers from plantation forests. The government is closing down natural forests, encouraging the development of plantation timbers and various types of boards. The supply of planted timber, including rubber wood, and the supply of artificial boards are growing. This has also changed the timber products in the wood villages.

5. The roles of State authorities for the activities in wood villages

In principle, the manufacturing, processing and trading of wooden furniture in the wood villages is subject to the supervision of many State authorities. The functions and tasks of these organizations are variously depending on the responsibilities at each stage of the supply chain. The specific agencies which directly relate to the activities of households in the wood villages are:

- The Commune People's Committee has the functions of administrative management for the manufacturing and processing households, helps the Tax Department to collect tax from trading households and helps Forest Protection organizations certify the output products of households when they are sold in the wood village and transported to the other provinces. The Commune People's Committee is also responsible for statistics and management of temporary laborers in the wood village.
- The Tax Department through the Commune People's Committee is responsible for collecting excise tax and business tax from households that register their businesses in the wood village.
- The District People's Committee plays the role of verifying and granting business registration certificates to households doing business in the wood village.

- The Forest Protection Department at the district level plays the role of inspecting and verifying the species of timber and timber products used in the processing and transporting activities of households.
- District fire fighters have the role of propaganda and training in fire prevention in their localities. Annually, households are trained in fire prevention and are encouraged to obtain fire extinguishers.

The governance system for the enterprises manufacturing, processing, trading timbers and wooden furniture differs from the system of monitoring household activities. Specifically, it includes:

- The Provincial People's Committee has the role of appraising and approving the project to establish wood processing and manufacturing enterprises.
- The Department of Planning and Investment has the role of receiving the registration documents for the establishment of enterprises, granting the license to establish enterprises when the project is approved by the Provincial People's Committee.
- The Department of Natural Resources and Environment appraises and approves the report of environmental impact assessment, which is the basis for the approval of the project by the Provincial People's Committee. Additionally, this Department is responsible for annual inspection of how enterprises comply with the environmental regulations.
- The Tax Department is responsible for administration of enterprise tax, receiving, examining and supervising the annual tax reports of enterprises.
- The District Forest Protection Office has the function of inspecting and verifying the sources of input timbers used by the enterprises. Regarding importers, forest rangers are responsible for inspecting and certifying timber materials when they are transported to the wood villages before being put into storage and sold to households. For manufacturing and processing enterprises, the Forest Protection office provides the book for recording the input and output of timbers and timber products (refer to as in-output book for forest products) so that the enterprise can update the timber records. The Forest Protection Office certifies the origin of timber for the products according to the timber records and inspects the quantity and species based on the in-output book for forest products.
- The firefighters are responsible for appraising and approving the fire protection system of enterprises before putting into operation.

Although the State authorities have a clear function, the inspection and supervision activities of these authorities are weakly performed at the localities, especially for households. Many surveyed households said that they did not have any interactions with the State authorities, except that households had to pay the excise tax to the commune. According to the State authorities, their restrictions on monitoring and supervising the large number of households in wood villages are due to their lack of human and financial resources. This is also the reason that leads to the spontaneous activities of households in the wood villages.

6. Current status of wood villages and policy implications

6. 1. Economic and legal position of the present wood villages

The wood villages in the entire country, including five surveyed villages, play a very important role in the current economy. They provide the main livelihood for tens of thousands of households, creating jobs for hundreds of thousands of workers in wood villages and from other places. However, up to the present, the manufacturing and trading businesses of the wood villages are still spontaneous, and their output products mainly follow the market demand and consumer preferences.

The spontaneity of the activities in wood village is one of the important characteristics of the informal economy. In simple terms, the informal economic sector is an industry that has not been recognized by the

legal system of the country as its activities have not been recognized by any governance system (through official registration). The informal economy also does not contribute any revenue to the State budget. The current activities of most households in the wood villages have these characteristics.

The activities of households in the wood villages are informal activities. However, this does not mean that the activities of households are not important. On the other hand, considering the scale of labor and the role for local livelihood, wood villages play a very important role at present and in the future.

Decree No.78 in 2015 issued by the Government stipulates that the households who undertake the manufacturing, processing or trading activities and whose income exceeds the low income threshold stipulated by the Provincial People's Committee need to register their own businesses to become the official business households. When registering, households need to pay a registration fee (VND100,000 per household). Once registered, households are annually required to pay excise, with rates based on household income, value added tax and household income tax. For households with business registration, if the household employs 10 or more workers with stable work annually, the household should register to be transformed into an enterprise and operate under the Law on Enterprises.

