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REPORT

WOOD PROCESSING SECTOR

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SUPPORT BUSINESS ASSOCIATIONS TO PREPARE STUDIES ON DEVELOPMENT STRATEGY FOR TWO SELECTED SECTORS

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Introduction

The wood processing sector highly occupied by the Government in terms of policies and mechanism to support its manufacturing and trade development thanks to its impressive growth rate and continuously appearing in group of highest export turn over products in recent years.

However, these policies have limited impacts because of their disjoint and unsystematic supporting system. Especially in the context of Vietnam negotiating free trade agreements with big partners such as the Trans-Pacific Partnership (TPP), EU – Vietnam Free Trade Agreement (EVFTA), the wood processing sector has not managed to suggest an overall negotiating position for itself and effectively taken advantage of the consultation mechanism in international trade negotiation set out by the Prime Minister.

This is partly due to a lack of orientation towards developing the sector's products and market, as well as the mismatch between production capacity and firms' capacity and demand. From a management view point, the Government designed and adopted a development planning for the wood processing industry, just like other industries. It is, however, mainly subjective goals from the government perspective, without specific supporting measures and especially a direct link to business.

Therefore, it is necessary to study the competitiveness of Vietnam wood processing sector in order to identify an appropriate development orientation for this sector in the future and make appropriate recommendations, especially in free trade negotiations. This will be foundation for the sector to make suitable suggestions and overall negotiating options.

The research is conducted to satisfy part of the above demands of the wood processing sector. This report is under the framework of 2014 NSO-5 of EU-MUTRAP project, collaborated with the Vietnam Chamber of Commerce and Industry (VCCI).

PART 1 – OVERALL AND DEVELOPMENT ORIENTATION OF VIETNAMESE WOOD PROCESSING SECTOR

This part focuses on the status quo and developing trend of the wood processing sector as well as wood products market and related policies in the past few years (I). A general developing orientation for the sector would be formed based on those findings (II).

I. OVERALL OF VIETNAM WOOD PROCESSING SECTOR

Unlike many sectors, the wood processing sector has a quite special scope. Specifically, in terms of horizontal structure, this sector is often considered in larger scope, including not only wood processing activities but also other forest products (bambusodaea plants..). However, it does not include paper manufacturing. In terms of vertical structure, this sector closely related to plantation activities (to create more materials) as well as forest exploitation to get materials for manufacture. Therefore, these are often discussed together in most studies on wood processing sector.

Under this report's scope, the wood processing sector is understood as manufacturing and processing wood and forest products except for paper manufacturing. The manufacture consists of all levels (wood chipping, cutting, drying, processing semi-finish products, manufacturing finished products). Forestry activities (plantation, forest exploitation) are not covered in this report as a part of the wood processing sector. Instead, they are considered, from the sector's input perspective, as an inseparable element of the overall strategy of this sector.

In general, Vietnam wood processing sector has witnessed an impressive growth for more than a decade in all facets: from manufacturing scale, the number of players, labor force to products' total value.

1. Number of wood processing firms and units

In general, wood processing firms and units can be divided into 03 groups:

- Group of firms processing wood and non-timber forest products (NTFPs): those are mainstream firms, having Business License (or Investment License), operating under law of enterprise and related laws;

- Group of wood processing units in wood craft villages: those units may operate under the form of enterprises, but most of them operate under the form of households, located in craft villages. This group complies with laws related to its business forms (law of enterprise, cooperative or household)while enjoys regulations, policies relating to craft villages;

- Group of households manufacturing and trading wood products: this group mostly manufacturing in small scale, doing both production and retails, not located in concentrated craft villages.

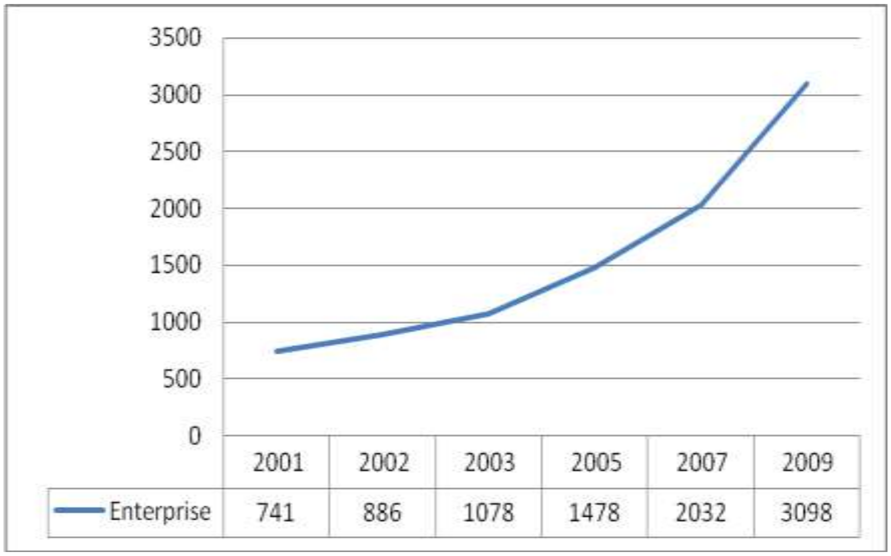
Official statistics are only available for the first group (enterprises). For the second group, there are only data at craft village level (there are currently 340 wood craft villages nationwide). There is even no data at all for the last group. Therefore, the following analysis of the scale of the wood sector is mainly for the first group (firms manufacturing/processing wood and/or NTFPs).

Regarding the number of subjects participating in this sector, although there is a difference between data cited, all those data agree on one point: the official number of wood processing firms has increase dramatically in recent years.

According to data from “Mapping related parties for FLEGT/VPA in Vietnam” (Forest Trend, 11/2011), in the period of 2000-2009, the number of wood processing firms increased from 741 firms in 2000 to 1,710 firms in 2005 and 3,409 firms in 2009 (the average growth rate is 18% per annum). A report of Department of Agricultural, Forest, Fishery Products Processing and Salt Production – Ministry of Agriculture and Rural Development “Planning Vietnam Wood Processing Industry towards 2020 – Orientation towards 2030” 6/2013 stated that there are 3,900 official firms operating in this sector, which is quite close to the above data of Forest Trend.

The “Process of negotiating VPA/FLEGT Agreement between Vietnam and EU” report of Vietnam Administration of Forestry – Ministry of Agriculture and Rural Development, issue of July 2014, shows a statistical data of 3500 firms. This data is considered as consistent with this ministry’s 2013 data (3900 firms in June 2013), in the context of economic crisis leading to a certain numbers of firms gone bankrupt.

Figure 1 - Development of Vietnam wood processing sector



Source: “Mapping related parties for FLEGT/VPA in Vietnam”, Forest Trend, 11/2011

The increase of firms in the wood processing sector can be explained by several reasons, of which some worth mentioning are (i) The business environment in general and for the wood sector in specific has considerably improved thanks to more liberal law and policies, encouraging and creating favorable conditions for market entry and operating; (ii) The deep integration (open trade agreements allowing Vietnam wood products to access big markets with lower tariff) helps increase the efficiency of exporting wood and non timber forest products (NTFP), which in turn boost the establishment of domestic firms or firms evolving from household scale, with the purpose of taking advantage of this market opportunities; (iii) An increase in foreign investment in Vietnam market (to take advantage of market access opportunities; in case of China investing in Vietnam from the end of 2006, it was partly to shift production in order to cope with anti-dumping tax against Chinese wooden bedroom furniture in U.S market); (iv)A considerable expansion in scale of domestic market, especially when real estate grew rapidly, leading to a high demand of wooden furniture; (v) Highly increasing demand for some wood products (e.g. China’s demand for wood chip in recent years); and (vi) The dynamism of Vietnamese firms in searching and taking advantage of opportunities for development. In the future, the scale of wood processing sector is predicted to strongly increase if those causes still continue.

At present, the geographic distribution of wood processing firms is uneven. There are about 80% of the firms located in the South (especially in Binh Duong and Dong Nai) and the Southern Central (Binh Dinh).

With its distinguished features, besides official firms (registered under the form of enterprises), the wood processing sector also consists of thousands of wood processing and forest products trading units under the form of households, especially in craft villages or material zones (to exploit natural timbers, plantations and NTFPs).

This group, with a relatively large number of participants who belong to the sensitive residential areas (vulnerable, low and unstable income), contributes considerably into the development of the wood processing sector in general as well as the spillover effect in terms of income and society in related areas.

At the moment, there hasn't been a full statistics about the number of those processing units of this scale. Therefore, their quantitative rise is not known. However, if the above reasons applied to the growth of firms are true when applied to small units, then it could be predicted that the number of those units, within the scope of craft villages, also increases by time (especially the increasing trend will be corresponding with the increase of value of handicraft products made from wood and NTFPs).

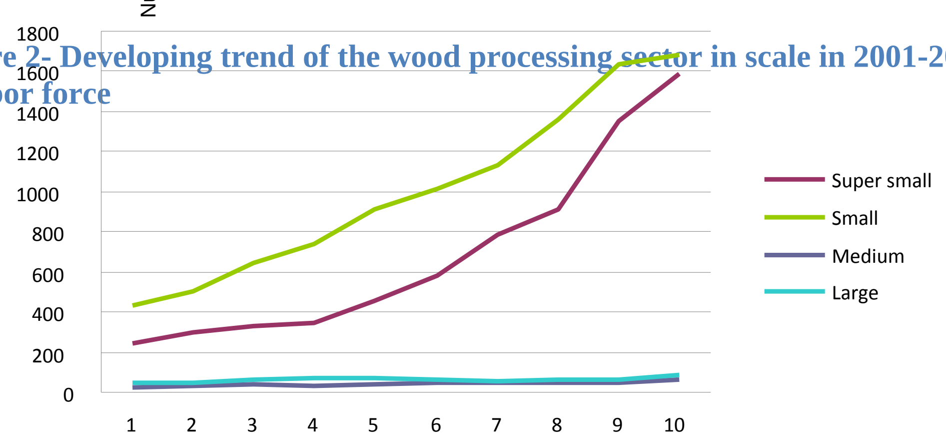
In summary, the wood processing sector has been through a rapid development in quantitative terms. The sector has existed a certain concentration through establishing some industrial zones for wood processing, concentrated in Southern and Central provinces. A distinguished feature of this sector is that there are a large number of small units operating under the form of households, craft villages.

2. Scale of wood processing firms

According to data from Ministry of Agriculture and Rural Development (Planning Wood Processing Industry, 6/2013), most of the firms in this sector are small-scale. In terms of labor force, 46% of the firms are super small-scale, 49% are small-scale, 1.7% are medium-scale and 2.5% are large-scale. In term of investing capital, 93% firms are super small and small-scale, 5.5% are medium-scale and only 1.2% are large-scale. In term of capital source, 5% of the firms are state-owned, the remaining 95% are private, in which FDI firms account for 16%.

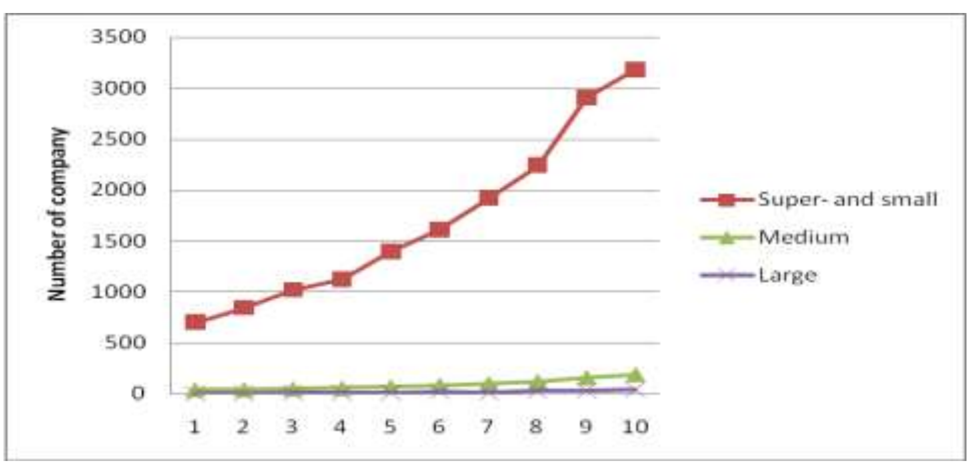
Appling the standards for firms, the scale of wood processing unit as households or in craft villages is considered as super small or small.

Figure 2- Developing trend of the wood processing sector in scale in 2001-2002 according to labor force



Source: "Mapping related parties for FLEGT/VPA in Vietnam", Forest Trend, 11/2011

Figure 3- Developing trend of the wood processing sector in scale in 2001-2010 according to investing capital



Source: "Mapping related parties for FLEGT/VPA in Vietnam", Forest Trend, 11/2011

Regarding FDI firms only, 30% of them are large-scaled, the rest are medium and small-scaled. This might help explain a phenomenon in the wood processing sector: "the foreign sector" accounts for a large proportion of the sector's export value. According to 2011 data, more than a half (55-60%)of the total exported value belongs to FDI firms, which only accounts for approximately 20% of total number of firms. Economy of scale and professionalism might be the main factors creating FDI's advantages in manufacturing and trading. An encouraging signal from 2013 and 2014 data (Vietnam Timber and Forest Products Association (VIFORES), Ho Chi Minh Handicraft and Wood Association) shows that this proportion has been improved, followed by the domestic sector outmatched foreign one, accounting for more than 60% of the total export value.

In general, it is believed that small-scale in terms of both labor and capital can greatly affect the sector's competitive capacity and manufacturing stableness. Small-scale wood processing firms and units are likely to be strongly impacted by fluctuations, even small ones, in material supplies as well as orders (due to a lack of capital to stock enough materials for operation for a certain time in order to adjust to that fluctuation). Besides, having little capital might make it harder for firms to meet the changing or increasing demands or requirements of export market, which happens quite often.

Nevertheless, with recent reported improvements in firms' exporting capacity, the wood sector is hoped to overcome the instability in competitiveness due to too small scale.

3. Labor and technology of the wood processing sector

In terms of labor force, according to Ministry of Agriculture and Rural Development's data, the wood processing industry is attracting about 250,000 direct and indirect labors, of which less than 10% have a college degree, 45-50% are trained direct labors and the rest 35-40% are seasonal manual labors. However, another data in 2010 shows that there are about 300.000 labors in this sector. This difference could be explained by the fact that the wood processing sectors consists of thousands of units operating in the forms of households or craft villages, with the labor force fluctuating by seasons and almost unable to get a full statistics.

Never the less, those data all agree upon one point: this sector is creating jobs for a great number of people, especially manual labors, living in low income rural areas. Fluctuations in this sector's business may considerably affect income and social stableness of the sensitive residents group.

According to some State agencies' evaluation, in general, the labor force of this sector is gradually improved thanks to vocational training programs of the Government and firms and a rise in the number of well trained technical staff from University of Agriculture and Forestry.

However, it is a fact that labor force is still a big problem for the wood processing sector in terms of common labors, technical labors and management staff. A lack of methodical trains, unprofessional operation, inappropriate allocation of labor, un-appreciation of work efficiency management are now highlighted issues.

Box 1– Shortcomings in work efficiency of wood processing firms in Binh Dinh

Binh Dinh is one of Vietnam's key areas for processing and manufacturing wood products, where most domestic investment firms locate. The shortcomings in work efficiency of Binh Dinh firms show a typical issue of the quality of labor in Vietnamese wood processing sector in general.

According to the Forest Products Association of Binh Dinh, the productivity of firms in that association is much lower than of Dong Nai firms (FDI firms in Vietnam) – for example, a factory with 600 labors in Dong Nai is capable of manufacturing 1,200 containers per month, while a factory with twice the labor and mostly equivalent technology in Binh Dinh only manufacture the same quantity. Apart from unreasonable calculation for production procedure, this issue is also caused by expertise (labors' skills and productivity), ineffective allocation of labor (inappropriate staff arrangement, lack of measures of putting pressure and monitor work) and unappreciation of the labors.

