STRATEGIC ANALYSIS OF GHANA'S WOOD EXPORT SECTOR

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DEDICATION

This thesis is dedicated to the United States Agency for International Development (USAID). I sincerely appreciate the opportunity given to me to complete my program successfully at LSU. This dedication especially goes to Dr. Mywish Maredia, Mrs. Adeline Ofori and Mr. Emmanuel Mensah of USAID-Ghana for their encouragement throughout my academic program at LSU.

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ABSTRACT

Export-led strategies are very crucial to achieving growth and goals of developing and transition economies such as Ghana. As a result, export strategies are being adopted in many developing countries. Although such export strategies might be in place, the deployment of resources and tax payers' money involved often calls for the investigation of programs and initiatives that exist and perceptions by industry if they are working. Furthermore, Ghana wood exports to the US, a historically major market, have been declining over the past six years. Therefore, there is the need to determine if export constraints to the US market exist. The objective of the study was to assess Ghana's wood products export sector strategies and performance, and further assess export constraints to the US market. The study indicated that the wood export industry in Ghana perceives that government-led programs and initiatives are not working effectively. There was significant difference in responses based on firm size and product groups. It is therefore suggested that the Government and public and private sector institutions in the wood export sector coordinate activities and creating an enabling environment for Ghana wood products exporters to compete favorably in the international market. In assessing the export constraints to the US, results indicated that respondents have difficulty finding reliable buyers and face a lack of understanding of the US classification and grading system. In addition, large volumes required by US importers are also a major barrier in exporting to the US. There were significant differences in responses based on firm location, firm size and product group. Overall, respondents indicated there was no comprehensive and well documented export strategy in place. This calls for the development of a detailed national export strategy that will address the needs of wood products exporters to make Ghana's wood product industry competitive in international markets.

CHAPTER 1. INTRODUCTION

Ghana's aspiration to become a middle-income country by 2015 will require an increase in an average growth rate in GDP from 5% to about 8% to fulfill such a target (TSSP, 2004). Such rapid growth requires structural transformation of the productive sectors of the economy such as the wood export sector. Wood products exports contribute significantly to Ghana's economy. It is the fourth highest foreign exchange earner, having provided around 12% of Ghana's foreign exchange between 1990, 2003 and 2006 (Lebedys, 2004; Ghana Forest Commission, 2006). Domestic wood products demands are met and wood processing companies tend to focus on higher value export markets. Despite export demand, there are factors that hinder Ghana's successful execution of the nation's wood export strategies resulting in less than optimal opportunities in international markets.

According to Timber Industry Development Division (TIDD) of the Ghana Forest Commission (FC), in 2005, Ghana earned €170 million from the export of 455,000 m^3 of wood products in 2004. However, the International Tropical Timber Organization (ITTO) (2006b) reports that Ghana's wood products exports fell in 2006; wood product exports in the first three quarters of 2006 were €125.82 million in value and 328,620 m^3 in volume. These figures corresponded to 8.8% and 6.7% decline in value and volume, respectively, compared to 2005. The decline was attributed to millers facing continued reductions in supply of raw materials as well as macro-economic constraints. During the same period, wood exports to the US and European markets were reported to have declined in volumes 23% and 32%, respectively.

The downward trend in Ghana's wood products exports exhibited in 2006 was not very different from 2005 as reported by ITTO (2006a). The report indicated the export earnings fell to €112.6 million (288,895 m^3) in January-August 2005, down 8% (down 7% in volume) from the same period in 2006 (TIDD 2006). The Forestry Commission attributed the downward trend in

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exports to structural constraints, including deficient processing equipments, unskilled labor and low-level production techniques. Furthermore, the FC stated that price instability affected exports during the last quarter of 2005 and the first two quarters of 2006.

Given the issues, there is need to critically access and analyze factors resulting in the downward trends being exhibited by Ghana's wood products exports especially to US and European markets, which are major buyers of wood products, contributing over 80% of the total earnings (ITTO, 2006; Timber Industry Development Division ,2006). This suggests a more tactical approach is needed to reverse the current situation. It is against this background that the strategic positioning analysis of Ghana's wood products exports will be examined and analyzed.

Export-led strategies are very critical to the achieving the developmental goals of Developing and Transition Economies (DTEs) such as Ghana (International Trade Center, 2005), and as a result, export strategies and work programs are being increasingly adopted in many developing countries. In as much as these strategies are in place, outlay and deployment of resources is involved for which analysis, evaluation and justification need to be provided. It is also necessary to demonstrate whether the strategies are effective or not. Accordingly, export policy strategists need to engage in strategic analysis and re-evaluation of export sectors (International Trade Center, 2006).

The working premise for sustained improvement in national export performance relies solely on the existence of a realistic national export and the capacity to manage it (International Trade Center, 2005). This assertion means that the constraints Ghana wood products exporters face might be attributed to either a non-existent national wood export strategy or the strategies are not working effectively. It is also suggested that determining direct impacts of export strategies is difficult since there are so many externalities or factors beyond the control of national export strategy policymakers (International Trade Center, 2005).

To be competitive internationally, it is often prudent to form strategic alliances with partners in lucrative markets. For example, recent reports indicate the US is on the brink of entering into an Economic Partnership with Africa (EPA) (AGOA, 2007). In 1994, US Senator Lugar from Indiana reiterated that the US need to move into an era in which Africa nations are their trading partners, resulting in the proposed Lugar-Leahy African Growth and Opportunity Act. The Act is intended to offer opportunities for a wide range of trade investment and reform initiatives (United State Trade Representative, 1997). In support of the Act, US Deputy Treasury Secretary Lawrence Summers commented that "the key to unlocking African potential will be helping it to achieve high levels of trade and private investments.'' Meanwhile, under the Partnership for Economic Growth and Opportunity in Africa Initiative President Clinton launched at the White House on June 17, 1997, it indicated that several countries in Africa, including Ghana, are well positioned to derive benefits from this and other trade and investment initiatives. In addition, at the fourth annual meeting of the US-Sub-Saharan Africa Trade and Economic Cooperation Forum held in Senegal in July 2005, with the official U.S. delegation led by Secretary of Agriculture Mike Johannes, President Bush announced a new Presidential Initiative – the African Global Competitiveness Initiative (AGCI) – providing $200 million in funding over five years to support expanded African trade and improved African export competitiveness (AGOA, 2005; USTR, 2006).