The majority of households in the wood villages (74.5%) have not registered their business yet. This may be due to the fact that the income of the households is below the income threshold stipulated by the Provincial People's Committee, or the income exceeds the threshold but they do not want to register their businesses because they do not want to pay taxes in accordance with current regulations. It is also possible that the households have income that exceeds the threshold but they do not know the requirement to register. These cause the majority of households in the wood villages become part of the informal economy. This informal sector includes not only those who do not qualify for registration and those who qualify but have not yet registered but also a large number of workers employed by the households in these wood villages.

According to the legal regulations, households whose income exceed thresholds without business registration and do not pay statutory taxes are illegal producers and traders. So far, there are no official statistics on the number of households in wood villages that are not eligible for business registration (informal or legal) and the households that are eligible for business registration but have not yet registered (unofficial, illegal). However, as the annual income of households in wood villages at present, it is difficult for households to be in the low-income group. There should be sufficient surveys to capture the economic conditions and scale of this informal economic sector in current wood villages. The results of these surveys play a special role in the process of factual policymaking, supporting the industry for development and mitigating policy risks in the future.

6.2. Legality of timber sources and the changes in timber supply sources of wood villages

The supply sources of timber materials to households in the wood villages are various, including those with high legal risk (for instance, precious timber species imported from Laos, Cambodia and Africa) and low-risk wood species (planted wood, wood imported from the EU, the US).

The results of this study show that there has been a shift in wood villages from the use of high-risk timber to low-risk wood species. The shift is not only expressed by species but also by the quantity of used wood. The demand for low-risk timber species tends to increase while high-risk species, especially precious imported timber species, decrease. There are many reasons for this shift, including the strict control of the export of raw materials by the timber supplying countries, the efforts of the international community to protect the endangered timber species, the expansion of the list of timber species on the list of protected species, the incentives for the use of plantation timber by the Government of Vietnam and the changing needs and consumer preferences in the domestic and export markets, especially in China. The shift in timber materials used in wood villages and the increase in the use of low-risk wood species reveal the positive signals in wood villages towards more sustainable for the environment.

However, the legal risk of timber materials in wood villages still exists, and the complete removal of precious wood species used in wood villages is very difficult because of large volume currently used. In addition, the quantity of imported wood from Africa which is used in the wood villages increases. These are new risks for the wood villages.

The risks of raw materials used in the wood villages are not simply the use of imported species but also the presence of the evidence for timber legality. At present, the transactions between timber traders and household manufacturers in the wood village; the transactions between timber product manufacturers and buyers are informal transactions. These transactions usually have no documented evidence to prove the legality of the transactions as well as of the input-timber sources and output-timber products. The lack of such evidence raises the legal risks of wood products being sold.

At present, it is weak enforcement or lacking of enforcement scheme for legal regulations which relate to the manufacturing and trading activities in the wood villages. There is almost no interaction between the State authorities and trading households in the wood villages. Most interactions happen to the enterprises, timber trading households; the large-scale entities with contributions to the State budget via taxes. The situation of weaknesses and lacking of law enforcement scheme at localities directly contribute to the legal risks of timber sources as well as wood products presently made in wood villages.

6.3. Using laborers and complying with environmental regulations in the wood villages

Hundreds of thousands of employees working in the wood villages presently shows the importance of wood villages to the economic well-being of local people. The nature of this labor force is farmers with leisure time mobilized from farm households including many poor people. This shows the importance of wood villages to the current situation of poverty reduction.

However, as the households in the wood village are one part of the informal economy, labor in the wood villages is informal. Informal laborers are legal if they work in households with annual income less than the 'low income threshold' regulated by the Provincial People's Committee (and do not have to register as a business household). Labor is illegal if the household has income beyond the low income threshold. This is also illegal if the household does not comply with the requirements of the current law in the use of labor (e.g. contract conditions, labor safety conditions). The survey results in five wood villages show that households are generally not compliant with the labor-use regulations. Using the illegal labor directly creates the legal risks for wood products of households. So far, the risk aspects of labor and the employment of households in the wood villages have not been paid attention yet.

Until now, the current legal framework which has regulated the environmental requirements and environmental protection for processing entrepreneurs has been relatively clear. However, these regulations only focus on formal groups, for example, processing entrepreneurs that are already registered for business. There are no legal frameworks for household manufacturers; especially those who have not register their businesses yet. The legal gaps in environmental regulations which relate to occupational health and safety, fire and explosion prevention, pollution treatment, etc. for the households in wood villages make the living environment of wood villages unsafe and polluted. In the future, the policies need to be changed to improve the environment in the wood villages.