Source: Forest Products Association of Binh Dinh's Report 6/2013

For wood processing firms at simple level (chipboard, sawmill, core veneer…), labor's skill and quality are not much of a concern as for firms manufacturing finished wood products. Labors working in the earlier firms are mainly manual, since the job is simple, doesn't require high technology.

With current issues in labor force, especially for exporting firms, it is important for the wood processing sector to train and supplement skillful labors, capable of using high technology in manufacture, especially for boosting export and aiming for wood products with higher quality, added value and brand name.

In terms of manufacturing technology, according to VIFORES, Vietnamese firms are now divided into 4 levels:

- Group of FDI and large and medium firms manufacturing products for export: using modern technology with equipment mainly imported from EU or Taiwan;
- Group of firms manufacturing artificial boards (MDF, plywood,…): using European manufacturing technology with capacity from 60,000 m3 to 300,000 m3 products/annum;
- Group of firms manufacturing wood products for domestic consumption: mainly using Taiwan and Chinese technology with small capacity from 1000 to 10000 m3 products/annum;
- Group of firms producing handicraft wood products: mostly manual, with traditional tools for cutting, hewing or carving by hand.

In general, there have been some efforts from wood processing firms to upgrade the technology used for wood processing recently. Many technology help using plantation timbers such as the technology for wood sawing, drying and producing artificial boards like chipboard, laminated board, plywood have been developed (creating subsectors of wood chipping, sawmills). There are also some enhancements in equipments to make them suitable for features of input materials (e.g. enhancing sawing, chipping and drying technology… to match with small diameter plantation timbers). Some modern technology such as denatured wood technology, making wood composite materials (to overcome the shortcomings of plantation timbers and to improve the wood using efficiency) have gradually developed in Vietnam. Thanks to these technologies, the ratio of using plantation timbers is highly increased, some large scale artificial board manufacturing units (especially fiberboard, MDF) have been established.

However, in overall, the innovation of technology and equipments for manufacturing and processing wood, in most case, is a challenge to many firms due to the requirement of relatively large investment, exceed firms' capacity.

Apart from equipments and technology, another less costly issue, but having great impact and are often mentioned in the production procedure of super small and small-scale wood processing firms, is the organization of production procedure. According to many experts, drawbacks in this organization is one of the main reasons for reducing the operating efficiency of Vietnamese firms, directly affect their manufacturing cost and competitive capacity

Box 2– The shortcomings in organization of manufacture of wood processing firms in Binh Dinh

- The manufacture is discontinuous, has lots of redundant actions

To manufacture a wooden furniture/exterior products for export, from the first phase (bring timbers in for processing) to the final phase (packaging), a labor put the product up and down averagely 18 times, resulting to a long pause in production line. Since each phase is independent, the labor in the later phase has to wait for the earlier one finishing to do each part, any lateness or break in one phase will immediately affect the later. Furthermore, due to not having detailed calculation, especially time for each phase, discontinuous, inconsecutive phases usually occur: if the manufacturing phase is fast then the packaging phase is late, or the wood drying phase does not catch up with the processing phase.

- *Limit in material supplies and use:*

Firms have not put much attention in designing yet, making labors think how to use timber in the most economic way (while the designing phase should be done previously by an professional department, the labor only need to stand in the line and implement, without thinking of an appropriate way to draw, cut for maximum usage of materials). This not only reduces the efficiency of materials usage, wastes a large quantity of materials but also limits the productivity and makes it considerably depend on the quality of each individual labor.

Similarly, firms haven't calculated a detailed material norm and a mechanism to monitor actual use compared with the norm yet, resulting to great loss of materials. Ancillary material cost(screw, nail, package…) accounts for 20-25% production cost.

This waste greatly affects production cost, reduces firms' profit and consequently affects their reinvestment capacity.

Furthermore, due to not focus on exploiting and building stable supplies of materials, firms are often passive when receiving orders. Materials in stock are not suitable for the order, while bought ones are still on the way or not available. Products' parts are manufactured still wait for packages…

- *Quality control is not ensured*

The products' quality need to be controlled after each manufacture phase. The current control of firms in wood sector is mainly based on subjective monitor of managers, labor's self-discipline and propagation. This traditional method of control is only suitable with small scale manufacture, for small orders and unable to effectively applied to large orders, highly detailed products, which requires systematic control, carried out by the labor in backward control principle (later phase controls earlier phase to detect errors in time and increase the responsibility of each department).

- *Low professionalism in trading*

One of the shortcomings of Vietnamese firms when manufacturing export goods is the lack of professionalism when implementing the contracts, especially the compliance of delivery deadlines as well as the capacity to performing big contract with uniform quality.

This shortcoming can be considered as the consequence of the all limitations in organizing manufacture mentioned above.

Source: Forest Products Associate of Binh Dinh Report, 6/2013

4. Manufacturing capacity and trading pattern

As an export oriented sector, the export capacity in wood processing sector clearly reflects firms' competitive capacity.

According to data and analysis from "Mapping related parties for FLEGT VPA in Vietnam" Report, Forest Trend 11, 2011, of 3.400 firms in this sector (data up to 11/2011), about 600-700 firms (which accounts for about 20% of the total) participating in direct export. The remaining either serves direct exporting firms or focuses on domestic market.

In detail, the <u>direct exporting group</u> (accounts for about 20%) consists of mainly medium and large scale firms, of which 57% are FDI ones. This group is divided into two smaller ones, one capable of accessing EU and U.S markets, and the other mostly accessing Asia markets. The earlier group is mainly exterior manufacturing firms, with small ratio manufacturing furniture (especially in recent years, China wooden furniture have been levied anti-dumping tax in U.S market). This group is considered as having more competitive and stable capacity thanks to those potential markets, which buy products at high price but have strict requirements of inputs' origin and products' quality. The second group has less competitive capacity, mainly exports wood chip to more easy-going Asia markets.

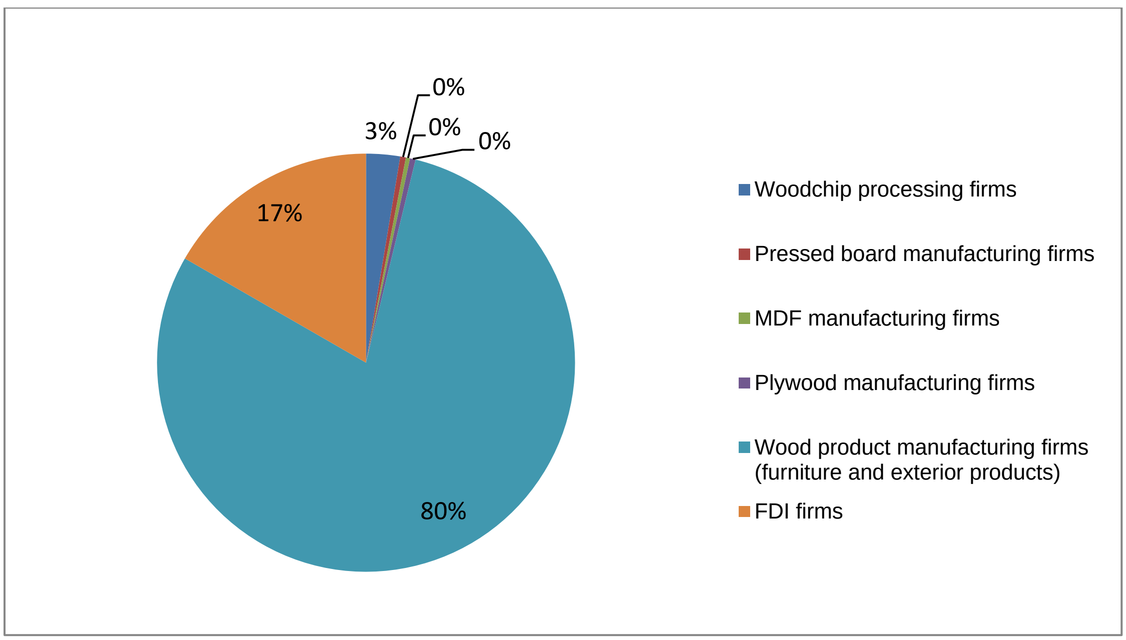
The <u>non directly exporting group</u> (accounts for about 80%) consists of re-processing firms serving exporting firms and manufacturing firms serving domestic consumption.

Re-processing exported wood products is a new form of business recently developed strongly since direct exporting firms turn into this form in order to reduce manufacturing risks (especially in labor and delivery issues…). To do the processing job, firms need to have relatively modern manufacturing system under control, various supply sources and enough manufacturing capacity to perform big contracts. However, this group's market relationship is weak (not directly approach the customers), leading to less competitive capacity.

The wood processing group for domestic consumption consists of firms processing semi-finished wood (plywood, MDF,…) and firms manufacturing finished wooden furniture and exterior products (mostly furniture).

The group manufacturing finished wood products for domestic consumption consists of (i) firms manufacturing for middle class, with modern models using good quality timbers, modern manufacturing and assembling line, allowing for large quantity production. In addition, there are some firms providing wood products with traditional designs, using high quality timber, made by handicraft for each order, limited quantity and high price. This group has high competitive capacity, relatively large-scale. However, there are only a few firms belong to this group; (ii) firms producing wood products to meet mass demand of ordinary people, using low quality, low value timbers, undiversified models, simple production line, with output depending on orders (according to individual customer's requirements or mass production for retail). A majority of domestic firms belong to this group, with small manufacturing scale and limited competitive capacity.

Figure 4-Allocation of firms in wood processing sector by major products (2008)



Source: Stakeholder- TL12

The fact that only 20% firms capable of exporting accounting for 80% total manufacturing value of the sector shows a big gap in competitive capacity of firms in Vietnam wood processing sector, and the ratio of firms in strong competitive capacity group is quite small.

Similarly, there is a great difference in firms' profit, in which the benefits of exporting belong to about 20% of firms. There is also a distinct division of benefits and competitive capacity in this group, depending on the export markets it aims to.

Unlike many other sectors, the conversion of market segment in wood processing sector (from lower segment to higher ones) is not easy for firms. This conversion requires not only normal capacity in marketing products to new markets or connecting to customers there but also the capacity to control manufacturing procedures, legality of timbers and to meet the requirements/technical barriers, which could not be achieved in a short time. This will be a big challenge for the wood processing sector in its orientation towards market and products development as well as sector restructuring.

In overall, from the exporting perspective, the wood sector of Vietnam is facing with several challenges, some of which can be listed as followed:

- *Limited competition capacity:* in fact, most of Vietnamese wood exports are processed products for fore in companies, so they will provide the design and in charge of selling goods.
- *Low value-added*: Almost 100% exporting companies are selling goods under FOB method, so the interest is very low and they cannot access directly to the foreign supply chain.
- *Low labor productivity*: According to VIFOREST, the labor productivity of Vietnam wood industry is only equal to 50% of Philippines, 40% of China and 20% of the EU.

Those are three great issues that need to be paid special attention when making any policies for the wood industry in the coming time.

5. Supporting and connecting services

Similar to other manufacturing sectors, in order to operate and grow, the wood processing sector need supporting services, of which the most popular and worth mentioning are trade promotion services (advertising, business initiation) and business facilitation (information, forum, formation of manufacturing chains).

In terms of policy, from 2003, Vietnam Trade Promotion Agency, Ministry of Industry and Trade was assigned to take charge in implementing trade promotion programs for exporting sectors, which include wood sector, with 50% of total cost are from state budget for programs such as organizing groups of firms participating in foreign expos, organizing periodic domestic expos, organizing groups of firms doing market surveys and finding trading partners of products and manufacturing equipments, advertising on foreign and domestic media, buying information and spreading them to firms…

Nevertheless, these activities, in fact, are not effective because they are conducted in a scatter way depending on events without a specific strategy. Besides, due to limited resources, even getting support of 50% cost, it is still not easy for some firms. Moreover, the number of firms able to participate in those trade promotion programs is not large.

Therefore, participation in international expos are on individual, self-supporting basis without specific guidance or supports. Firms also haven't made careful decision about whether or not participating in these promotions.

In terms of advertising, except for some individual efforts of several firms, mainly in domestic market, there hasn't been any general promotion strategy or large-scale promotion events for Vietnam wood products in international market.

The connection in information between wood processing firms is also limited. Firms have to find information about supplies and customers on their own, compete unfairly to take other firms' customers(resulting to damages for firms while customers enjoy the benefit of firms' price war). There is no information channel for firms to help each other, share their experience, supplies and customers to get big contracts, attract big and stable customers.

In terms of manufacturing connection, according to VIFORES, there are some integration models in manufacturing wood products as followed:

- Closed integration of seeding – planting – exploiting – collecting –processing – trading: this type of integration is not available at present;
- Incomplete integration, including several forms:
  - Integration of seeding – planting – material collecting. This form was establish and have existed for years (such as VIJACHIP in Danang cooperates with VINAFOR, Vietnam Forestry companies; Nam Dinh Forest Products company, Wood Land company… cooperate with households, companies planting forests);
  - Integration of planting – processing (such as Dai Thanh company, Truong Thanh company… cooperate with forest planting companies);
  - Integration of materials collecting – processing – exporting (such as PISICO Binh Dinh , Vinafor … cooperate with forest planting households – wood processing companies);

However, the number of successful integration models in this sector is small. Therefore, it is not rare for firms, due to afraid of material shortage, to buy too many timbers at the beginning of the season, using their own and borrowing capital, while the orders afterwards require other kinds. Then firms have to find new supplies and capital to buy those. And there still exist a situation of firms refusing orders due inability to find materials when needed.

Therefore, it is necessary enhance the connection in manufacturing of the wood sector in the near future.

6. Materials source

A typical feature of Vietnamese wood industry is that manufacturing closely related to materials supplies(natural timbers, industrial wood and NTFPs.

Therefore, it is important to mention about material supplies for this sector.

Wood materials

Demand for wood materials

According to VIFORES the demand for wood materials is categorized based on the outputs as followed:

- Domestic plantation wood: used for manufacturing wood chips for export, paper powder, artificial boards and wood products;

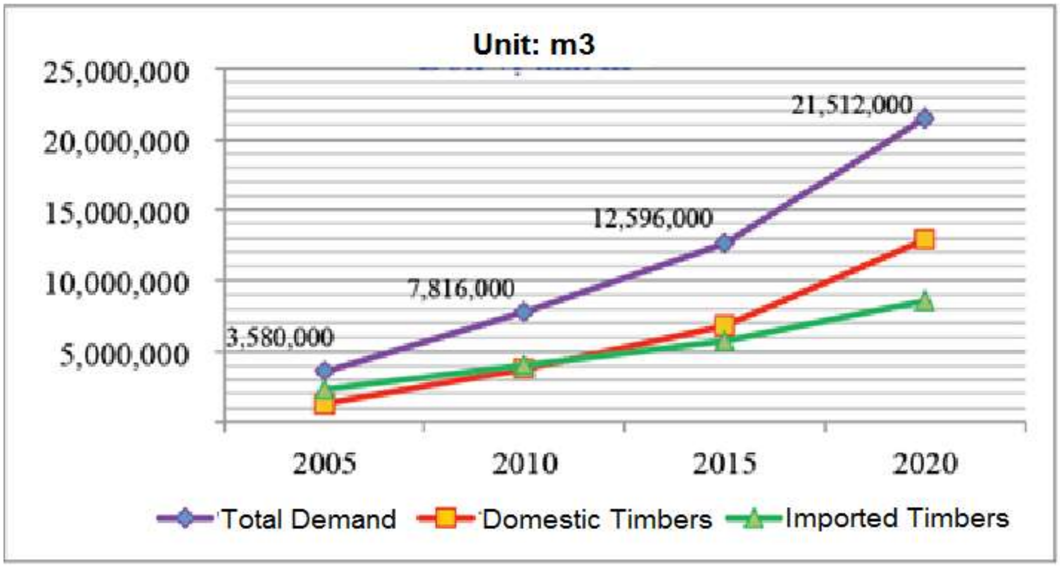
- Imported wood: used for manufacturing wood products for export and construction wood for domestic consumption;
- Garden wood (mango, jackfruit, logan fruit, cashew…), scattered plantation (oval tree, nacre, rubber tree …) used for plywood, outdoor wooden furniture for export;
- Artificial boards: which Vietnam currently is able to manufacture but still need to import. It is expected that in 2020, Vietnam will no longer import and start to export them.