At present, only one percent of US trade is with Africa, while less than one percent of US direct overseas investment is in Africa (USTR, 2006). Ghana exports a considerable amount of wood products to the US including air-dried lumber, kiln-dried lumber, sliced veneer, rotary veneer and plywood (Timber Industry Development Division, 2006). Although the US is a primary manufacturer and exporter of wood products, most African wood and wood products are considered rare and exotic and do not compete with species grown in the US (Duery, 2006;

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ITTO, 2007). Consequently, there is little direct species competition in promoting Ghanaian wood products to US markets (ITTO, 2007). It is against this backdrop that finding market opportunities and identifying constraints faced by Ghana wood products exporters to the US market are assessed and recommendations are provided to improve the sector's international competitiveness.

CHAPTER 2. THE FOREST PRODUCT INDUSTRY IN GHANA

MAJOR PRODUCT GROUPS

The Ghana wood industry manufactures many products for both domestic consumption and for export (Figures 1). Over the years there has been expansion in scope of wood products for exports while the domestic market has also shown an increase in wood products utilization. There are over 100 companies exporting kiln-dried wood materials, with some companies exporting more than one product (Ghana Gazette, 2006).The wood industry is largely comprised of sawmills but the informal sector is thought to account for 6,000 tertiary enterprises (Ghana Gazette, 2006). Wood processing companies that have integrated wood processing with logging activities account for about 95% of the logs harvested in Ghana. Around 30% of wood processing companies also harvests logs. There are 70 small-scale processing facilities that account for the remaining 5% of the domestic log market.
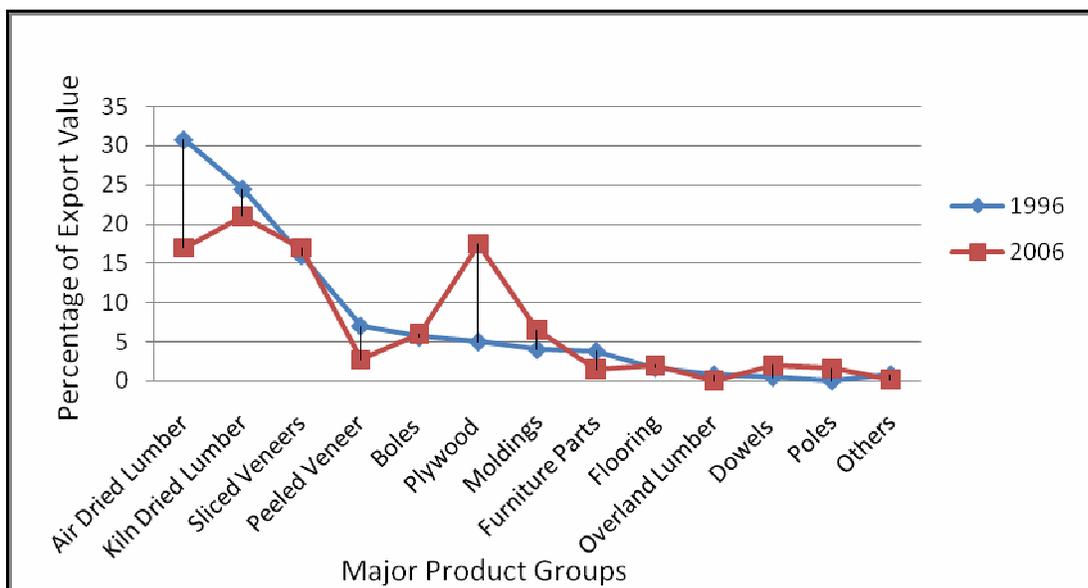
Figure 1: Comparison of major Product Groups (1996 and 2006)
Source: Timber Industry Development Division, Ghana

Wood trade is heavily concentrated in 20 leading companies which accounted for about 60% of the total export earnings in 2004). Their average export earnings amount was US

$6,000,000 compared with the average of the next tier of about 200 exporters of US $680,000 (Ghana Gazette, 2005).

THE INFORMAL WOOD SECTOR

The informal sector in the Ghanaian economy has been described in lots of literature as a diversion of economic transactions beyond the reach or boundaries of state and formal economic structures (Inkoom 1999; Owusu 2001; Hutchful 2002 ; Sarfo-Mensah 2005).Due to the obvious lack of the formal wood sector to meet the local demand of lumber, the informal sector has become dominant in meeting the needs of the local market (Birikorang et al., 2001). The informal timber and wood products traders and related operators i.e. saw millers, carpenters and illegal chainsaw operators, became pronounced in the parallel economy that emerged in Ghana in the early seventies due to a crisis which hit the economy (Sarfo-Mensah, 2005). According to Sarfo-Mensah (2005) citing Hutchful (2002) , Ghana's informal wood sector was described as follows ;

"By informalization it is meant diversion of economic transaction beyond the reach of the state and the formal economic sector. This sector spans an extremely diverse range of products and activities and involves unrecorded though open transaction, which are unregulated and non legal rather than legal. Structurally, the main characteristics of the sector are: it's predominantly artisan in nature; its ease of entry and often (though not necessary) marginal operators; the prevalence of non contractual (and often highly exploitative) relationships; and the coexistence of waged and partially waged, and family forms of labor". (Hutchful 2002). It has been observed that the crisis in the Ghana economy generated a process of informalization which had profound implications for the state, civil society and politics (Sarfo-Mensah,2005) citing (Hutchful 2002)

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Accordingly, the informal nature makes them difficult to track their activities and they mostly target the local markets whilst the formal wood sector concentrate more on exports to the detriment of the local market. The timber and wood products informal sector is growing and is dispersed throughout the country. Primary markets are the regional capitals, especially Accra and Kumasi, the capital and the country's second largest city, respectively.

GHANA LUMBER PRODUCTION & CONSUMPTION

Ghana's lumber mills have very low recovery rates. The lumber recovery factor is 20-40% of the log input (FAO, 2005). The total annual log requirement of sawmills in the country is about 1.3 million m^3. FAO (2005) believes the figure excludes the volume of logs for other primary wood processing activities such as veneer and plywood. The volume of logs for domestic use exceeds the allowable annual cut (AAC) of 1.0 million m^3. Investors use all possible means to secure logs for their mills, which often contribute to illegal harvesting of trees. The total volume of lumber available for domestic use is only 152,660 m^3 per year, yet the annual demand is about 384,730 m^3. The difference of 230,070 m^3 is fulfilled by the informal sector (FAO, 2005).