6.4. Challenges of manufacturing, trading activities in wood villages and support policy

The household manufacturers and traders in the wood villages have faced many challenges, including the restrictions on accessing production resources. The shortage of working places seriously occurs in most wood villages. This makes households use their daily living space for manufacturing. This leads to many risks, including the risks related to occupational safety, fire, explosion and pollution in the wood villages. It is urgent for wood villages to separate the working places from family-living spaces. However, there has been no solution for this problem.

Several surveyed households said that access to financial resources for production is not a problem because commercial banks are willing to provide loans for households as long as the households have collateral. However, this financial capital is usually a commercial loan, with a quick payback period (usually 2-3 years). The banks often do not lending to households for long-term investment, such as the financial capital for household start-up, investment in technology changes or the expansion of manufacturing spaces. In other words, households in the wood villages face difficulty in accessing long-term financial capital.

The Law on Support of Small and Medium-sized Enterprises that was approved by the National Assembly on June 12th, 2017 and that will come into effect on January 1st, 2018 provides the support for small and medium enterprises. The support includes assistance to the households with business registration, who are changing to enterprise model. The support includes administrative and technical measures to help the enterprises meet all eligibility criteria so that they can access preferential loans, such as the preferential period, forms of payment, simplification of administrative procedures and other measures to encourage enterprises in compliance with the requirements of the law. This law provides measures to assist enterprises in accessing new manufacturing areas, new technologies, market expansion and building capacity. Under the new law, new enterprise established by the transition from household business will receive free administrative assistance to meet the requirements (for instance, registration assistance and tax exemption for 3 years). Newly established enterprises will be allowed to access to preferential capital and be trained to improve capacity. They will be helped to interact with other firms in the supply chain. The State will also set up a special fund to support these enterprises.

The households without business registration in the wood villages are one part of the informal economy, thus is not eligible to access the support regulated by the Law. However, this support can be a motivation for households to register their businesses, to access support resources to become official businesses and even become the enterprises in the future.

Article 70 of the Law on Forestry issued by the National Assembly on November 15th, 2017 and takes effect on January 1st, 2018, stipulates that organizations and individuals who joined together in trading and doing business in wood products will be allowed to access to preferential loans. This means that the households in the wood villages, if joined together in trading and manufacturing activities, shell be able to access these loans, implementing Article 70 of this law can motivate the households in wood villages to register their own businesses.

6.5. Requirements for households in the wood villages by the VPA

The timber products of the wood villages which include export and domestic products are regulated by the FLEGT VPA. Specifically, Article 13 of the VPA that was initialed by the EU and Vietnam Government states that "... Viet Nam shall verify the legality of timber products exported to non-Union markets and timber products sold on domestic markets ". The implementation of the VPA in the future may considerably impact on the manufacturing, processing and trading businesses of households in the wood villages.

Appendix II of the VPA Agreement clearly regulates seven principles concerning timber legality for households². In the current context of wood villages, Principle IV (Compliance with the regulations on Timber Transportation and Trade), Principle V (Compliance with Wood Processing Regulations) and Principle VII (Compliance with tax regulations) directly relate to the households in the wood villages.

Principle IV (*Compliance with the regulations on timber transportation and trade*) includes the following criteria:

² Principle I: Domestic logging complies with the regulations on land use rights, forest use rights, management, environment and society. Principle II: To comply with regulations on handling confiscated timber. Principle III: To comply with regulations on imported wood. Principle IV: To comply with the regulations on transportation and trade of timber. Principle V: To comply with the regulations on wood processing. Principle VI: To comply with export regulations and Principle VII: To comply with the regulations on tax.

- Criteria 1. To comply with the regulations on trading and transporting unprocessed timbers that are harvested and/or salvaged from domestic natural forests. This criteria stipulates that the timbers should be invoiced in accordance with the regulations of Ministry of Finance (in case of household purchasing timber from organizations), with an packing list of forest products, sealed by forest ranger for large diameter timber and a document certified by forest rangers for the seal what so-call minutes of placing forest hammer marks.
- Criteria 2. To comply with the regulations on trading and transporting unprocessed timber harvested from concentrated plantation forests, home gardens, farms and scattered trees. This criterion includes the regulations similar to the criteria 1.
- Criteria 3. To comply with the regulations on trading and transporting imported timber and timber products that have not been domestically processed. The regulations are similar to those in criteria 1 and 2.

Regarding the transportation of wood products after processing, originating from natural forests, imported timber, plantation forest timber, etc. Criteria 5 and 6 stipulate that households should comply with the regulations on the legal dossiers (financial invoices in accordance with the regulations of the Ministry of Finance, the packing list of forest products, and minutes of placing forest hammer marks).