Statistical data shows that the demand for wood materials is increasing rapidly, corresponding to the expansion of market share for Vietnam exporting wood products to the world.

According to statistics, in 2003, the total timbers used in Vietnam are more than 8.8 million m^3, of which 51.61% is for wood processing industry, 18.66% is used as materials for chipboard, MDF and woodchip, 29% is for paper and paper powder manufacturing industry, the remaining is used as pit props. In 2005, that number increased to 10 million m^3, of which 53.4% is for the wood processing industry, 20.19% is used as materials for chipboard, MDF and wood chip, 25.52% is for paper and paper powder manufacturing industry, the remaining is used as pit props. In 2008, the total number of timbers used is about 11million m^3, in which 57.34% is for the wood processing industry, 17.6% is used as materials for chipboard, MDF and wood chip, 24.2% is for paper and paper powder manufacturing industry, about 0.86% is used as pit props. From the above data, it can be seen that the demand for wood materials is rising, of which timbers used for manufacturing wood products increase highest, while the other are on decreasing trend (Nguyen Ton Quyen – TL8).

It is predicted that the demand for wood materials will remarkably increase in the time to come, depending on this sector’s manufacturing and exporting growth rate.

Figure 5- Total demand of materials for wood products manufacturing and supply sources



Source: Ministry of Agriculture and Rural Development, Ministry of Industry and Trade
(The above graph does not include demand for manufacturing chip board and other demands, with the basis of the growth rate of total manufacture from 2006-2011 is 11.3%/year).

Wood material supply sources

In general, materials used for Vietnamese wood processing sector mainly come from the two following sources: domestic timbers (natural and plantation timbers) and imported timbers.

Regarding domestic timbers, according to Ministry of Agriculture and Rural Development, in 2012, the total forest area is 13.52 million ha, of which 10.29 million ha is natural and 3.32 million ha is plantation.

The area of natural production forest (allowing exploitation) is about 4 million ha, with the maximum exploiting quantity is about 400,000 m3 timber per year, mainly for domestic use. However, according to Government's decision, from 2008, the exploitation output from natural forests is no more than 150,000 m3 per year and they will be closed from 2014. Therefore, the supply of domestic wood materials can no longer include natural timbers, totally depends on plantation.

According to statistics, the area of plantations is about 3.2 million ha, with about 60 million m3 timbers. The exploitable volume of plantation timbers reaches about more than 5 million m3/year, although they are mainly eucalyptus and acacia (those are exploitable at the age of 6-10 years, with small diameter and unsatisfactory quality).

Table 1– Table of plantation's area in Vietnam

Year	Area (ha)	Year	Area (ha)
2000	196,000	**2007**	13,505,000
2001	191,000	**2008**	1,305,000
2002	387,000	**2009**	1,705,000
2003	577,000	**2010**	1,948,000
2004	759,000	**2011**	2,200,000
2005	913,000	**2012**	2,600,000
2006	1,122,000	**2013**	3,200,000

Source: Collected from Forest Development Strategy and Report of Ministry of Agriculture and Rural Development

It can be seen from above data that the area of concentrated plantations (including protection forests, special-use forests, production forests) is on decreasing trend. Specifically, according to Economical – Social Report of the Government from 2009-2013, except for a slight increase in some years, the plantation area is declining. In average, each year, the area of concentrated plantation decreases 1.7%. It is fortunate that the above decrease does not fall much in production forests, which provide materials for the wood sector and still maintain a stable area for years.

Table 2– Area of concentrated plantation and volume of exploited timbers

Year	Quantity/ Growth rate		Area of concentrated plantation	Volume of exploited timbers
2009	Quantity	(1000 ha/m3)	243	3766,7
	Growth rate	(%)	5,9	5,7
2010	Quantity	(1000 ha/m3)	252,5	4042,6
	Growth rate	(%)	3,9	7,3
2011	Quantity	(1000 ha/m3)	212	4692
	Growth rate	(%)	-16	16,9
2012	Quantity	(1000 ha/m3)	187	5251
	Growth rate	(%)	-11,8	3
2013	Quantity	(1000 ha/m3)	205,1	5608
	Growth rate	(%)	9,7	6,8
	Average growth rate	**(%)**	**-1,7**	**7,9**

Source: Economic – Social Report of Government 2009-2013

Relating to domestic source of wood materials, there is currently a considerable imbalance in geographic allocation of manufacturing and materials supply. Specifically, the places where wood processing firms are concentrated in are not where production forests located.

According to many reports, the majority of medium and large-scale wood processing firms concentrated in industrial zones with good infrastructure, connecting to sea ports (mainly Binh Dinh and the South East areas). Only 1% of the total firms in the whole country operate in the Northwestern, where large area of forest locates in. Although Tay Nguyen has largest area of production forest, about 1.6 million ha, accounts for 34.2% total area of production forests in Vietnam, which mainly are natural forests, there are only about 180 wood processing firms, accounting for 7.3% of the total firms in Vietnam, operating there. The total area of production forests in the Red River Delta and the South East region only accounts for 5.1% the total national forest's area, while 70% of the total firms operating there.

For firms mainly using on the spot materials such as firms manufacturing woodchip, board, the above imbalance restricts their competitive capacity (transportation cost is higher than normal).

It should be noticed that while some wood processing firms can use imported timbers, some mainly depend on domestic plantation and natural timbers such as woodchip manufacturing firms. The restriction in domestic wood materials supplies together with the imbalance in geographical allocation between firms and material zones are creating big challenges to the development of those firms.

Regarding imported timbers, according to statistics, the wood processing sector in Vietnam is relatively dependent on imported materials. In fact, the proportion of domestic timbers and imported timbers has change dramatically in the past decade. Before 2000s, the domestic wood materials accounted for a very large proportion and primarily were exploited from domestic natural forest. In the next years, the wood materials domestically exploited for manufacturing industry started to fall, accounting for 60-70% the total used materials. However, in the past few years, according to VIFORES, there has been some improvements with the gradually increasing proportion of domestic wood. In 2013, imported wood only accounted for 40% of the total wood used by this sector (4.5 million m3 of wood imported compared with 17 million m3 used in total). In the first half of 2014, this proportion fell to 30%.

Also according to VIFORES, the import value of wood material is equivalent to 30% of the total export value of wood products. Regarding importing markets, Vietnam is currently importing wood from more than 100 countries and territories.

In terms of kinds of wood, since the majority of imported wood materials are of high price, good quality, they are often used for manufacturing exported wood products (about 65-75%, depending on each type). The domestic timbers used for exporting is only 20-23%, depending on each type, due to limited quality.

Table 3– Ratios of domestic material use

Source	Products		
	Domestic consumption	**Exporting**	**Total**
1. Imported timbers			
- Imported round woods, lumbers	33,4%	66,6%	100%
- Imported artificial boards of various kinds	2,27%	77,3%	100%
2. Domestic timbers			
- Plantation, rubber wood	66,6%	22,7%	100%
- Domestically manufactured artificial boards of various kinds	77,3%	22,7%	100%

Source : Nguyen Ton Quyen – TL8

Vietnam is currently importing timbers from different source (depending on the timbers it imports). Detail is as follows:

Table 4– Value and quantity of timber imported in 2012

HS Code	Major products	Value (USD)
44.01	Wood materials, in log, billet, twig, fagot or similar forms; chipboard, scrap wood	938,035
44.03	Timbers, with or without bark, sapwood or rough squared logs	324,312,786
44.07	Timbers sawn or sliced vertically	609,000,239
44.08	Sliced timbers used for veneer, plywood(maximum thickness of 6mm)	61,833,835
44.10	Chip boards, oriented strands board and similar products	37,468,302
44.11	Fiberboards made by wood or other lignin materials	167,211,864
44.12	Plywood, veneer plywood and similar boards	83,264,264
	Total	**1,284,029,325**

Source: Department of Forest Use – Vietnam Administration of Forestry – Ministry of Agriculture and Rural Development

Table 5– Importing market for timber and wood products into Vietnam in 2013

(Unit: 1,000 USD)

Market	2013	Compared to 2012 (%)	Market	2013	Compared to 2012(%)
Laos	458,886	60.86	Korea	12,972	159.54
U.S	220,035	11.84	Taiwan	12,489	4.85
Malaysia	91,820	2.51	France	10,565	129.63
Thailand	78,108	-9.42	Italia	8,147	67.57
Myanmar	65,964	30.69	Sweden	7,145	3.07
New Zealand	65,084	4.18	China	6,740	-96.64
Cambodia	48,580	70.09	Australia	6,528	-9.15
Chile	38,113	20.15	Japan	5,941	3.38
Brazil	22,792	-11.96	Rusia	5,762	41.79
Germany	19,690	82.30	Canada	4,824	-23.59
Indonesia	16,970	-34.55	Argentina	4,188	56.80
Poland	15,807	14.11	South Africa	3,109	-0.02
			U.K	981	48.42

Source: General Department of Vietnam Custom – Ministry of Finance

Table 6– Types of imported woods and supplying markets

Markets	Types of imported wood into Vietnam
South East Asia countries (Laos, Myanmar, Malaysia, Indonesia...)	Gỗ lớn, gỗ cứng từ rừng tự nhiên, gỗ rừng trồng và ván nhân tạo
Oceania countries	Plantation timbers (acacia, eucalyptus)
Africa countries	Plantation timbers (eucaliptus), natural timbers
South America countries (Brazil, Chile)	Planted eucaliptus
North America	High quality timbers (oaks, cherries)
China	Artificial boards

Source: Nguyen Ton Quyen – TL8

The more and more increasing demand for imported wood materials is corresponding to firms' exporting and manufacturing capacity and the decreasing trend of domestic natural forests exploitation output (gradually decrease natural forest exploitation quota, close natural forest in the years to come) while the plantation areas do not expand much and usually face with the risk of reducing area due to forest fires, severe weather…

Non-timber forest products (NTFPs)

NTFPs consist of various kinds such as bamboo, cane, rattan, sap oil. However, to serve as materials for wooden and forest products manufacturing, within this research's scope, bamboo and rattan are the two major groups of materials.

Unlike timbers, which are importable (and currently importing 70-80% of the manufacturing demand), the bam busoideae materials for manufacturing are mostly domestic supplied.

At present, there are about 1.4 million ha of bamboo in Vietnam, equivalent to about 6.2 billion bamboos. Of which, plantation are accounts for about 6%, the remaining are natural forests. There are 32 provinces having concentrated bamboo forest, but only 23 provinces with bamboo areas of 10,000 ha or more. Of 40 types of bamboo, there are only 9 types with economic value: bambusa nutans, bambusa balcooa, bamboo, bambusa stenostachua, purivory bamboo, dendrocalamus barbutus, thyrsostachys siamensis, phyllostachus heterocycla, dendrocalamus giganteus munroandsinocalamus. Dendrocalamus barbutus, thyrsostachys siamensis and phyllostachus heterocycla are three kinds of bamboos that have high commercial value.

There are 30,000 ha of rattan nationwide, allocated in 28 provinces. Most of them are natural. Nghe An, Quang Nam, Lam Dong, Thua Thien Hue and Quang Ngai has great volume of rattan.

The current volume of bamboos and rattans are able to meet the demand of NTFP manufacturing for domestic consumption and export of the wood processing sector. However, in the future, if the NTFP manufacturing sector growth faster, together with stricter policies in exploiting natural forests (close natural forests from 2014 to 2020) and the fact that NTFP plantation are mostly not invested for development, the supply for NTFP manufacturing is predicted to be limited, or even exhausted if there aren’t any reasonable plantation policies

Other ancillary material supplies

According to data, ancillary materials such as glue, paint coating, screws… for the wood processing sector of Vietnam are currently imported up to 90%. Domestic supplies only meet 10% of the demand and are not stable.

II. OVERVIEW OF WOOD PROCESSING MARKET

1. Market for wooden furniture and exterior products

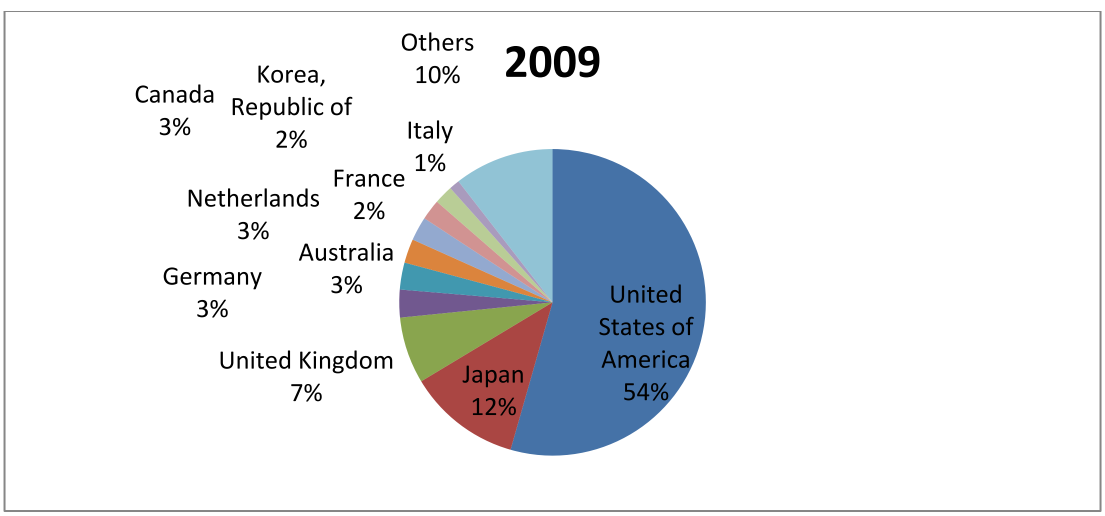
Exporting markets

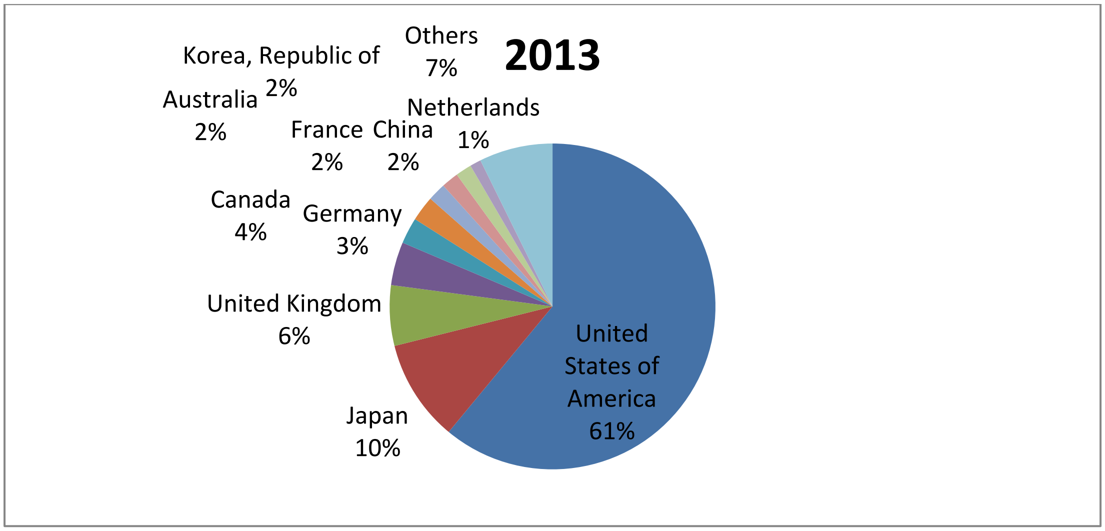
The wood processing sector is considered as successful integration, with rapid growth of exported value and great contribution to Vietnam's exporting achievements, creating position in global exporting wood products.