GHANA WOOD PROCESSING CAPACITY

According to ITTO (2006a), the wood industry in Ghana is characterized by an over-capacity of out-dated and inefficient equipment. There is evidence that this over-capacity is increasing, due largely to new investments to take advantage of the relatively cheap raw material and the existing loopholes in investment incentive provisions. At the same time, some of the larger companies have invested in downstream processing and are successfully finding markets for lesser-known "Pink" species that have been converted to finished products. More recently, kiln-drying capacity has increased substantially in response to the export levy on air-dried lumber imposed in 2005. This positive trend sets the stage for growth in further value-added

production and marketing. The industry has traditionally concentrated on exports, to the neglect of the local market. The output of processed products increased significantly. At the same time, supplies to the local market (estimated at a demand of 0.7 million m^3 per year) were supplemented by illegal logging and chainsaw operations. The domestic demand is likely to rise or to keep pace with the expanding building construction industry and the growth of the economy (currently 3.8%; targeted at 5% per year (ITTO, 2006).

GHANA WOOD PRODUCTS EXPORTS

Primary wood product exports are air- and kiln-dried lumber (Figure 2). According to ITTO (2006a) Ghana's wood products exports dropped from 352,167 m^3 valued at about €138 million between January and September 2005 to 328,613 m^3 valued at about €126 million for the same period in 2006. Primary wood products (lumber, veneer, boles, poles, pegs, and plywood) and processed wood products accounted for 88.7% and 11.3% of the exports, respectively. The Forestry Commission attributed the export decline to structural constraints, including deficient processing equipments, unskilled labor and low-level production techniques. Price instability, which affected exports during the last quarter of 2005, had spilled over to the first two quarters of 2006 (ITTO, 2006a) In 2006, the secondary processed wood products (SPWP-furniture parts, moldings, flooring, etc.) accounted for 14% of the total export volume in the period, but 28% of the export value. SPWP exports reached €35.6 million, up 35% from 2005, while primary products (lumber, veneer, plywood, etc.) totaled €90.21 million (287,470 m3), down 19% from 2005. Exports of other processed wood products offset the decline in exports of furniture parts, moldings, and other SPWP (ITTO, 2006b).

The United States, India and Italy were among the 10 major destinations for the country's wood products that imported about € 98 million worth of wood products or 78% of total wood exports (Figure 2). ITTO (2007) reports indicated that wood exports to the Economic

Community of West African States (ECOWAS) market registered significant increase by 113%

from about € 9 million in January to September 2005 to more than € 19 million during the same

period in 2006
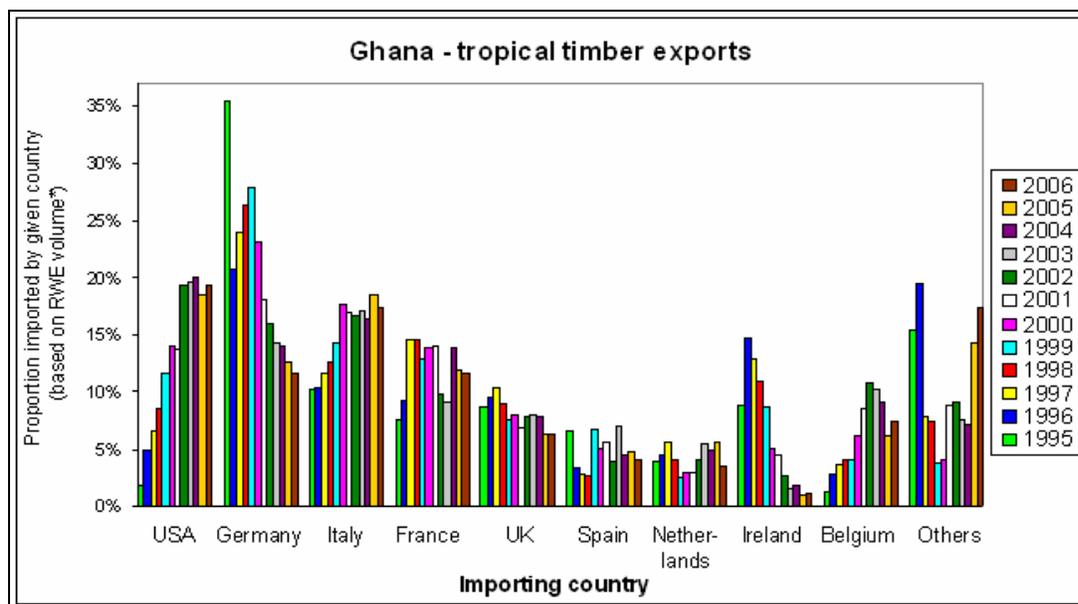
Figure 2: Major Importing Countries of Ghana Wood Products (1995-2004)
 Source: Euro Stat (2007)

Many primary wood products from Ghana are still being exported relative to secondary

products (Figure 3). However, Duery (2006) stated that, there is exporter shift to finished wood

products and many importing countries are changing the trend of importing primary products to

importing secondary products from tropical countries. This is the case in Ghana (Figure4).Ghana

wood exports have exhibited high volume/low value over the past 5 years (Figures 5and 6).

For Ghana wood products exports to be competitive in the international markets, value-

added products need to be produced instead of focusing on primary products that requires high

volume but are sold at a lower average value (Donkor, 2003). With the issue of competiveness

being the watchword in lucrative markets, structures in terms of pro-competitive export policies

would have to be put in place in the national export strategy. These competiveness components

were assessed and addressed in this thesis research.