In the current status of wood villages mentioned in this report (Part 3), the transactions in the wood villages, including the transactions between timber traders and household manufacturers, between household manufacturers and buyers are informal transactions. These transactions have no evidence or documents which demonstrate the legality of the timber sources and of the products after processing. This means that for the current status of manufacturing and trading activities, most households in the wood villages cannot meet the criteria in Principle IV.

Principle V (*Compliance with regulations on wood processing*) includes the following basic criteria:

- Criteria 1. To comply with the regulations on the operation of processing entrepreneurs, which include compliance with the regulations on fire fighting and prevention (design and approval of firefighting and prevention, compliance with regulations on occupational safety).
- Criteria 2. To comply with the regulations on the legal origin of timber to be processed (including compliance with the regulations on legal timber dossier for timber harvested from forests of households, timber purchased from organizations, timber purchased from other households, timber harvested from natural forests, imported timber). In general, legal documents include financial invoices in accordance with the regulations of the Ministry of Finance, the packing list of forest products, and minutes of placing forest hammer marks.

As mentioned in Part 3, the lack of working place is a common and serious problem in most wood villages. The lack of working place leads to the use of daily living spaces of households as manufacturing area. This leads to the fact that most households do not know and do not comply with regulations on fire fighting and fire prevention, occupational safety and health. Applying criteria 1 of this principle, in the future the wood villages will be extremely challenged unless the government allocates the working place for households (similar to the model of Lien Ha).

As mentioned in Part 3, most of the transactions in the wood villages are informal. Current households do not understand and have no interest in the legality of the timber materials for processing. With the current status of the households, it is very difficult to request legal documents for the input materials and for wood products.

Principle VII (*Compliance with regulations on tax*) includes the following main criteria:

- Criteria 1. To comply with the Law on taxation which stipulates that the household should comply with the law on tax declaration, registration and payment

At present, most households in the wood villages have not yet registered their businesses to become a business household. Therefore, they do not have to comply with the requirements relating to tax registration, declaration and payment. However, as mentioned in Part 3 of this report, probably there is a number of households in the wood villages that must register as business households to fulfill their tax obligations, however these households has not registered yet (because they do not want to register, or do not know about the requirements to register). Identifying the households that must register and providing the scheme to ensure that these households register and fulfill the tax obligations will be a major barrier for the State authorities in the future, especially in the context of weak local enforcement capacity.

If the State allocates sufficient resources to require households to comply with the VPA regulations, implementing VPA in the future with strong interventions (e.g. the closure of manufacturing entrepreneurs or households that do not meet the requirement of the VPA) will negatively affect most households in the wood villages.

In order to mitigate the adverse effects of the VPA implementation in the future, Article 16 of the VPA provides the measures for social safeguards which emphasize "... *the Parties agree to assess the impacts on ethnic minorities and local communities concerned and on their way of life, as well as on the households and the timber industry.*" In addition, "*the parties monitor the impacts of this Agreement ..., taking reasonable steps to mitigate any adverse effects. The Parties may agree on additional measures to address any adverse effects.*" The main findings of this study are presented in Part 3, which provide important information on the current status of the wood village, thus facilitating the State authorities to develop appropriate approaches for wood villages to mitigate the adverse effects on households when the VPA is implemented.

6.6. Policy options for the households in wood villages within current context

The study of the informal economic sectors offers four policy options for these sectors (Williams, nd), including: (i) doing nothing, (ii) de-regulating formal entrepreneurship, (iii) eradicating informal entrepreneurship and (iv) formalizing the informal economic sector. The arguments for each option are as follows:

- *Do nothing.* This option is based on the belief that the informal trading, manufacturing and processing entrepreneurs are important for the formal base in the future, it therefore is not necessary to take any action on informal entrepreneurs. However, many observers said that the existing situation of informal manufacturing entrepreneurs will negatively impact on formal entrepreneurs (e.g. unfair competition), on consumers (e.g. goods and services provided by informal entrepreneurs are low quality), on employees (poor and unsafe manufacturing conditions), and on the Government (state budget lost a source of revenue due to no contribution of tax from these entrepreneurs). According to these views, the '*do nothing*' option cannot be a policy measure because this approach will make the negative impacts of informal entrepreneurs 'sustainable'.
- *De-regulating formal entrepreneurship.* Those who selected this approach assumed that informal entrepreneurs are the product of the high demand of the State authorities; therefore, it is necessary to deregulate the requirements that are applied to the formal entrepreneurs. In line with this view, when formal entrepreneurship requirements are deregulated, economic activities will be carried out in the context of deregulated requirements and this will help informal entrepreneurs meet the new requirements. However, many observers said that this is not a suitable solution in economic development because it does not create incentives for the growth and more sustainable economic development in the future.
- *Eradicating informal entrepreneurship.* This approach assumes that informal entrepreneurship operates in the breach of tax rules and that they will continue to violate as long as the costs which are involved in the violation, including penalties, are smaller than the paid taxes. Therefore, the appropriate policy and solution for this group is to *eliminate* these entrepreneurs from the

economy. However, many observers argue that the use of this strong approach may lead the State authorities to confront manufacturing entrepreneurship, which negatively impacts on the relationship between manufacturing entrepreneurship and State authorities.