Specifically, exporting wood products currently ranks 6th in top 10 exporting sectors of Vietnam. Although there are differences in data quoted from different source, all shows that Vietnam is one of the biggest wood products exporting countries, ranks 2nd in Asia and 1st in South East Asia.

According to data from Centre for Industrial Studies (CSIL), Vietnam is the 6th biggest wood products exporting country in the world, exporting up to 80% the total value of products manufactured by the wood processing sector of Vietnam. Data from International Trade Center (Trade map) in 2013 even shows that Vietnam ranked 4th in exporting wood products, with market share of 4.7%, below China (34.6%), Italia (9.3%) and Germany (9%).

Figure 6– Exporting markets of Vietnamese wood products

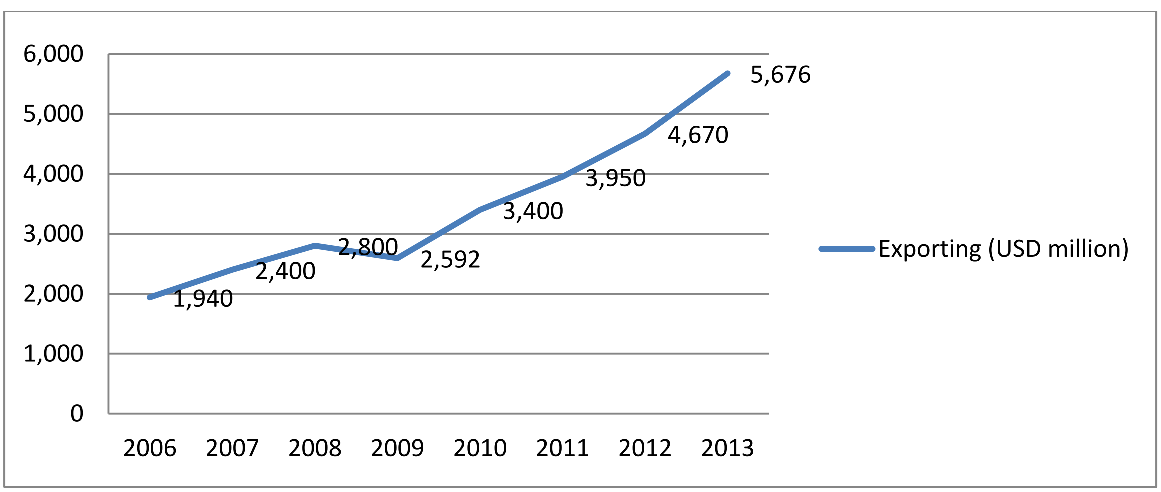




The primary exporting wood products of Vietnam are: wooden handicrafts, furniture, exterior furniture, wood combined with other materials, artificial boards and wood products made of artificial boards, NTFPs, wood chips.

According to data from Ministry of Finance, Vietnam wood products have been exported to more than 100 countries and territories, with exporting value growing stably (except for 2009, when the world's demand fell due to crisis). In the period of 2001- 2010, the average growth rate of wood products' exporting value reached 27.15%, much higher than the nation's exporting growth rate.

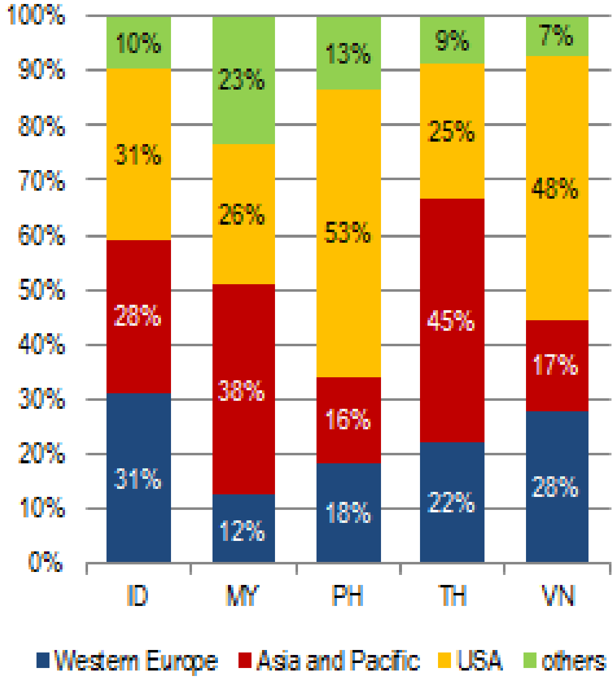
Figure 7– Total exporting value of Vietnamese wood products



Source: Ministry of Industry and Trade

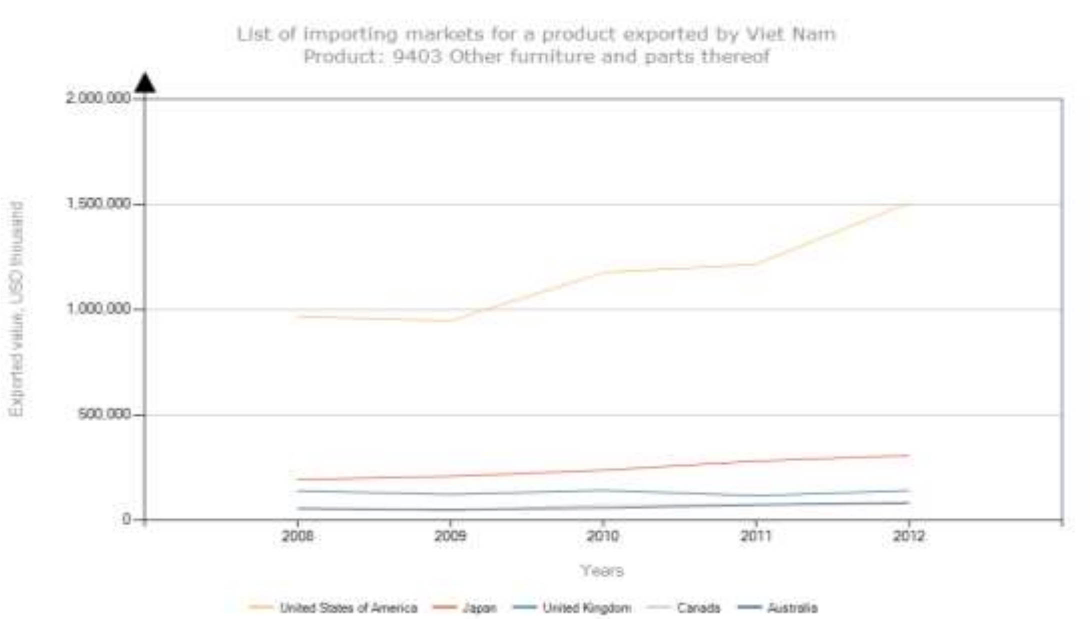
Statistical data all agree that U.S is Vietnam's biggest wood products exporting market, accounting for about 40-50% total exported value, next is Western European countries(EU: 28-30%), Pacific Asia (Japan: 12-15%) and other regions. Unbalanced exporting proportion, highly depending on some markets, is not abnormal compared with other countries in the region but also reflects a high risk. The two biggest exporting markets of Vietnam, U.S and Europe, are the two most difficult markets in the world, with strict requirements of legality of timbers' origin and very high risk of abusing trade defense instruments (anti-dumping, anti-subsidy, defense).

Figure 8– Exporting proportion of Vietnamese wood products in terms of markets



Source:"The furniture industry in South East Asia", CSIL 9/2012

Figure 9– Progress of Vietnamese wood products consumption at big markets



Source: ITC Trade Map

Regarding woodchip market, China and Japan are Vietnam's biggest woodchip exporting markets. Those two markets actually imported 83% of the total woodchip in the world.

Table 7– Vietnam's woodchip export in quantity and value

Indication	2001	2008	2009	2010	2011	2012	2013	2014 (first 5 months)
Quantity (million tons)	0,4	1,9	2,2	3,9	5,3	6,2	6,5	3,04
Value (USD million)	50	237	275	487	630	660	800	418

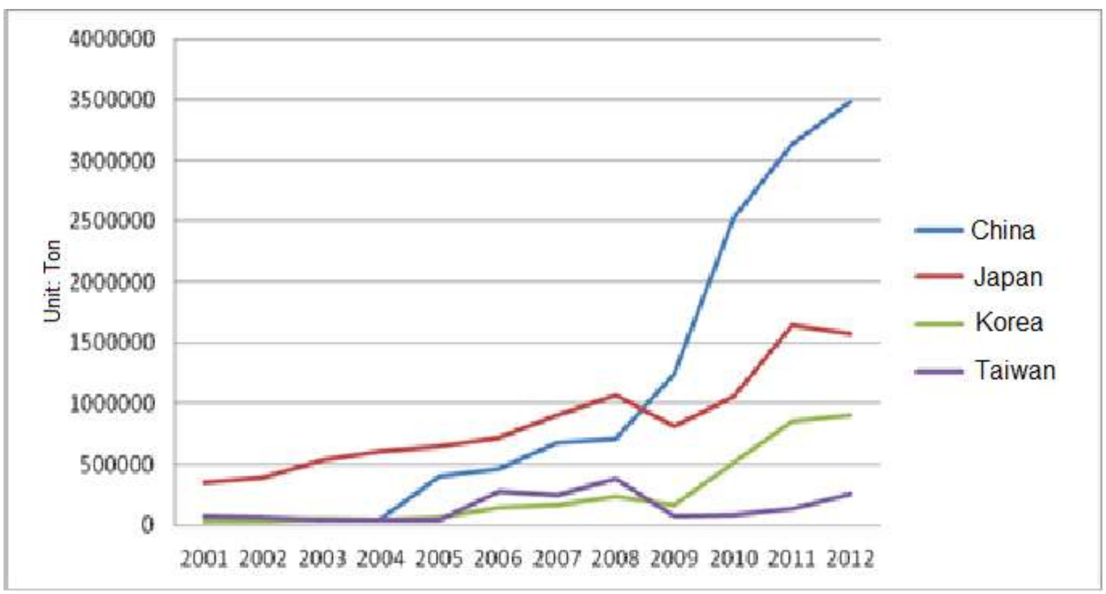
Source: VIFORES

Table 8– Vietnam's woodchip export in markets

Imported countries	China	Japan	Korea	Taiwan	Other	Total
2006	468,163	720,181	142,259	280,064		**1,610,667**
2007	680,580	902,764	161,803	249,184		**1,994,331**
2008	706,369	1,070,978	236,940	384,573		**2,398,860**
2009	1,245,065	809,265	165,929	70,250	90	**2,290,599**
2010	2,527,031	1,063,726	511,019	86,217	21	**4,188,014**
2011	3,137,760	1,647,719	857,548	134,962	55	**5,778,044**
2012	3,486,876	1,577,509	904,676	257,274	-	**6,226,335**

Figure 10– Vietnamese's woodchip export in markets

(Unit: ton)



Domestic market

Vietnam, with nearly 90 million people, GDP's growth rate always higher than 5%/year, even in difficult time, is considered as a potential market.

According to statistical data, the average consumption of wood products in the past 5 years is about USD2.25 billion/year, equivalent to USD31.7/person. According to a market research company, the trade of Vietnamese wooden products in 2010-2013 was about USD19.8 billion, equivalent to about USD 4 billion/year, accounting for 25-30% the total annual exported value of Vietnamese wood products

The major targets are mainly new constructions (about 40% total value of domestic market), urban residents (30%) and rural areas (30%). Up to now, there has not been any full statistics of market shares of groups providing market of domestic wood products in Vietnam.

It is believed that the domestic market has been left for neighbor manufacture firms, especially South East Asia ones, for a long time. There are even data showing that wood products from China, Taiwan, Hong Kong, Malaysia and Thailand account for about 80% market share, while domestic manufacture only supplies 10-20% of the domestic demand.

However, in fact, due to lack of full statistics of markets, especially market of rural areas and individual consumption in urban areas (where considered to consume a great number of domestic wood products due to limited income, less likely to be able to consume imported products), the above information is untrustworthy or only true, if any, with markets of medium and high segments in urban areas.

Moreover, indirect data of the amount of wood materials consumed shows a different fact of the market shares of wood processing and manufacturing firms in Vietnam. For example, there are 340 wood craft villages in Vietnam, consuming averagely 1 million m3 wood per annum, and their outputs are mostly for domestic production. Besides, wood products for construction, household (doors, kitchen cupboard, floors…) are mainly domestic since foreign ones are expensive, only suitable for high class people.

Table 9– Total value of Vietnamese wood products consumed in domestic market

Year	2006	2007	2008	2009	2010	2011	2012
Domestic consumption (*USD million*)	1,642	1,942	2,613	2,761	2,381	2,161	1,700

Source: Nguyen Ton Quyen, TL – 8

The world financial crisis in 2008-2009 made a big impact on the world's demand, together with stricter requirements of legality of timber sources in key markets such as U.S (Lacey Act), EU (FLEGT)… made firms reconsider their market strategy. Turning back to domestic market is encouraged by the Government and wood processing sector, as a safe and stable option for the development of Vietnamese wood sector.

2. Non-timber forest products market

Products made by bamboos, rattan can be divided into 2 groups: traditional products (handicrafts, curtains, mats…) and modern ones (pressed bamboos made into furniture, road lining, serving construction…).

Handicrafts and modern products made by bamboos (pressed bamboos used for flooring, road linings and furniture…) are two types having rapidly increasing value, comparative advantages over similar products made of wood or other natural materials thanks to their rapid growing ability, utilization of material and little impact on environment when exploiting and manufacturing…

Manufacturing modern products made from bamboo with industrial scale started in Vietnam 15 years ago. At present, there are about 350 firms and units manufacturing modern products from bamboos such as bamboo flooring, pressed bamboo, bamboo formwork, pressed bamboo board…

International market of bamboo and rattan products is considered as big and highly competitive. According to Mekong Bamboo Program's report, the world bamboo, rattan market in 2009 reached approximately USD12 billion.

In Vietnam, products made of bamboos, rattans are mostly traditional, with a large proportion for exporting (exporting value is about USD180-200 million/year). Domestic consumption (especially with bamboo flooring, furniture, kitchen furniture made by industrial manufactured bamboos) started growing in recent years, but the value is still limited.