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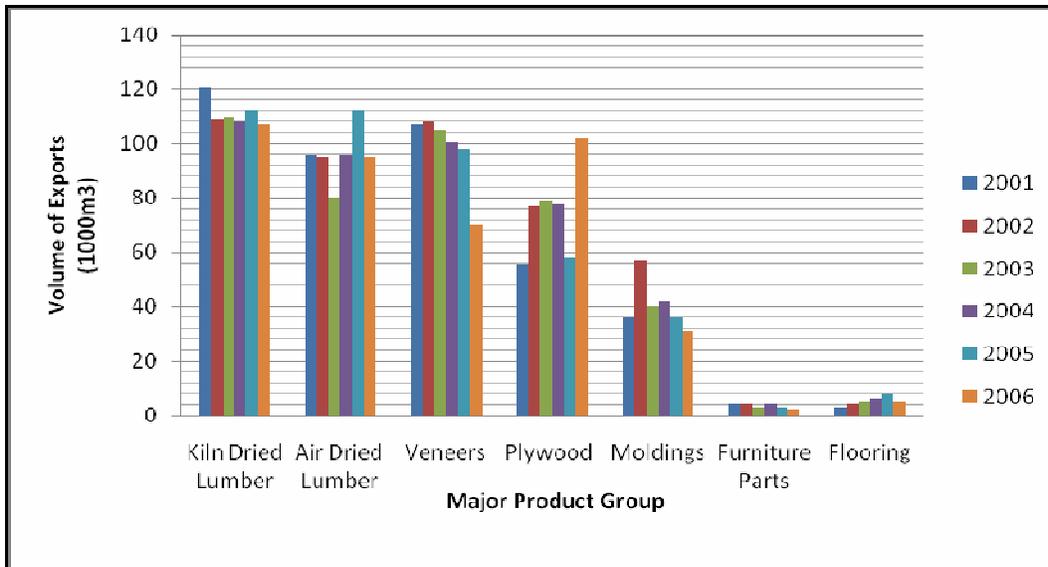
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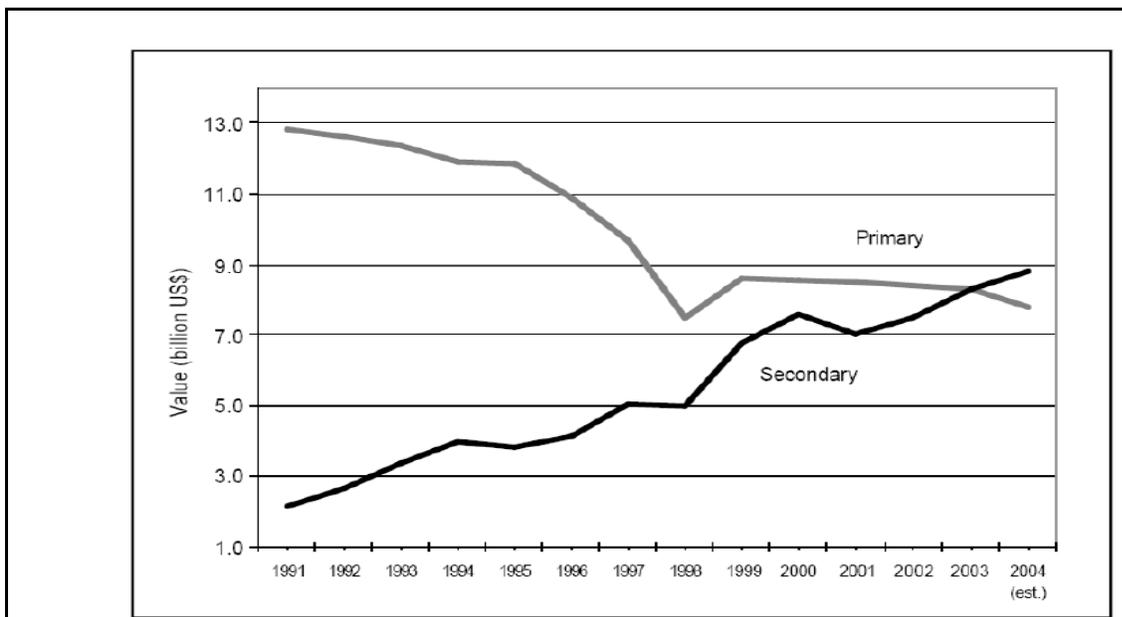
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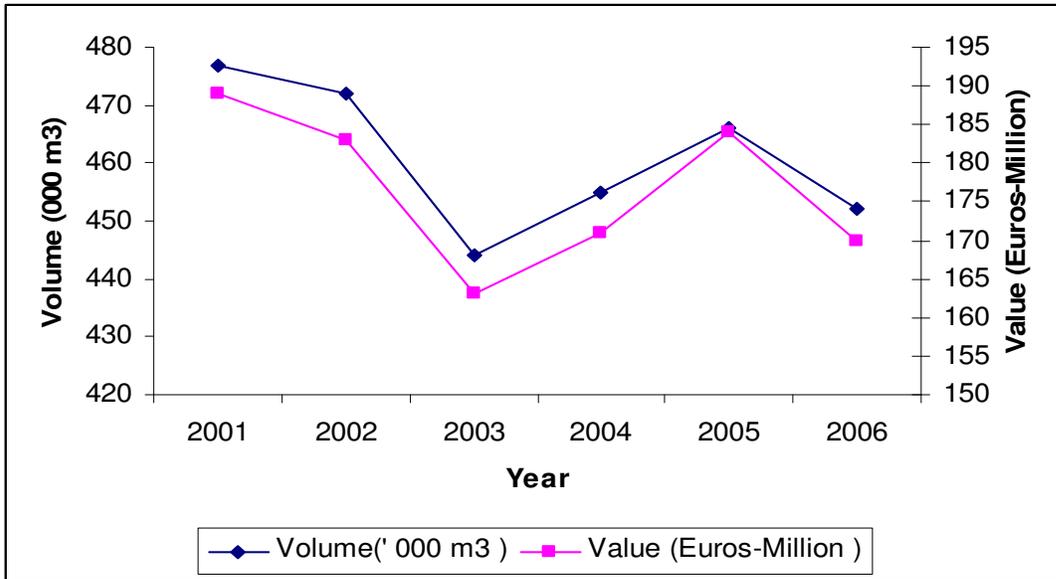
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Source: Ghana Timber Industry Development Division Export Permit (2001-2006)
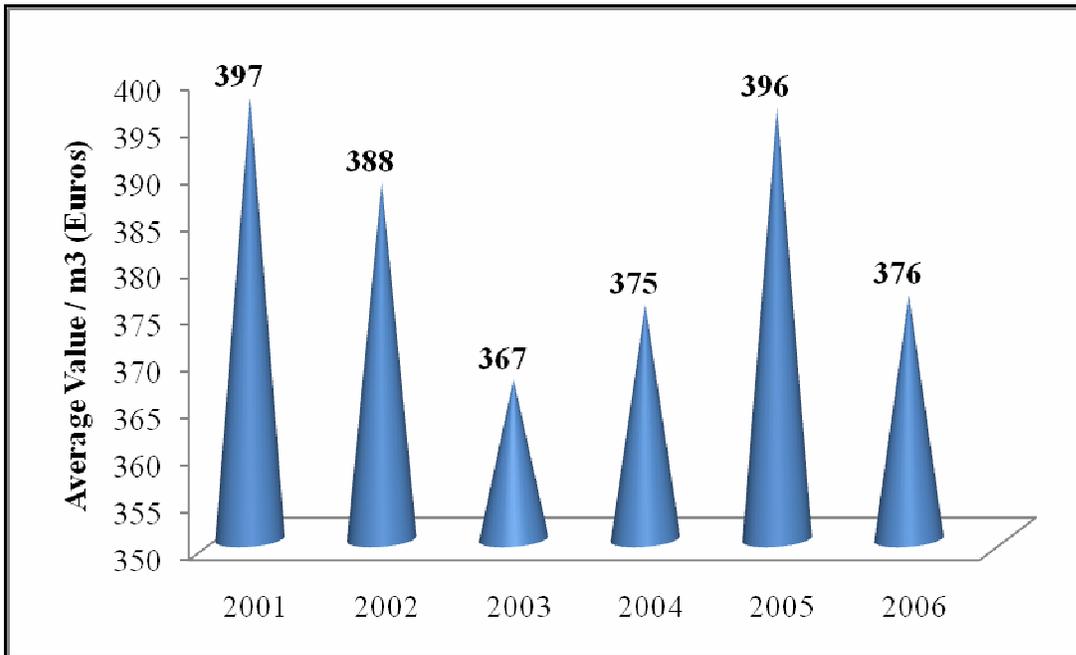
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Source: Ghana Timber Industry Development Division Export Permit (2001-2006)