- *Formalizing informal entrepreneurship.* It is the best solution in policy options because this approach improves working conditions, improves the quality of goods and services provided by the entrepreneurs and generates revenue for the Government via tax.

In many cases, the measures can be applied simultaneously to different target groups. This depends on the characteristics, capacity and motivation for development of each group. For example, when support is no longer available, the Government may decide not to apply any form of intervention to informal entrepreneurs who just start up. The Government may also impose penalties, even closure for informal entrepreneurs who have high income but repeatedly violate the State regulations.

The previous studies (Cling, et al. 2011, 2014) showed that formalizing informal entrepreneurs requires strong incentive measures. Such strong measures include intensifying investigations, identifying and punishing violators. The incentive measures may include tax exemptions, tax reductions, building capacity, free consultations, etc.

For the households in the wood villages, formalizing is the best solution in the near future. To do this, the State needs to have a fair and relevant view of the importance of wood villages to the household economy and their role in creating jobs and poverty reduction. Accurately positioning the role of wood villages is extremely important, helping the State authorities identify the appropriate schemes and adequate policies in line with the status of the households in the wood villages. Strong measures should be applied, especially focusing on reinforcement of monitoring the timbers supplied into the wood villages, which is undertaken by the groups of healthy enterprises and better-off households with large scale of manufacturing and processing business. The incentive measures should be applied to households engaged in manufacturing and processing business in the wood villages in order to transform eligible households to the households with business registration. These measures may include the information support, legal advice and administrative assistance to help households register their businesses. Preferential tax measures (e.g. tax exemptions) should also be applied to households. The special funds which support the setting up of small and medium enterprises in the near future should be offered to assist the households shifting from informal to formal entrepreneurship.

Encouraging households to become one part of the formal economic sector can also be done by assistance measures to support households become a part of supply chain. At present, several cooperative business models have been established between the companies that supply the timber materials and the households own manufacturing and processing businesses in some wood villages (e.g. TAVICO's model) (*To Xuan Phuc, 2017*). It is necessary to conduct in-depth studies of these models in order to identify the strengths, weaknesses, risks and opportunities for future replication.

With the support of the international community, the Government of Vietnam is starting to implement the projects with the objectives of supporting the shift to formalism. One of the current projects is the project of the International Labour Organization (ILO) in collaboration with the Vietnam Cooperative Alliance and the Ministry of Labor, Invalids and Social Affairs³. The projects with similar objective need to be developed to assist the households in wood villages in transforming to the formal model. In order to do this, it requires the great attention and high priority from the State authorities, development organizations, vocational social organizations, timber business community and the households themselves in the wood villages.

³ http://www.ilo.org/hanoi/Whatwedo/Projects/WCMS_541906/lang--vi/index.htm

7. Conclusion

The report examines the current status of manufacturing and trading businesses, focusing on the households in five wood villages of the Red River Delta. The report was done in the context of that Vietnam timber industry is comprehensively integrating with the international community. The integration is reflected via Government commitments to establish, and rigorously enforce the policies to ensure that the timber products of wood villages are legally marketed.

The report shows the positive signals presently changing in the wood villages, which is reflected via the shifts from the use of precious natural timber species with high market value to more sustainable and environmental friendly timber sources. However, the manufacturing, processing and trading activities of households in the wood villages still face many challenges, including the legal risks of the raw materials that are used, the lack of working areas, the risks of labor safety and of environment, and access to long-term capital. These challenges consist of new difficulties occurred in the context of market integration.

The challenges and risks which the households in the wood villages are facing show the aspects of an informal economic sector. Since the important role of wood villages to household livelihoods and employment for workers, and in the context of the Government efforts to implement commitments to remove the illegal logs, it is essential to support the households transforming into formal business model. In order to do this, it requires a combination between the rigid mechanisms (including effective sanctions and strict law enforcement) and the soft mechanisms (including assistance measures and support policies for households). The efforts not only require legitimate concerns and priorities from government, but also the role of the international community, vocational social organizations, business community, and households themselves in the wood villages towards sustainable development in the future.

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