Figure 11– International market of bamboo and rattan products

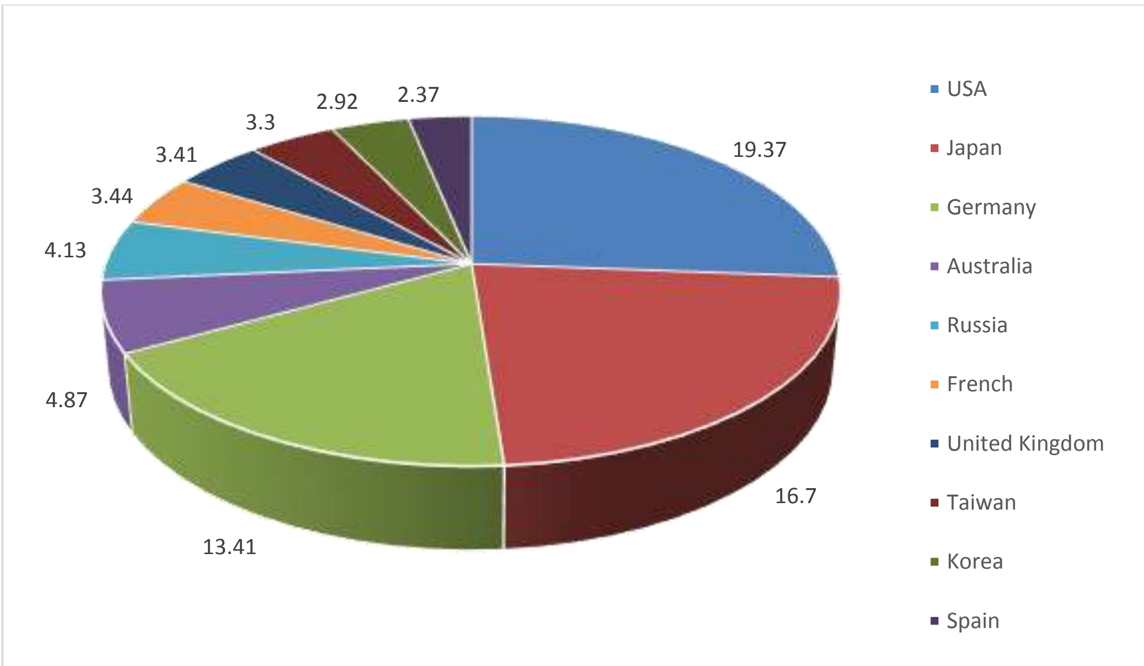
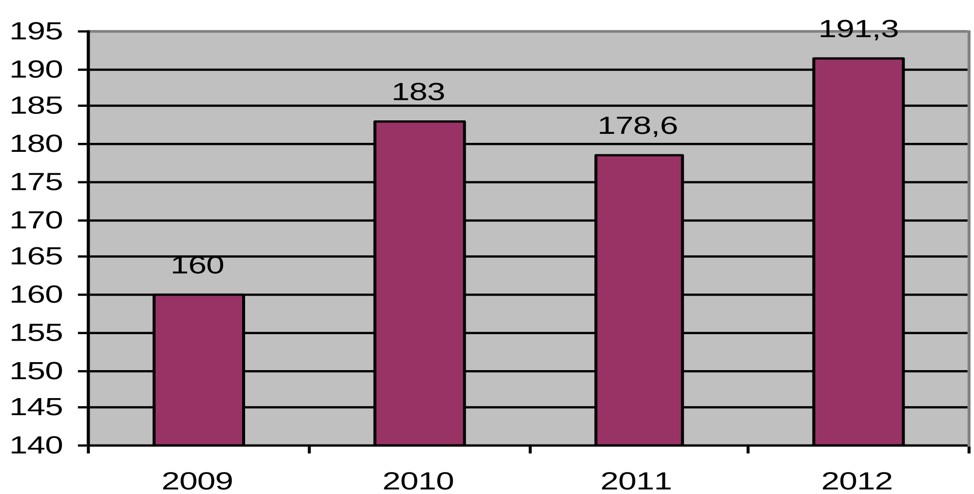


Figure 12– Exporting Value 2009 -2012



III. CURRENT POLICIES AFFECTING MARKET AND THE WOOD PROCESSING SECTOR

1. Domestic policies

A review of legal policies directly or indirectly related to the wood processing sector shows that recent policies mainly focus on developing production forest and forest industry (to meet the demand of input material for wood processing sector) with few policies for processing, manufacturing wood products.

In terms of planning

Although the wood processing sector is a highly potential and the key exporting sector of Vietnam, there seems to be inadequate attention to it.

Specifically, whereas many sectors have Development planning regulated in a legislation (normally Prime Minister's Decision), the wood processing sector only have a Planning issued by Minister of Ministry of Agriculture and Rural Development (an administrative document, not legislation) – "Planning the wood processing industry towards 2020, orientation toward 2030" approved in Decision No. 2728/QĐ-BNN-CB dated 31st Oct 2012 of Ministry of Agriculture and Rural Development.

In fact, the planning of the wood processing sector has been stated in a planning document of a Prime Minister's Decision: Master planning for development of agriculture toward 2020, orientation toward 2030 issued in Decision No. 124/QĐ-TTg of Prime Minister dated 2nd Feb 2012. However, in this document, planning of developing the wood processing sector is only one in many other agricultural sectors, with little content. Besides, the wood processing sector there is viewed as an agricultural sector – which means it is considered from forest exploitation and raw manufacture perspective – while the wood processing sector as a whole should be an industry (manufacturing industry).

From the perspective of manufacturing forest products, Planning for development of Vietnam forest sector towards 2020 attached to Decision No. 18/2007/QĐ-TTg of Prime Minister is the most thorough document in this sector at present. The wood processing sector mentioned in this Planning as a forest products manufacturing industry, at the last part of forestry issues, including forest management, protection, development and use and developing forest products processing industry.

From the perspective of efficiency, development planning with objective, declarative goals, few practical regulations almost have no contribution to the development of a specific sector. Therefore, there is nothing to guarantee that such planning is necessary or capable of boosting the development of the wood processing sector. Current situation of sectors already having development planning and strategy shows the limits of those planning and strategies. Planning for agricultural or forest sectors is also in similar situation.

However, the fact that the wood processing sector hasn't had any planning regulated in high-level legislation, only appears in a small part of other sectors is a signal that from a policy perspective, the wood processing sector hasn't gotten enough attention from policy makers.

It is necessary to build a thorough, scientific policy to develop the wood processing sector. This policy would not be a combination of objective goals and declarative measures but developing orientations formed by careful research of market's demand and the sector's capacity, together with different policies, relating to each other in order to deal with the sector's difficulties and help promote its development in the scope of law and related international commitments.

Regarding incentive policies

As mentioned above, currently, policies relating to the wood processing sectors are mainly for developing and restructuring forest sector (forest planting, managing and using). There are few specific policies for the wood processing sector.

A review of the current policies shows that there is no particular incentive policy (e.g.in credit, investment…) for the wood processing sector. This is actually easy to understand: when joining WTO, Vietnam promised not to apply any export subsidy measures and comply with regulations of WTO's Agreement on Subsidies and Countervailing Measures, whereby not applying any particular subsidy measures to domestic manufacture (only apply to a sector or a specific group of domestic firms). As an export oriented sector, all credit or financial support for wood processing firms/sector (separately or in conjunction with other exporting sectors) could be considered as export subsidies or specific subsidies, leading to a high risk of being sued (against subsidies) for exported wood products.

However, in principle, the Government can apply supporting measures to develop forest materials sources as well as wood processing units located in rural areas according to the mechanism of agriculture subsidies allowed by the Agreement on Agriculture of WTO and Vietnam's agreements on the total agricultural support each year. Moreover, supports for manufacturing industry applied generally, without any discrimination (e.g. supports for SMEs, developing infrastructures and disadvantaged areas…) is also allowed by WTO and can be taken advantage of to develop the wood processing sector.

In fact, some incentive policies for the wood processing sector is applied in this method. For example:

- Decree No. 210/2013/NĐ-CP on policy encouraging firms to invest in agriculture, rural areas (in which there are regulations about supporting investment in processing plantation for Northwestern provinces and provinces with poor districts; supporting investments in wood products manufacturing, preserving and processing units; favoring investment in manufacturing artificial boards directly from agricultural and forest materials…);
- Decision No. 11/2011/QĐ-TTg on policy encouraging the development of bamboo and rattan sector (in which there are regulations about incentives measures for investment in and/or support for technology, labor… for bamboo, rattan manufacturing units);
- Decision No. 497/QĐ-TTg dated April 17, 2009 of Prime Minister on supporting lending interest rate for purchases of equipments, materials for agriculture manufacturing and construction materials in rural areas;
- Decision No. 443/QĐ-TTg dated April 4, 2009 on giving interest rate support to organization, individuals that borrow long, medium term loans from bank to make new investment for development of production and business;
- Decision No. 131/QĐ-TTg dated January 23, 2009 on giving interest rate support to organizations, individual borrowing from bank for production and business;
- Decree No. 75/2001/NĐ-CP dated August 30, 2011 of the Government on the Government's investment credit and exporting credit (amended and supplemented afterwards by Decree No. 54/2013/NĐ-CP dated May 22, 2013 and Decree No. 133/2013/NĐ-CP dated October 17, 2013) (according to this Decree, manufacturing exporting wood products is classified into Handicraft group in the List of products allowed for export credit; however, in order to

conform to international commitments, lending rate shall be made consistent with market interest rate. Therefore, in principle, this is not a credit subsidy policy).

Relating to policies on domestic support for forest sector, thereby the wood processing sector is indirectly benefited, the Government has many policies on investing in forest development via specific supporting program, with an important contribution from non-refundable ODA (which statistically is about USD560 million for the period of 2005-2010), such as:

- Project 661 – planting 5 million ha forest (implementing Decision No. 661/QĐ-TTg of Prime Minister dated July 29, 1998 on objectives, missions, policies and implementation the Project of planting 5 million ha forest);
- Program 327 (in accordance with Decision No. 327-CT dated September 15,1992 of the Chairmen of the Council of Ministers on policies of using vacant lands, bare hills and mountains, alluvial plains and water surfaces);
- Decision 57/QĐ-TTg of Prime Minister dated January 9, 2012 approving forest protection and development plan, period of 2011-2020.

Control policies

In recent years, the wood processing sector is the subject of tightening policies and regulations which focus on 4 groups:

- Group of policies relating to decreasing and proceeding to temporary stop of natural forest exploitation (i.e.: Decision No. 186/2006/QĐ-TTg dated August 14, 2006 of Prime Minister; Document No. 27/VBHN-BNNPTNT issuing Regulation on forest management; Decision No. 57/QĐ-TTg dated January 9, 2012 of Prime Minister approving Forest protection and development plan, period of 2011-2020);
- Group of policies relating to ensuring the legal origin of wood materials (e.g.: Circular No. 01/2012/TT-BNNPTNT dated January 4, 2012 of Minister of Agriculture and Rural Development regulating legal forest products and examination of forest products' origin, amended and supplemented by Circular No. 42/2012/TT-BNNPTNT);
- Group of policies relating to phytosanitary of timbers and NTFPs;
- Group of control procedures for exported wood products (e.g. : VPA/FLEGT agreement which is currently under negotiation with the EU).

Basically, these control policies is inevitable, suitable with the world common trend in management for wood products in specific and environment management and sustainable development in general.

However, the increase of such regulations requires firms to have measures in order to meet the requirements and have appropriate business strategy (especially for supplies and consumption market) and manufacturing strategy (control procedures).

This is a big challenge that without careful and effective preparation, firms will find it hard to survive and grow, especially exporting firms.

In overall, it can be seen that even though there have been policies focusing on developing material sources, along with the objective of environmental protection and sustainable development, policies for the wood processing sector are currently disjointed, lack of uniformity and specifically not including practical policies. Incentives policies for several sectors, if any, are difficult to access.

2. International policies

Exporting more than 80% of the total products' value, the wood processing sector of Vietnam is under great impact of exporting market's policies for wood products as well as international agreement between Vietnam and countries related to wood products trading.

In general, international trade policies have witnessed many milestones in the past decades under strong impact of trade liberalization via WTO and regional, bilateral free trade agreements (FTA). Regarding wood products manufacturing and exporting, big international policies focus on the fundamental areas as follows:

- *Tariff policies:*

Thanks to international trade agreements, tariffs on processed wood products, in general, have considerably reduced, with a significantly deeper reduce than of agriculture, forest related products. Most Favored Nation tariff (applied within the scope of WTO) for wood products imported to big market (U.S, EU…) nearly reaches 0% in several tariff lines. Incentive taxes in FTAs for wood products are mostly eliminated.

Those are greatly favorable conditions for the wood processing sector of Vietnam to develop and expand its markets, considerably increase its competitiveness in exporting markets, especially in big ones.

However, from domestic perspective, together with other subjective reasons, easy tariff policies is one of the basic reasons why Vietnam's wood product market mostly fall into South East Asia, Taiwan and Chinese manufacturers. This will also be a big challenge for Vietnamese wood manufacturing firms to regain their market share.

- *Non-tariff policies and measures*

Also thanks to WTO and FTAs, ordinary non-tariff measures such as quota, imported licenses… for processed wood products are almost removed.

Some special policies related to trade of certain high value goods such as policies on export tariff, exporting bans are still remained but with limited scope and almost have no impact on the total trade of wood products, especially processed ones.

- *Subsidy policies for agricultural - forest sector*

As mentioned above, in a narrow sense, the wood processing sector itself is not a subject of permitted subsidy measures within WTO's scope. However, from the perspective of forest manufacturing, supporting measures for controlling timber's origin, increasing material supplies, supporting small manufacturing units in rural areas, craft village… are permitted. In international trade of wood products, nations can take advantage of these permitted measures in order to support their firms, which will create a considerable competitive advantage for their wood products.

In the context of more than half of the world market share of wood products have fallen into manufacturing firms from developed countries, with high income and strong capacity and subsidy practices, this can be a great challenge for Vietnamese wood product manufacturing firms in particular and developing countries in general, though this is rarely mentioned.

- *Technical barriers to trade (TBT) and Sanitary/Phytosanitary (SPS)*

According to WTO's regulations, the issuance of regulations on TBT, SPS is under the authority of importing countries, as long as those barriers are issued in accordance with WTO's procedures in order to ensure the transparency, science and legitimate purposes. FTAs signed after WTO mostly do not alter the autonomy of nations in this matter. TBT, SPS's regulations in FTAs (including new generation FTAs recently) mainly reaffirm the strict compliance of WTO's regulations. Supplemented regulations, if any, mainly focus on procedures for faster dealing with complaints of TBT, SPS. There are no big regulations adjusting or restricting the issuance scope of such measures.

In fact, together with environmental protection and sustainable development trend, most big markets consuming processed wood products recently have increased TBT, SPS measures. This policy group is going to strongest impact on wood product export at present as well as in the future.

Among TBT measures, regulations on indentifying timbers' legal origin have greatest impact on trading of processed wood.

In U.S, this measure belongs to Lacey Act (full name is Conservation law), which was amended in 2008, mostly about wood products. This Act is considered as strongly affecting Vietnamese wood product export in a large scale since U.S market is currently accounting for nearly half of the total exported value of Vietnamese wood products.

EU's measures on the legal origin of timber are implemented in accordance with FLEGT (Forest Law Enforcement, Governance and Trade). To carry out FLEGT, EU designed a mechanism allowing exporting countries to control the compliance with FLEGT of their exported products via signing a Voluntary Partner Agreement (VPA). The nature of VPA is to transfer the authority of confirming timbers satisfied legal origin requirement as qualified to import into EU from EU's border control agency to management agencies of exporting countries, as long as their procedures and licensing criteria (FLEGT license) meet EU's requirements. Vietnam is currently under negotiation over VPA with EU.

Box 3– U.S's Lacey Act of 2008

Lacey Act, a natural conservation law, named after Senator John F. Lacey, was adopted by U.S Parliament in 1900. This act prohibits trade in wildlife, fish, and plants that have been illegally taken, possessed, transported or sold.

In 2008, this Act was amended to increase sanctions on illegal trading and manufacturing wood. Specifically, according to new regulations supplemented in 2008, it is unlawful to import, export, transport, sell, receive, acquire, or purchase in interstate or foreign commerce any plant in violation of the laws of the United States, a state, or any foreign law that protects plants.

According to the amendment in 2008, US could interpret foreign laws relating to wood products and trial individuals or companies relating to wood products in the exporting country ("due care" responsibility in trading, transporting and consuming wood products).

This Act also requires subjects (traders or consumers) to fill in the Declaration form about country of origin, species and scientific name of all lignin components in the wood products exported from or imported into U.S.