CHAPTER 3. THE UNITED STATES MARKET FOR TROPICAL WOOD PRODUCTS

OVERVIEW

ITTO (2007) predicted producers and exporters of tropical wood products will experience challenges in the US market in years to come. ITTO suggests there will be increased demand from large retailers to ensure legality of timber sourcing. Certain panel products will also have to meet stricter US standards in some places (new regulations on permissible levels of formaldehyde emissions from panel products in California (CARB, 2006). It is also expected the demand for certified wood products will increase but probably not until sufficient and stable supplies are available without a significant premium. To date, the US market is not offering much of a premium, if any, for certified wood products. In 2008, it can be expected that demand for most forest products, domestically produced as well as imported, will slow, as the economy weaken and housing starts decline. Despite these issues, there will continue to be opportunities for exporters willing to adapt to new market conditions by producing high-quality products made to customer specifications.

According to ITTO (2007), the US consumes only a very small percentage of the world's tropical wood-based products despite being one of the world's largest producers, consumers and importers of hardwood forest products. In 2006, the US imported hardwood products valued at an estimated US $3.6 billion. This number, which does not include furniture and builders' joinery, is more than double that of five years ago. An estimated 30% of US hardwood product imports are of tropical timber origin (ITTO, 2007). For hardwood lumber, tropical imports account for about 23% of total imports (Figure 7). This trend is particularly prevalent for plywood, flooring and moldings as a consequence of the major expansion of Chinese production

capacity over the past few years (ITTO, 2007). The value of imports of tropical wood products (excluding wood furniture) to the US was an estimated US$1.6 billion in 2006 (Table 1).

Table 1: Value of US Imports of Tropical Wood Products, 2002-2006)

	2002	2003	2004	2005	2006	05/06	02/06
Roundwood	0.8	0.8	1.0	0.7	0.9	29	13
Sawnwood	160	163	218	252	274	9	71
Plywood	322	326	547	476	531	12	65
Veneer	31	32	36	41	40	-2	29
Flooring	43	66	131	185	146	-21	240
Molding	52	54	77	78	81	4	56
Builders Joinery	266	285	372	419	509	21	91
Tropical HW, Total	875	927	1382	1452	1582	9	81

Sources: US Customs data, Seneca Creek
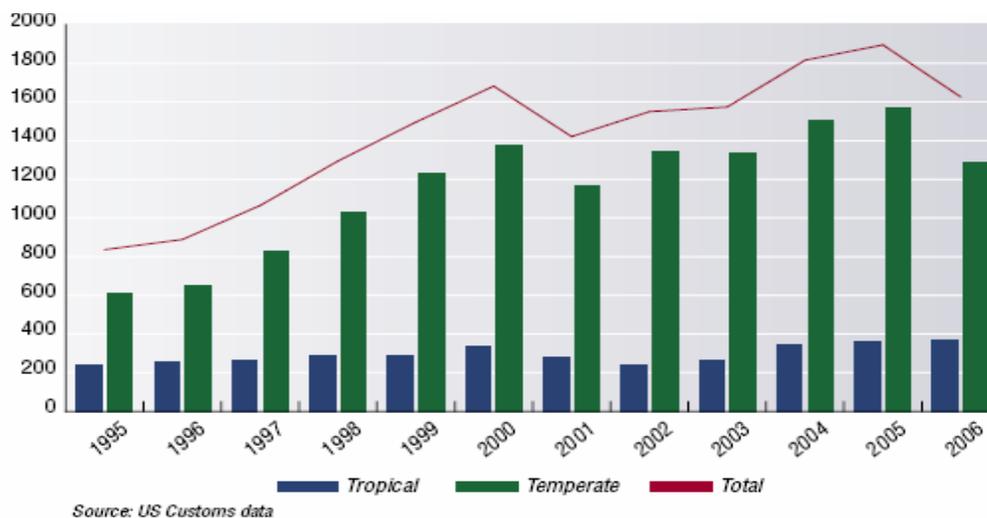
Figure 7: Hardwood Lumber Import to the United States (1995-2006).
Source: ITTO (2007) citing US Custom Data

Tropical timber species are used in distinct and important niche markets, most often in high-end market segments of furniture, cabinets, flooring, architectural woodwork, decking, and moldings. Other unique markets include specialized industrial applications such as for marine use and truck beds (ITTO, 2007). The majority of tropical lumber imported by the US originates from Latin America. Other major supply regions include Southeast Asia (Malaysia and Indonesia) and West Africa (largely Ghana and Cameroon). The trend of hardwood import into the United States is on ascendancy (Figure 8). This is a surrogate that tropical hardwood consumption in the US will be increasing in the coming years as US market desire for exotic and rare tropical species is also increasing (ITTO, 2007).
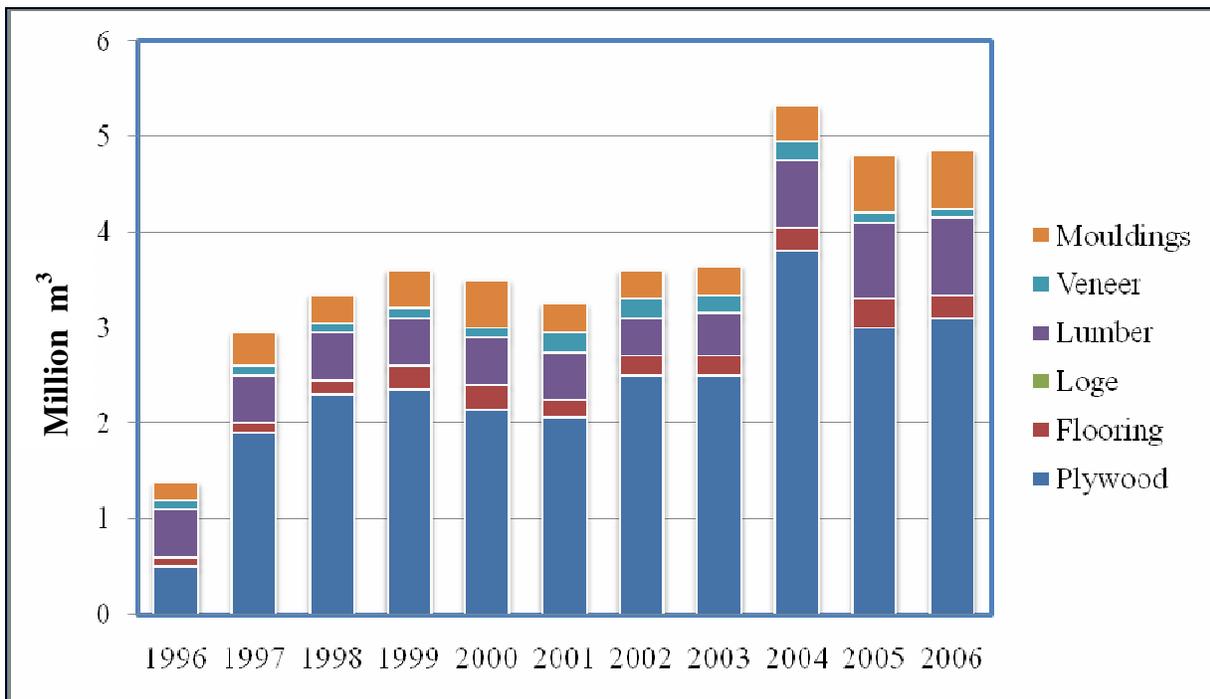
Figure 8: US Imports of Tropical Wood Products (Roundwood Equivalent)
Source: ITTO (2007)

ITTO (2007) stated US tropical imports of plywood were 1.4 million m^3 in 2006, which accounted for about 30% of total hardwood imports. Forty five percent (45%) was estimated to be accounted by tropical flooring the US imported. Accordingly, US imports of tropical wood

species represented about 4.6 million m^3 in roundwood equivalent. This estimate does not include wood furniture (Figure 8).

Recent market research by the organization Metafore (2007) strongly suggested there are opportunities for suppliers of tropical hardwood flooring products to increase sales in the US market, particularly for fixed-width lumber and pre-finished flooring products. In particular, the staining of light-colored species to obtain uniformity of colors of various species that have that characteristics, will create opportunities for tropical species such as Wawa (*Triplochiton scleroxylon*) . It is also expected that, pre-finished products can generate tremendous prospects for suppliers that can deliver lesser-known tropical species of uniform quality (ITTO 2007).

ITTO (2007) further indicated, although opportunities exist for tropical hardwood flooring to the US by promoting certified wood, wood from plantations and by marketing new lesser-known species, there are also some major obstacles to an expansion of the market share for tropical wood. Some large importers of hardwood products to the US believe that certifying the wood might not help much in terms of marketing (ITTO, 2007).

According to Metafore (2003e), approximately 1.7 million m^3 of tropical hardwood was the annual figure which veneer accounted for about eighty percent (80%) veneer (1.36 million m^3) and sawnwood (0.34 million m^3). Tropical hardwoods can effectively compete in niche markets with the US hardwoods. Furniture and flooring are some of the areas with high value ends which tropical wood exporters can target (Metafore, 2003d). The hindrance to the utilization of tropical hardwood have been attributed to its higher cost , transportation time variable quality and an inconsistent frequency of supply while positive attribute are the uniqueness or rarity not available domestically and durability (Duery 2006),.

Duery (2006) further reiterated that the US imports approximately 161 different species of tropical hardwoods, 20%, 37%, and 43% from Africa, Latin America and Asia, respectively.

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The most traded tropical wood species from Africa in 2006 were sapele *(Entandrophragma cylindricum)* and Aniegre *(Aningeria altisima)* accounting for 30% and 26%, respectively .

Duery (2006) indicated in her findings that there are general perceptions that US importers are reluctant to accept new tropical species due to marketing issues .In 2006, most imported tropical species were from Latin or South America (Table 2). This depicts the competition is very keen in terms of species being traded in the US market and therefore to market a particular species, it would require a significant marketing effort which according to Duery (2006), might prove difficult in the US market.

Table 2: Most Popular Tropical Wood Species Importers to the US in 2006

Trade Name	Scientific Name	Trade (%)	Origin
Jatoba (Brazilian Cherry)	Hymenea sp	65%	Latin America
Big-Leaf Mahogany	Swietenia macrophylla	65%	Latin America
Ipe (Brazilian Walnut)	Tebubuia sp	57%	Latin America
Purple heart	Peltogyne	57%	Latin America
Meranti	Shorea sp	48%	Asia
Virola	Virola sp	48%	Latin America
Camura (Brazilian Teak)	Dipteryx odorata	43 %	Latin America
Spanish Cedar	Cedrela odorata	39%	Latin America
Teak	Tectona gradis	35%	Asia
Keruing	Dipterocarpus sp	39%	Asia
Faveira	Parkia pendula	35%	Latin America
Sapelle	Entandrophragma cylindricum	30%	Africa
Aniegre	Aningeria altisima	26%	Africa