Box 4– EU's FLEGT implementation plan

The European Union's policy to fight illegal logging and associated trade was defined back in 2003 with the Forest Law Enforcement Governance and Trade (FLEGT) Action Plan. The key regions and countries targeted in the FLEGT Action Plan, which together contain nearly 60% of the world's forest and supply a large proportion of internationally traded timber, are Central Africa, Russia, Tropical South America and Southeast Asia.

The FLEGT Action Plan covers both supply and demand side measures to address illegal logging.

The FLEGT Action Plan has led to two key pieces of legislation:

FLEGT Regulation adopted in 2005, allowing for the control of the entry of timber to the EU from countries entering into bilateral FLEGT Voluntary Partnership Agreements (VPA) with the EU;

EU Timber Regulation of 2010, regulating control measures of wood trading in EU market.

This Regulation laid down the obligations of operators who place timber and timber products on the market through three key obligations:

- Prohibiting the placing on the EU market for the first time of illegally harvested timber and products derived from such timber;

- Requiring EU traders who place timber products on the EU market for the first time to exercise “due diligence” (The operator must have access to information describing the timber and timber products, country of harvest, species, quantity, details of the supplier and information on compliance with national legislation; should assess the risk of illegal timber in his supply chain, based on the information identified above and taking into account criteria set out in the regulation; When the assessment shows that there is a risk of illegal timber in the supply chain that risk can be mitigated by requiring additional information and verification from the supplier)

- Requiring traders to keep records of their suppliers and customers during the transportation of timber and timber products (to facilitate the traceability of timber products economic operators in this part of the supply chain)

SPS measures for processed wood products are mainly to ensure that wood and ancillary materials not include any liquid or components that are harmful to importing countries’ hygiene and epidemiology. Since manufacturing technology becomes more and more advanced, there have appeared less preventing measures.

- *Trade defense instruments*

According to WTO, the adoption of trade defense instruments (anti-dumping, anti-subsidy, safeguard) against imported goods must comply with WTO’s principles to avoid unfair competition/massive imports hurting domestic manufacturing industries. However, since those instruments are mostly implemented upon the demand of domestic manufacturers and the importing countries’ decision to investigate, many defense instruments have been abused to become disguised protectionism for domestic manufacturing industries.

In recent FTAs, similar to TBT, SPS measures, content of trade defense mainly repeat WTO’s regulations, with some supplementations primarily about cooperation.

In fact, wood products have become the target of some trade defense instruments, especially in important markets like U.S. Up until now, Vietnamese wood products haven't coped with any lawsuits of this type. However, it cannot be ignored the warnings about the risk of anti-dumping lawsuits in U.S, where Vietnamese wood sector is growing rapidly. With the present growth rate, this risk also exits in other markets and could affect the developing prospect of wood products in those markets.

In general, international policies related to wood product trade tend to easy in tariff but strict in technical requirements and disguised trade defense instruments. This should be specially noticed because unlike tariff barriers, which, despite of being high, is stable and could be overcome with good competitive capacity, TBT and SPS measures are hard barriers that firms only have one option of meeting all their requirements in order to import into those market; while trade defense instruments fluctuates with applied tariff, which creates difficulties for firms in making business strategy, especially for price. Sometimes, if the tariff is too high, firms may give up on potential markets.

IV. DEVELOPING POTENTIAL AND ORIENTATION FOR PROCESSED WOOD PRODUCTS

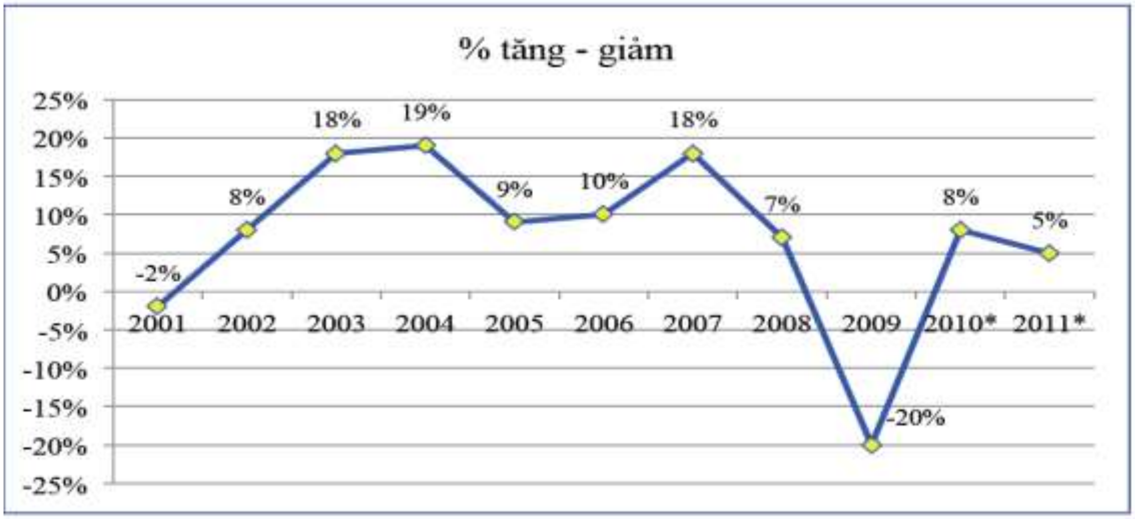
1. Exporting potential and orientation for wood export

Traditional wood products

Exporting 70-80% total products' value, the wood processing sector is clearly export-oriented. In the time to come, exporting will be considered the key strategy of this sector, in terms of both market scale and sector's capacity.

According to data, the world market for wood products reaches USD90-100 billion/years. Its growth is quite stable, except for crisis periods when the world demand fell dramatically.

Figure 13– Growth rate of world trade of wood products



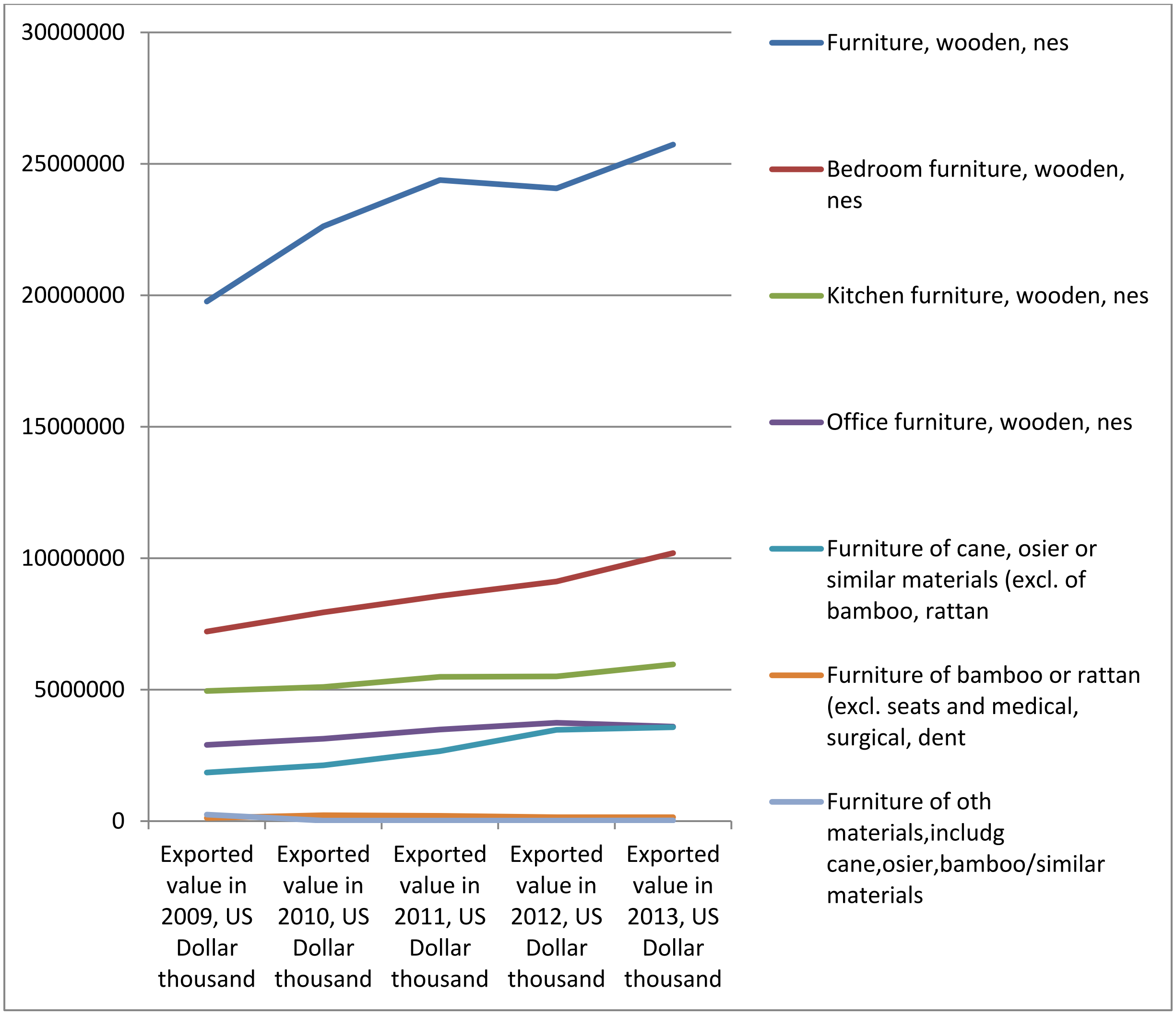
Source: CSIL (prediction). The above percentage was rounded (Nguyen Ton Quyen – TL8)*

In terms of general growing trend of exporting wood products for specific groups, according to ITC Trade Map's data, living room – kitchen wooden furniture have been ranked first in the past 5 years, next, much lower, are furniture for living room, kitchen and office, respectively. All those 4 groups witnessed a stable increase each year. Bamboo and rattan products are ranked lower with mild or no increase.

According to experts, without any big incidents (e.g. financial crisis, economic crisis in a key market…), the world demand for wood products will continue its previous 5 years' trend, in terms of both exported value and kinds of products. If the world economics is on recovery trend as present, especially in EU market, the demand's growth rate is even predicted as higher than the past(because of strong impact of crisis and slow recovery in the past 5 years). Experts predict that with this growth rate, the wood products market will reach USD300-400 billion/year in the next 10 years (Cao Vinh Hai – TL7), with a large market share belonging to wooden furniture.

Therefore, it can be seen that the world market for processed wooden products, especial furniture group, in the future is quite promising. This will be a significant consumption trend that global manufacturers should focus on.

Figure 14– Exported value of world wood products



Source: ITC Trade Map

In such a huge market, up to 2013 Vietnamese wooden furniture only accounts for 2-3% total exported value of world wood products. Therefore, it can be said that the developing opportunities for Vietnam wood processing sector in the future is very high.

A dramatic increase of exported wood manufacturing firms and exported value of wooden furniture of Vietnam recently shows that we are on the right track of meeting the world demand and creating fundamental conditions for products' growth in the future. However, supply sources, capacity to meet technical requirements for wood products and manufacturing efficiency will continue to be great challenges for Vietnamese wood sector to maintain and expand its market share in this highly potential market.

Unlike other products, the world's demand for processed wood products does not purely focus on products' quality and model. Eco-friendly and sustainable development trend poses new requirements affecting the world's demand.

Some elements could have an impact on the world's demand for wood products are as follows:

- Policies on wood products import of big markets' government

  As mentioned above, big markets such as U.S, the EU, Japan, Australia, New Zealand (account for about 50% of the world wood products market) are more and more "sensitive" with environmental issues. These markets have been increasing TBT related to the legal origin of timbers used for manufacturing exported products.

  However, according to data, there are only 8% of the timbers currently circulating in international trade having legal origin.

  To satisfy requirements of timber origin means being able to access huge market of wood products, and vice versa. Therefore, this is a big challenge for wood product manufacturing firms, but also an opportunity for those who can fulfill those requirements when exploiting and processing timbers.

  The fact that exporting Vietnamese wood products mainly depends on exploited and imported timbers, most of which are from South East Asia creates difficulties for Vietnam to meet the origin requirements of imported markets.

Supplying countries	**Risks of affecting the timbers' legal origin**
Laos	Laos Government prohibits exporting natural timbers. Imported timbers from Laos such as timbers in hydroelectric construction zones, military areas are classified as not having legal origin. Heavy corruption in custom clearance procedures and quota allocation makes certificates of timbers' origin less trustworthy.

Cambodia	Most of Cambodia's exported timbers are considered as having illegal and unsustainable origin. Some forest areas converted into rubber plants do not entirely comply with forest protection requirements. Prohibition of exporting timbers without legal documents is ineffective. Mechanisms to control the compliance of legal timber regulation are inefficient due to heavy corruption.
Myanmar	A large number of timbers smuggled out of border (especially to China and neighbor countries) are illegal ones.
Indonesia	Approximately 60-80% of the processed wood products, 55% of the exported wood board and 100% of the exported round wood are identified as having "doubtful" origin

Source: Forest trend – TL10

In a brighter aspect, Vietnam is under negotiation and aiming toward signing, implementing many FTAs, including TPP, with some members currently supplying high quality, legally originated timbers (U.S, Canada, Chile, Australia, New Zealand…). If Vietnam can take advantage of this opportunity, Vietnamese manufacturing firms will be able to purchase materials with more reasonable price and fulfill the requirement of timbers' origin from markets with highest demand.

– Customers' requirements

From the beginning of 2000s (before the issuance of strict requirements of timber's origin of US, EU Governments…), customers in developed countries have paid more attention to certified wood products (e.g. FSC – Forest Stewardship Council certificate). Wood products retailers in North America, the EU and Japan want to show customers their social responsibilities, thereby reduce risks of trust, supply chain's sustainability and even legal risk related to timbers' origin afterwards (when Lacey, FLEGT were issued).

This trend gradually developed and up until now became almost a popular norm in those markets. It is reported that big retailers (such as Wall Mart of U.S, Carrefour of France) currently ask foreign wood products suppliers for not only certificate of origin but also proof of products' sustainability confirmed by a third party. Criteria of legal timbers (as required by Government's agencies) now become minimum standards due to attached requirements of independent certificate.

Apart from private retailers, even the Governments ask for the same requirements in their public procurement bids. For example, from the latter half of 2000s, public procurement policies of Europe and Japan have required wood product suppliers to present their proof/confirmation from third party of the legal origin, assurance of compliance and sustainability. Those requirements contributed greatly into boosting this trend (i.e. in the EU, public procurement accounts for about 15-20% the total demand of this market).

It is clear that the ability to satisfy those requirements decide an important part of competitive capacity of Vietnamese wood products in the world market.

Non-timber forest products (NTFPs)

Regarding NTFPs, although products made from bamboo and other NTFPs only accounts for a small portion of market share, in terms of value, this group is worth mentioning.

According to Mekong Bamboo Program's prediction, until 2017, the market of bamboo products will reach USD17 billion. Despite its big market share (95%), the growth rate of traditional products tends to slow down. Modern products, despite its small market share, are very promising, being able to compete with related products of similar types, especially wooden ones. According to market experts, industrially manufactured bamboo products can totally substitute wooden furniture in terms of style and utility, together with its advantage in eco-friendly trend.

Therefore, in the context of bamboo furniture only accounts for 3% of 90-100 % of the world wood product market, industrial bamboo products are considered to be highly potential for exporting.

This is totally possible since the bamboo sector of Vietnam has advantages in materials and traditional techniques. Specifically, this sector has gotten its own development policy with particular support from the Government.