Source: ITTO (2007) citing Metafore

ITTO (2006) estimates suggest the US imported approximately US$1.6 billion tropical wood, flooring and other wood products excluding furniture (Figure 9). This trend, as well as the trend in US imports by volume (Figure 10) has been increasing over the past decade.
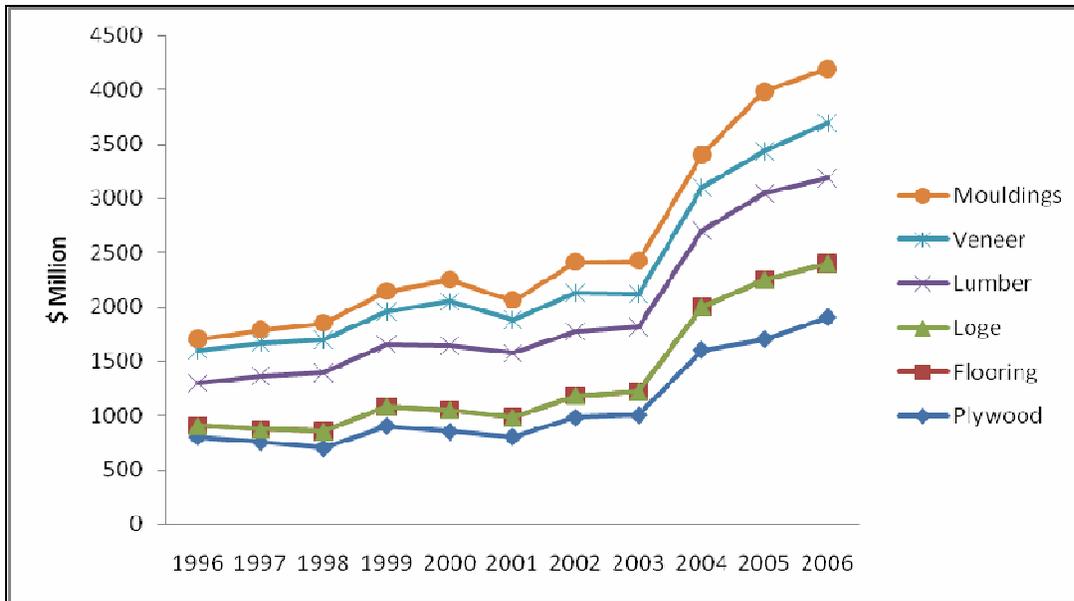
Figure 9 : Value of US Imports of Tropical Hardwood Products (1996-2006)
Source: ITTO, 2007
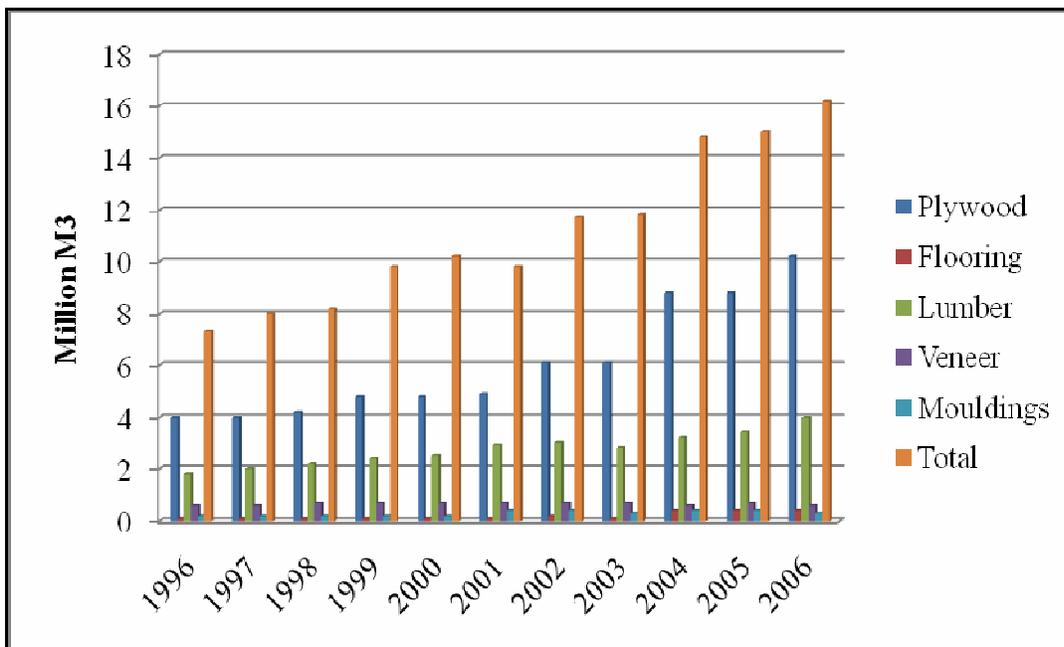
Figure 10: Estimated Value of Tropical Wood Imports (Excluding Wood Furniture)
Source: ITTO, 2007

Table 3: Value of US Imports and Further Processed Tropical Wood Products

Year	2001	2002	2003	2004	2005	2006	% Annual Growth
Tropical Species Imports—US $ million							
Roundwood	0.7	0.8	0.8	1.0	0.7	0.9	5.2%
Sawnwood	185.1	160.3	162.8	217.9	251.8	274.1	8.2%
Plywood	266.1	322.1	325.9	547.1	475.8	531.2	14.8%
Veneer	31.6	31.0	31.9	35.8	40.9	39.6	4.6%
Subtotal	483.6	514.3	521.3	801.8	769.2	845.8	11.8%
Further Processed Wood Products -US $ million							
Hardwood Flooring	114.1	140.3	212.2	318.5	406.8	347.4	24.9%
Hardwood Molding	123.0	199.1	147.1	193.9	200.2	191.9	9.3%
Builder Joinery	1,639.1	1,765.2	1,880.4	2,479.1	2,681.8	2,840.3	11.6%
Wooden Furniture	18,902.5	10,444.6	11,694.9	13,352.6	14,773.0	15,634.9	12.2%
SubTotal	10,678.7	12,488.2	13,934.7	16,344.1	18,061.8	19,014.9	12.2

Source: ITTO (2007) citing GTIS and Seneca Creek

Tropical wood furniture and parts imports accounted for US $ 15.6 billion in 2006, of which 20% was imported from ITTO producer countries (ITTO, 2006). Tropical wood products typically occupy unique or niche market in the US market using species that are used in high value market segments such as furniture, cabinets, flooring, architectural, woodwork, decking, moldings, and specialized industrial application (ITTO, 2007). The average annual value of US imports has been increasing over the past six years (Table 3). The annual growth percentage is estimated at 11.8% for all tropical species imports and 12.2 % for further processed tropical wood products imports.

US TROPICAL HARDWOOD PLYWOOD MARKET

High quality and value products such as cabinet and furniture have predominantly been the main use for hardwood in the US (ITTO, 2007). In the US, hardwood plywood can have some layers (one or more) tropical species which might account for about 30% of hardwood plywood imports.