The remaining issue is how to effectively implement this policy and increase products' competitiveness (in terms of design, quality…)

Box 5– Policies encouraging the development of bamboo sector

Decision No. 11/2011/QĐ-TTg issued many specific policies in order to encourage the development of Vietnamese bamboo sector. This is one of few sectors having an overall development policy, in different perspectives.

In terms of developing source of materials

- Provinces shall build development planning for bamboo, rattan material zones

- Government prioritizes investments in developing infrastructure in bamboo, rattan material zones along with product manufacturing and consumption

- Government supports investments in developing new craft villages in places having advantages in materials, labors or market

In terms of credit

- Firms having bamboo, rattan plantation projects; manufacturing bamboo, rattan products; supplying services directly serving bamboo, rattan plantation and consumption of these products are entitled to enjoy investment incentives and supports in accordance with Decree No. 6/2010/NĐ-CP

- Manufacturing and trading units of bamboo, rattan products having investment projects to develop material zones, manufacturing bamboo, rattan products will be supported 50% implementation cost by National Foundation for Science and Technology Development to invent new technology, in charged by that unit; 30% new investment cost to implement trial manufacturing approved by competent authorities (existed equipments and plants are not included in total cost)

In terms of labor

- Manufacturing and trading units, households of bamboo, rattans products are entitled to borrow capital from National Fund for Employment, National Target Program on Employment

- Firms having investment project to develop bamboo, rattan sector, which belongs to List of agriculture subsector eligible for special investment incentives, investment incentives and investment promotion in accordance with Decree No. 61/2010/NĐ-CP are supported by state budget 100% of domestic training cost.

In terms of import tariff

- Units manufacturing bamboo, rattan products are entitled to enjoy 0% import tariff on specialized equipments for manufacturing bamboo, rattan products which are unavailable in domestic market, in accordance with the list issued by Ministry of Industry and Trade

In terms of trade promotion

- Firms manufacturing and trading bamboo, rattan products are supported domestic and foreign trade promotion cost by the government in accordance with Decree. 61/2010/NĐ-CP; annual programs and funds for trade promotion of Ministries and provinces

Wood chip

Studies shows that wood chip market have witnessed a sudden increase in recent years. Just in 3 years, the world consumption of wood chip increased 5 times, from 1.6 million tons in 2009 to 31 million tons in 2012. This can be explained by the expansion of MDF manufacturing (e.g. in Turkey and Japan market) and strong development of paper industry (especially in China). Experts predict that the world wood chip market will even witness higher growth.

According to 2012's data, wood chip factories in Vietnam supply about 1/5 total world demand. Wood chip factories in Vietnam increased dramatically due to a surge of China's demand for wood chip, requirements of reasonable amount of capital to invest in technology and plants, simple labor and quick profitability. With the above mentioned growth rate, theoretically, Vietnamese wood chip sector is very potential.

However, there are many challenges awaiting this sector, especially the difficulties in material supplies. According to Wood chip Report of Forest Trend, current material sources are not enough to supply for existing firms, let alone firms going to be established in the future. Specifically, with 122 factories in operation as present, materials from plantation only adequate for them operating at 77% capacity. Competition for material in the time to come will be more complex when there are 18 more waiting for operating license.

In addition to intra-sector competition, the wood chip sector has to compete with other sectors for materials. Paper powder, construction, fuel, pressed board, household wood product sector … all use the same materials as of wood chip sector and in serious shortage of input.

It is said that exporting wood chip is similar to exporting raw materials, which is wasteful and increases material shortage for deep processing wood sectors. Although there are about 20-25% exploited timbers are qualified for manufacturing wood products, the rest should be used for domestic manufacturing of chip boards and other products instead of exporting in the form of wood chip as present.

Therefore, even though this sector is profitable in the near future, it should be limited in domestic consumption, serving domestic chip board and paper industry.

However, it is noteworthy that processing and exporting woodchip are lucrative, while it only requires simple technology and small capital. Therefore, limiting woodchip export in the near future is not an easy task, which needs determination and strict policies.

2. Domestic market

Demand for wood products in domestic market have been quite stable and increase steadily in recent years, depending on people's income and new consumption trend. Domestic market doesn't care much about the timber's origin and mostly falls into middle-class segment (consuming affordable products, primarily made of low valued timbers MDF). This sector significantly grew before real estate's crisis and is predicted to rise again when the real estate market is gradually recovered. With good preparation for this growth, it will be a new opportunity for Vietnamese wood sector.

Compared with foreign suppliers in domestic market, domestic firms are considered to have more advantages, especially in information/ knowledge of demand and consumption habits of Vietnamese people, control of traditional retail channels (stores, small shops) which are accessed by a majority of middle-class consumers, and in delivery and marketing costs.

However, in reality, Vietnamese wood processing firms find it not easy to dominate domestic market. It is partly because this market has been left for foreign suppliers for such a long time that regaining it is quite difficult. Moreover, since firms have manufacturing exported goods with designs proved by customers, without attention to retailers for long, most of them lack designing skills, with limited models and marketing capacity and distribution channels to approach customers.

Though only accounting for 20% of the total wood products' value, Vietnam market seems to have remarkable changes in recent years. Demand for wood products increase partly because of consumption trend (prefer wood products) and income rise in some group (especially in urban areas). Another reason is said to be more effective marketing strategy (advertising, fairs…) to approach individual consumers and constructions' owners.

In summary, in the time to come, wood product sector of Vietnam should focus on the following products:

- Processed wood products, especially furniture for exporting (in terms of high quality products) and domestic consumption (in terms of low or medium quality ones)
- NTFPs products, especially ones made from bamboo and rattan to serve both exporting and domestic consumption
- Wood chip, only for domestic consumption

Regarding exported products, it should be specially focused on timbers' legal origin and information related to types of wood used for manufacturing to take advantage of markets having huge demand of wood products but sensitive to sustainable development and environmental issues.

Regarding products for domestic consumption, increasing retails and improving models are key elements to gain more market share of more stable, potential and easier market of Vietnamese wood products.

V. PROSPECTS ANDORIENTATION OF THE WOOD PROCESSING SECTOR

1. The foundations for development of the wood industry

The wood industry is said to have promising prospect in the future. This is agreed by many experts in terms of several aspects, both market, capacity and ability to expand production, woodwork industry has a lot of potential.

From the market point of view, with huge prospects of global and domestic market as discussed above, the wood sector will have an extremely attractive output market, with high profitability and stability if manufacturing is on the right track, which is capable of filling quality and sustain able requirements.

From the production point of view, wood processing technology does not require too much capital investment, thus the ability to expand production is entirely within reach of Vietnam enterprises, especially medium and small enterprises. Regarding to labor, with low requirements in skills, it is not difficult to train employees, especially suitable for rural and remote areas. Moreover, the wood processing sector has a long tradition in many residential areas of Vietnam. With high workmanship and good skill, if there is appropriatest and ardization, labor force will become a strength instead of concern for the wood processing sector in the future.

In terms of raw materials for production, in a country where40% of the area is cover by forest, planning to rise to45% in the next 10 years, satisfyingapproximately60% the demand for raw material, the wood sector has many development opportunities. Growth of the wood industry will not only bring profits, but also help increase the value of wood and NTFPs, thereby creating spillover effects in expanding the area, protecting and developing production forests as well as natural forests. In other words, the wood processing sector is the driving force of economic forestry development, promotes forest expansion and development in Vietnam. Unlike many sectors which use natural resources as inputs for production, leading to exhaustion of natural resources, the wood processing sector is the only sector having good conditions to develop if following the right track. This is because wood is the only natural resource in the world that have high ability to renew and regenerate.

From the policy point of view, the development of the wood industry could create huge spillover effect in many sectors, particularly ones associating with areas of sensitive resident, low income such as a forestation, craft villages...Increasing plantation areas, efficiently exploiting of wood and NTFPs will thus create opportunities of employment, higher income and more stable life for millions of people planting forest in mountainous areas and hundred thousands of workers in the manufacturing units and craft villages. Moreover, if there are comprehensive developing policies, the supporting industries, mechanic and machinery industries can also have the opportunity to grow resonantly with the wood processing industry.

In the environmental point of view, planned development and sustainability assurance of wood processing sector also indirectly and significantly contribute to the environmental goals and sustain able development of Vietnam.

From this analysis, it can be said that Vietnam needs to focus on comprehensive and efficient developing policies for the wood processing sector in the future, considered it as a key manufacturing and exporting,

2. Requirementsto develop the wood processing sector

The development of the wood processing sector depends on many factors relating to Government's policies and firms' competitive capacity.

Requirement for policies

To efficiently develop the wood processing sector, the Government needs to have a comprehensive and scientific policy. This over all policy is neither a set of voluntaristic goals, nor declarativemeasures but development directions based on careful studies of market demand and capacity of the wood processing sector. This shall be systematic set of implementable and detailed policies, with specific measures connecting with each other to handle problems in the entire chain of raw materials supply, production and output of the wood processing sector. This system must also ensure a perfect combination between domestic and international policies relating to all aspects of the wood product manufacturing and consumption.

In fact, none of Vietnamese products have got such a policy system. Although the wood processing sector itself has been recognized as the potential industry but there are still only declarative policies, subjective goals without any specific measures to implement. The Development Planning of Vietnam's wood processing industry which is recently approved by Ministry of Agriculture and Rural Development also falls into such political path.

Therefore, from the efficiency point of view, the overall developing policy for Vietnam's wood processing should include eat least the following details:

- *In terms of policies on developingraw material sources*

  + It is necessary to study, form lists of priority wooden materials, thereby determine appropriate types of trees for production forests. In short term, these are some types of wood having enough quality, suitable for Vietnamese soil and climate conditions (acacia, eucalyptus ...)

    Note: The current a forestation policies are for common plants, there is no specific policy for processed timbers.

  + Policies to support the development of seed, priority types of tree, especially credit/investment preferential policies for development/cultivation projects of these trees, researches and technology transfers regarding to cultivation and preservation to enhance the quality of wood.

    For example, the Government researches and transfers for free its results to planting facilities or partially or fully funding research projects of institutions using National Foundation for Science and Technology Development.

    - Incentive policies for infrastructure and traffic development in material areas (production forest), support the service fee related to forest (forest environment, forest exploitation ...).
    - Support policies(on ground clearance, administrative procedures, tariff, credit loans...) for projects investing and constructing in material zones for areas which gather lots of wood processing units and for projects building industrial, centralized production zones for wood processing facilities;
    - Conducting negotiations and agreements with countries which currently supply Vietnam(Laos, Cambodia...) with large proportion of wood material to control the origin of import wood in Vietnam.

- *In terms of credit for production*

  + It is necessary to have incentives credit policies for businesses, production facilities to implement projects on cultivation, wood producing and processing; provide direct services for cultivation, production and consumption of processed wood products;

manufacture and process ancillary materials to process wood (especially secondary materials processing facilities such as MDF, particle board, ply wood, wood bar...; ancillary material suppliers such as knives, glue paint, hardware, fasteners,...)

For example: permit those entities to enjoy investment incentives, investment supported similar to regulations of Decree No.61/2010/ND-CP;

- Making credit support package for SME sand enterprises in the field of agriculture and forestry. In particular, simplifying procedures to access funds is totally feasible.
- Investment policies which support the development of new craft villages in material areas.

- *In terms of science and technology*

  + Policies funding and supporting research and transfers of research's results relating to product designs, materials, supplies, wood processing technology

  + Free training programs regarding to new technologies, processes of production, management of wood processing facilities.

  + Developing technical standards for controlling import wood in Vietnam (to ensure good material for production of export), at the same time, controlling and preventing poor quality wood processing products which are imported into Vietnam market.

- *In terms oflabor*

  + There should be free vocational training policies for workers in craft village areas

  + There should be policies which allow wood processing facilities, households to get loans from the National Employment Fund, national target program on employment or to be supported of training fee;

  + Policies which support associations to organize short-term training coursesin production management, designing, requirements and methods to satisfy export markets;

- *In terms of import tax:*

+ There should be policies to exempt fee/tax for importing wood materials.
+ Custom procedures, tax refund procedures need to be simplified for imported wood materials or exported products
+ Tax policies of machinery and equipment for wood processing should be reasonable

- *In terms of trade promotion*

  + There need to be programs to promote Vietnam as a nation supplying high quality, sophisticated wooden furniture, with legal origin and sustainable use in large markets. These programs should involve wood industry experts, market experts and wood association to ensure effectiveness;
  + Supporting craft villages in developing and marketing branches, product designs, particularly in domestic market;
  + Searching, guaranteeing and guiding enterprises to participate in the efficient distribution chain in key export markets;
  + Support building distribution channels and trade promotion in the domestic wood product market, especially emphasizing reliable sources, wood with high quality and reasonable price;
  + Setting up centers to provide free information about market, price, customers...to producers and consumers;

In fact, a program with similar details was promulgated to promote the development of bamboo and rattan (as mentioned above). Despite this, the absence of measures to ensure the implementation has led to undesired efficiency.

Therefore, for an effective overall policy to develop wood processing industry, it is necessary to specially emphasis on the comprehensiveness and peremptoriness of these programs, with participation and regular monitoring of enterprises, associations in wood industry.

In case the comprehensive system of policies cannot immediately implement(due to limited resources or lack of unity between policies of different management agencies), acertain policies should be prioritized, such as credit policies (especially in supporting industry) and trade promotion (especially in domestic market).

Requirements for enterprises

While policies highly depend on actual actions of Government agencies and thus difficult to control the efficiency and timeliness, there are many other measures within reach of enterprises and can be implemented immediately in order to enhance the competitiveness of each enterprises and the wood processing industry.

According to the Associations in wood industry, there are solutions which need to be done and can be done immediately by enterprises:

- Affiliating for joint strength through the wood industry associations

  In fact, Vietnamese firms in wood sector are still operating on an individual, self-supporting basis, not sharing information about supplier, market and thus, facing with is advantages and difficulties which could be avoided. There is usually no cooperation between firms, leading to damages or price fall due to customer's pressure. Enterprises may miss opportunities (like extreme large orders), due to the lack of cooperation (because an individual firm cannot meet client's order).

  Thus, to remedy this situation, firms should cooperate, share information serving for their business through groups or associations, in particular:

  + Information about market, customers(market requirements that need to pay attention to, unreliable customers...)
  + Information about supplier of raw material, machinery and equipment(good suppliers, reasonably price, unreliable suppliers...)
  + Information about technology, quality requirements
  + Information about risks (through regular forums of associations...)

  Besides, through affiliating business groups, associations, firms can effectively implement the following activities:

  + Trade promotion, mutual product promotion
  + Develop production affiliating chain(between big enterprises and satellite enterprises, between raw materials suppliers and processing enterprises...)
  + Forming business groups to deal with large orders, large customers
  + Petitioning the Government agency to support enterprise and industry or agitate policies and legislation which affect the industry

- Innovating mode of management, production
    + Choosing appropriate model of management for the scale of production;
    + Constructing production processes which are reasonable, efficient, maximum saving of materials, labor;
    + Establish a mechanism to control the entire production process, ensuring production efficiency and product quality;
    + There need to be tight, scientific plans to ensure timeliness for customer;
    + Setting up appropriate rewarding, punishing mechanism to control the quality of labor and encourage creativity;

PART 2 - RECOMMENDATIONS FOR NEGOTIATING VN-EU FTA RELATING TO WOOD PROCESSING PRODUCTS

Vietnam and the European Union (EU) offically began to negotiate onEVFTA since June 2012. By June 2014, the two parties have made 07 official negotiation rounds and many other meetings, discussion at technical levels. The two sides have been giving a lot of efforts to conclude the talks, at least all basic matters in October 2014 before the European Commission step into the next term of office.

EVFTA is expected to have a wide range of issues, covering virtually all aspects of traderelations between the two parties which in particular are: (i) Trade in Goods: market access commitments (eliminationof tariffs and non-tariff barriers), technical barriers and sanitary and phytosanitary (TBT, SPS), rules of origin ...; (ii) Trade in Services: commitments to open market services by reduction/removal of market entry and operating conditions; (iii) Investment: commitments to reduce restrictions on partner’s investment; (iv) New issues: public procurement, sustainable development – labor, state enterprises ...

As an export-orientedsector, with EU as a large, important and potential market, the wood processing sector is expected to have great opportunities when EVFTA is in force.

In order to maximize benefits from these opportunities to develop Vietnam's wood industry, the commitments in EVFTA framework related to the wood industry should be negotiated in an overall manner that best suits to the needs and capacity of Vietnam's wood industry, as well as the context of EU timber trade policy now and in the future.

This partsuggests recommendations for Vietnam in EVFTA talks within relating aspects to ensure maximum support from EVFTA for the orientation of Vietnam's wood processing industry, as analyzed in Part 1 of the report.

1. Vietnam – EU wood product trade and orientation of EVFTA talks

While the growing orientation of wood industry is becoming the basis for its domestic and international trade policy, for each specific market, depending on the situation and prospect of trade, specific policy should be adjusted accordingly. Regarding to EU market, in spite of a decline in turnover in 2008-2012 period, this market remains as one of the most important markets of Vietnam’s wood product exporting industry. In average during this 5-year decline, the EU market still accounts for about 30% of total Vietnam’s processed woods export turnover. The drop is only temporary due to the Eurozone economic crisis, thus can not indicate regular trend and the role of this market in Vietnam's woodwork export industry.

In terms of import, Vietnam has imported wood products from EUwith just a small amount in volume and value. Specifically, turnover from EU woodwork import accounts for only 2-5% compare to export to this market.

Table 10– Wood product trade between Vietnam and EU

Year	2008	2009	2010	2011	2012
International export (USD1000)	3.301	3.001	3.882	4.423	5.128
Export to EU (USD1000)	1.360	1.092	1.150	1.143	1.126
Proportion of EU export to the world (%)	41	36	30	26	22
Import from EU (USD1000)	32	55	54	45	45
Surplus with EU (USD1000)	1.328	1.037	1.096	1.098	1.081

Source: Worldbank

With the current trade, and the fact Eurozone countries has gradually recovered, along with higher expectation and consumption demand increasing with the revival of the economy, EU is consideredas an important market of Vietnam wood sector in the near future.Therefore, in EVFTA negotiation rounds, regardingprocessed wood products, in principle, Vietnam is in offense position, asking EU to open it market as large as possiblefor Vietnam's wood product in return for Vietnam's willingnessopen for wood products from the EU. This principle can be specified in different aspects of the talks:

– From market access perspective, in term of the wood sector in particular and the commodity production in general, EU and Vietnam are complementary partner (structures of goods and services are mutually complementary, not directly competitors). Thus, EVFTA talks on market access should be made in strong view, raise commitments that allow Vietnam to maximize access to EU markets and vice versa in shortest schedules.

– From a technical perspective, EU is a demanding market, with demand of high quality product, uncompromising requirement oftimbers‘ legal origin and stringent specification requirements for imported products. Therefore, EVFTA negotiation on wood processing products should not only to focus on tariff issues but also to ensure rational and acceptable specific technicalrequirements, creates favorable conditions for Vietnam's wood products to enter the market.

– From the perspective of production process, EU is an effective supplier of machinery, equipment and technology in the world. For Vietnam’s wood industry, the machinery, equipment, technology, facility used in production are imported mainly from Asian countries (China, Korea), Southeast Asia because of better competition on price. In the orientation of Vietnam's wood processing sector, as analyzed in Part 1, a solution is to improve technology, equipment and facilities used in production. Thus, EVFTA negotiation on wood industry should facilitate the importation of this type of products.

– From the investment perspective, EU is not a significant foreign investor in wood processing industry (according to 2008 figures, out of 420 FDI enterprises in this industry, most of them are from Taiwan , South Korea, Japan, China). However, in international investment in general, EU is a relative large supplier of capital investment in the world as well as in Vietnam. Therefore, Vietnam’s wood industry can hope to attract more investment from EU through favorable conditions in foreign investment management in accordance with appropriate EVFTA commitments.

– From the public procurement perspective, with the massive machinery of management, in both level (Unionlevel and member level), the market scale of EU’s public procurement is particularly large. According to some calculations, purchase of wood products of central governments in the EU member countries alone accounts for 15-25% of total value of wood products trading contracts in EU countries. If public procurement of local government and alliance level are took into consideration, "public procurement" market share in the total value of EU’s woodwork trade will be very significant. Thus, opening EU’s public procurement markets through EVFTA would mean a lot for the development of Vietnam’s woodwork market.

2. Negotiation on market access

For export manufacturing, market access negotiation (building Schedules of Tariff Commitments) in FTA is always the priority concern of the industry.

The results of these negotiations on the accesslevel of partner countries‘ markets (tariffs are removed, tariff removal route at partner markets) have direct impacts on price and competitiveness of imported products. Therefore, the maximum negotiating target in principle would be the elimination import tariffs on partner markets immediately or within a shortest route.

On its side, the level of market open of Vietnam for partner countries will also affect the competitive prospect in Vietnam domestic market, when goods from partners are entitled to preferential tariff treatment under the FTA commitments, leading to better competition againstdomestic goods. The assumed best target of negotiation is therefore not to remove tariff or if compulsory, to remove with the longest possible schedules.

Wood processing industry is not an exception to the above rule.

However, along with unique features of wood product trade with EU as stated above (export surplus of a certain number of products) and the current status of MFN tariffs between two sides, there are specific points in open market negotiation suggestions for wood industry in EVFTA.
Specifically, the EU market access negotiation strategyshould pay attention to the following targets:

- Requirement for immediate removal of tariffs on Vietnamese wood products which have potential (outdoor and indoor wooden furniture, furnishings, rattan products);
- Long schedules for non-export promoting products (wood chips, semi-finished wood in other forms..) acceptable;
- No need of negotiating for MFN tariffs whose rates are close to 0% or MFN tariffs which are not the strength of Vietnam.

Regarding to negotiation options to open Vietnam market for EU products, these following objectives should be considered:

Immediate removal of tariffs on wood products and materials;

Immediate removal of tariffs on equipment, machinery and facility in general (in reality,not only processed woods but all industries have demand for machinery, equipment, facility imported from the modern technology areas such as EU), including products which have beenclassified as "sensitive" and are protected by tariffs in the past years but have been proven to be ineffective (transportation means for example).

3. Negotiations on rule of origin

Negotiation on rules of origin is associated with market access negotiation (tariff) and stands as a practical conditioner for the effectiveness of preferential tariffs.

For Vietnam wood industry in particular, with80% of raw materials for export are from Asian, Africa, America (as mentioned in Part 1of this report), the rules of origin are issues that need to be focused in negotiation process.

Specifically, in order for wood industry to really enjoy preferential tariff from EU market access negotiation, rules of origin need to be negotiated in the following directions:

- ***Cumulative principle:*** Negotiate for wood materials originated from ASEAN member countries to be cumulative in determination of origin

  According to data in 2013, imported timbers from ASEAN member countries into Vietnam accounted for 61% of total timber import turnover. Thus, in principle, if ASEAN timbers are cumulatively recognized as Vietnam origin, there will be more opportunities to enjoy EVFTA preferential tariff.

  It should be noticed that although the ASEAN cumulative principle might be of little meaning in the current context where timbers imported from ASEAN are mostly natural timber of large diameter and high value and products exporting to EU are mostly outdoor furniture, using small wooden bars cut from small-diameter timbers, with lower value,. with the orientation of enhancing export of higher-value indoor furniture to EU in the future, this culmulative principle, if achievable, will be a considerable advantage.

Table 11– Timber import turnover from ASEAN member countries into Vietnam in 2013

Market	Turnover ($1,000 USD)	Proportion of total turnover (%)
Laos	458,886	37.27
Malaysia	91,820	7.46
Thailand	78,108	6.34
Myanmar	65,964	5.36
Cambodia	48,580	3.95
Indonesia	16,970	1.38
Total turnover	**1,231,240**	**100**
	ASEAN	61.75

In reality, the strategy of negotiation on ASEAN cumulative rules of origin for wood products in particular and tariffs in general within EVFTA are relatively feasible. This is because the EU has precedents with cumulative rules of origin in the EU-Singapore FTA.

However, according to that FTA, ASEAN cumulative rules of origin apply for only ASEAN member countries which already have FTA with the EU, while in fact these countries are very limited (only Singapore has completed negotiations, Vietnam and Thailand are in process of bilateral negotiations). Thus, Vietnam will need greater effort to persuade the EU to extend the cumulative principle to all ASEAN member countries. This will be a big challenge for Vietnamese negotiating delegation, but not completely unfeasible.

Despite being temporary delayed, the EU and ASEAN FTA negotiations remain intention, hence right after the negotiations resume, issues on ASEAN cumulative rules of origin will not be far away.

Obviously, cumulative principle will be applied for materials which are originated from the EU(this is a standing rule in all FTAs). However, the fact is that the volume of imported timber from the EU is not significant, cumulative rules of origin for the EU timber therefore do not have practical meaning.

- ***For non-origin inputs: Negotiate to simultaneously apply principle of tariff-shift and content-value principle close to current rule in the EUGSP for Vietnamese wood products.***

  Like many other products, Vietnam's wood products(HS code No9403) have been receiving GSP preferences from the EU for products with non-origin input son the principle of tariff-shift(4-digit heading) or meterials whose value does not exceed 70% of ex-factory price. This rule has been quite stably applied in Vietnam, thus continuing to apply it will be favorable for Vietnamese enterprises.

4. Negotiation regarding to TBT, SPS

In addition to U.S market, the EU the market also creates high TBT for imported wood products, such as requirements for legal origin and sustain ability of wood as well as other controls of wood trading processes. Currently, these TBT measures have focused primarily in the FLEGT program and the relating Regulations of the EU.

According to information from many sources, EVFTA negotiations have a chapter regarding to this issue (TBT Chapter). However, general observations from many other EUFTA signed with developing countries like Vietnam, as well as new trend of FTAs show that it is unlikely that TBT chapter in EVFTA will limit EU right to adopt its own TBT measures to a lesser extent than TBT Agreement of WTO. On one hand, developed countries don't want to be tied up in controlling this issue (especially when they can be used for different purposes). On the other hand, with nature of general applying measures (regardless of partner), TBT measures can hardly be the subject of bilateral agreements in the FTA.

Therefore, it is likely that TBT chapter in EVFTA mostly includes commitments which emphasize compliance with TBT Agreement of the WTO and news commitments relating to new procedures, for example:

- Creating cooperative mechanisms in solving issues on TBT measures
- Simplified mechanism for resolving complaints of TBT measures

In this context, the EU can always adopt new TBT measures which can obstruct and raise difficulties for woodwork export from Vietnam to the EU. A negotiating option which requires the EU to reduce or limit that promulgation is not likely possible, although it is what Vietnam wood processing sector desires the most.

Thus, Vietnam wood industry could only expect that TBT chapter in EVFTA comprise:

- Transparently, feasibly building procedures and mechanisms relating to the implementation of TBT measures in the EU;
- The adoption of the new TBT measure so modify existing TBT measures in the EU be done transparently, taken into account the opinions and circum stances of the relating parties, with an emphasize on the" do not create unnecessary obstacle to trade” WTO principle;
- Carefully-planned implementation schedules for new TBT measures, if any, to avoid unreasonably damaging to exporters.

Besides, it is necessary to consider that the VPA/FLEGT negotiations between Vietnam and the EU are being parallel conducted with the FTA negotiations. Negotiators therefore might flexibility combine relating suggestions of negotiation. In particular, difficult issues in EVFTA relating to TBT measures for wood, if any, can be put in to VPA. In contrast, Vietnam’s commitments, concessions in EVFTA may be used to achieve exchanges from the EU within VPA framework.

5. Negotiation regarding to rules of competition

Competition is a new issue in recent FTAs between the EU and partner countries, under which the parties under take to apply and maintain measures to ensure fair competition, equality among trade players.

This regulation receives wide unanimity throughout the world and is becoming a generally accepted trend in FTA negotiations in recent years.

However, as mentioned above, although Vietnam's wood sector has observed sudden increase in the number of wood processing firms and units recently, most of the firms are small and ultra-small-scale, with limited competitiveness, not to mention thousands of wood processing units currently operating in the form of household or group producers in craft villages. With such characteristics, these subjects faced many difficulties in competing with large scalene enterprises.

Therefore, to create favorable conditions for the wood industry to stably and sustainably develop, negotiations on rules of competition need to have exceptional provisions relating to SMEs as well as the group of small business entities such as household and individual businesses, craft villages and rural, mountain our communities,...

Negotiations on exceptional rules of competition relating to these subjects are totally possible since WTO and many FTAs in the world also have specific preference for these subjects.

6. Negotiations on environment

According to recently FTAs of the EU, negotiations on environmental issues are in the Trade and Sustainable Development Chapter. The content of environmental issues on this chapter, beside provisions on obligation of international convention about the environment, there are also provisions relating to trading of certain types of products tied to environmental issues.

In the latest EU FTA (FTA with Singapore), Chapter on Trade and Sustainable Development has a separate provision for wood trading and wood products. This provision focuses on enhancing the cooperation between parties to ensure legal origin and sustainability of wood. For Vietnam's wood industry, if these environmental commitments are limited on this content, basically it will not change the current rights and benefits of the industry(especially the EU FLEGT program with which Vietnam are complying). However, if Vietnam has good negotiating plans regarding to this issue, not only the wood industry but also relating communities will also be beneficial.

In particular, suggestions of negotiation relating to environmental issues in EVFTA should consider to bring in the followings:

- **Commitments of technical assistance from the EU** in order to enhance the effectiveness of measures, to be implemented with the goal of conservation, resource development, environmental protection, developing sustainably in general and forest resources in particular. This technical assistance will be the basis for Vietnam to carry out afforestation programs, forest development. Besides the environmental benefits, these measures will in directly boost supply for wood production and processing.

- **Reserved the right to support the communities that depend on natural resources**, to protect lives and current natural resources.

  If this provision is brought into EVFTA, it will create wider space for policies on subsiding and supporting relating are as, where by creating incentives to settle once and for all current in adequacies incultivation, forest protection as well as mining, wood processing and non-wood forest products. In particular, this provision, if any, will form the basis for the Government to implement measures to directly support the producing, processing unit in rural and remote areas.

7. Other measures relating to wood products

As a new generation of FTAs, EVFTA is expected to be wide-ranging, including many trade and non-trade issues. Commitments regarding each issue are expected to have different impacts on trade in specific sectors. Thus, in the framework of these negotiations relating to wood trade, beside measures to promote and create favorable conditions for the export of wood processing products (mainly wood en furniture and exterior products) to the EU, it is also necessary to have other measures in order to realize other orientations of Vietnam's wood industry.

Concerning the orientation of export limitation on wood raw materials and semi-processed wood products to relax the short of supply of wood materials of Vietnam's wood industry, although EU is not a significant market for these products, to keep suitable policy space for fur the negotiations (with significant importer of these products from Vietnam–for example RCEP), it is probably important to reserves the right to apply some measures, for example:

- Measures of tariff quotas or export prohibition on several types of wood material, particle board
- The right to apply measures the temporary prohibit export in the specific conditions for certain types of wood materials

Concerning the direction of enhancing the competitiveness of the wood industry through synchr on ous policies, depending on the details of negotiations, Vietnam may consider to preserve certain policy space for several necessary policies for the wood industry in the EVFTA framework as:

- Subsidy measures as to infrastructure, research and development (R&D) for the wood industry, are as which gather wood processing units

- Subsidy measures as to activities promoting wood-products trade in EU market
- Subsidy measures as to human resource training for the wood sector (including management and labors).

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