In assessing the major competitors for Ghana primary wood exports in the US market, Malaysia, China, and Brazil have been the leaders in tropical plywood supply to the US over the past 10 years (Figure 11). Furthermore, China has been improving on its quality control over the years, therefore China has been exporting finished plywood to the US market (ITTO, 2007)
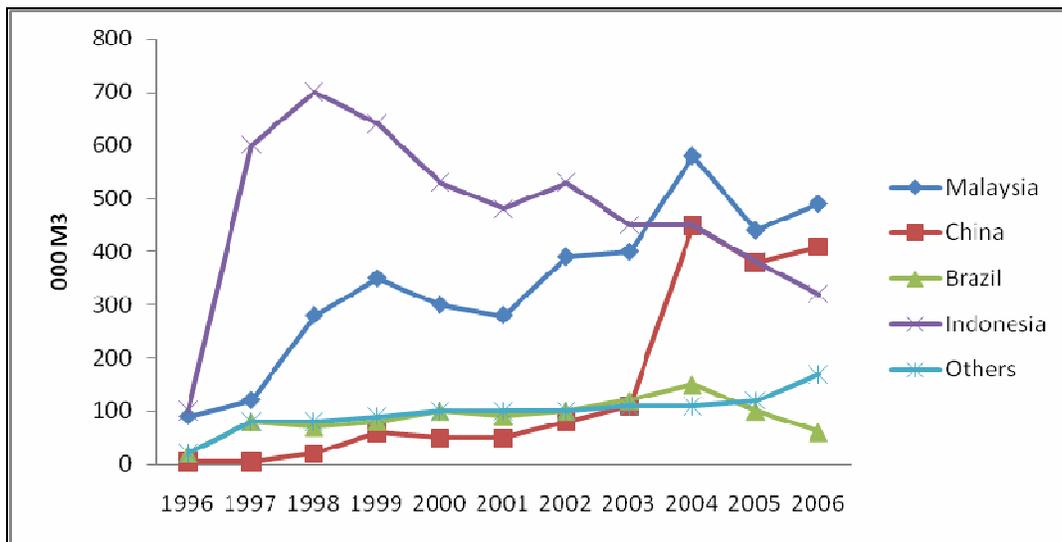
Figure 11: US Major Import of Tropical Plywood (1997-2006) Source: ITTO (2007) citing Global Trade Information System (GTIS) and US International Trade Commission (ITC)

US TROPICAL SAWNWOOD MARKET

In the US, most tropical sawnwood is used for high value added products (Figure 12). In 2006, the major end use products from tropical sawnwood were flooring, millwork, furniture and architectural woodwork. Currently, there is emerging market opportunities for decking from tropical sawnwood resulting from safety issues associated with Chromated Copper Arsenate (CCA) used as chemical for treating wood products in residential use (ITTO, 2007). This development has resulted in finding substitute wood species that can be used for both outdoor decking and playground equipment which are most resistant to insect attacks (ITTO 2007). Teak in particular is estimated to account for one-half to one-percent of materials used for decking in the US (Metafore, 2001).

Although tropical sawnwood occupies a small share of US sawnwood consumed; it is

rising steadily with a 2006 estimate of 364,000 m^3 which accounted for less that 1% of

consumption. According to ITTO (2006), the major exporters for tropical sawnwood in 2005

were Brazil, Peru, Ecuador and Ghana, accounted for a combined 65% of the total imports of

tropical sawnwood. Although Latin America tends to dominate in the export of tropical

sawnwood to the US, West Africa (Ghana, Cameroun), Malaysia, Indonesia and Southeastern

Asia were also a force. Interestingly, Mahogany (*Sweetinia spp*) has been the most popular

tropical sawnwood specie traded on the US market, and others include Sapele

(*Entandrophragma cylindricum*) and African mahogany (*Khaya ivorensis*) from West Africa

(ITTO, 2007) Prices for tropical sawnwood have generally been higher on average than prices

for domestic hardwood species (Figure 13). Mahogany and Khaya species, the major tropical

sawnwood species used are also higher than the average tropical sawnwood prices. Although

these two species are under strict control by CITES, the trade in these species are still high.

US TROPICAL HARDWOOD VENEER MARKET

The veneer industry is categorized into rotary and sliced veneers and furniture, cabinetry,

and architectural woodwork are often manufactured using veneers (ITTO, 2006). The price of

most veneers is somewhere 4 to 10 times higher than the saw log used in the manufacturing.

According to ITTO (2007), importers are very specific on the attributes of the veneers they

purchase.
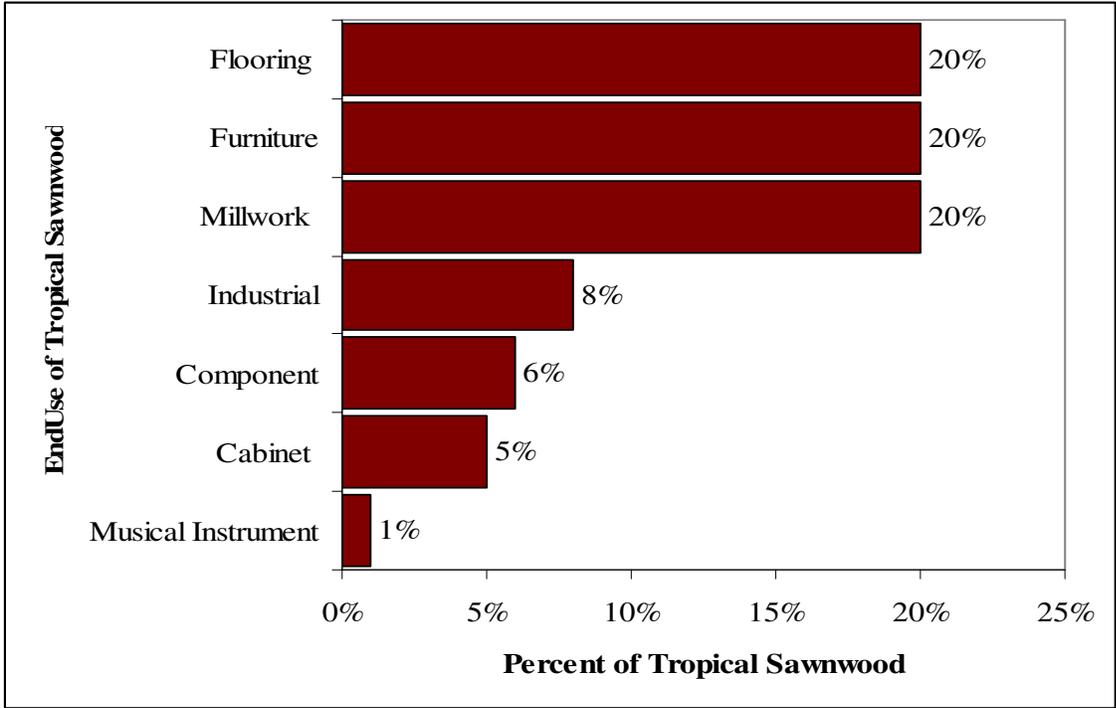
Figure 12: US Tropical Sawn wood End Uses
Source: ITTO 2007 citing Seneca Creek Associates, LLC
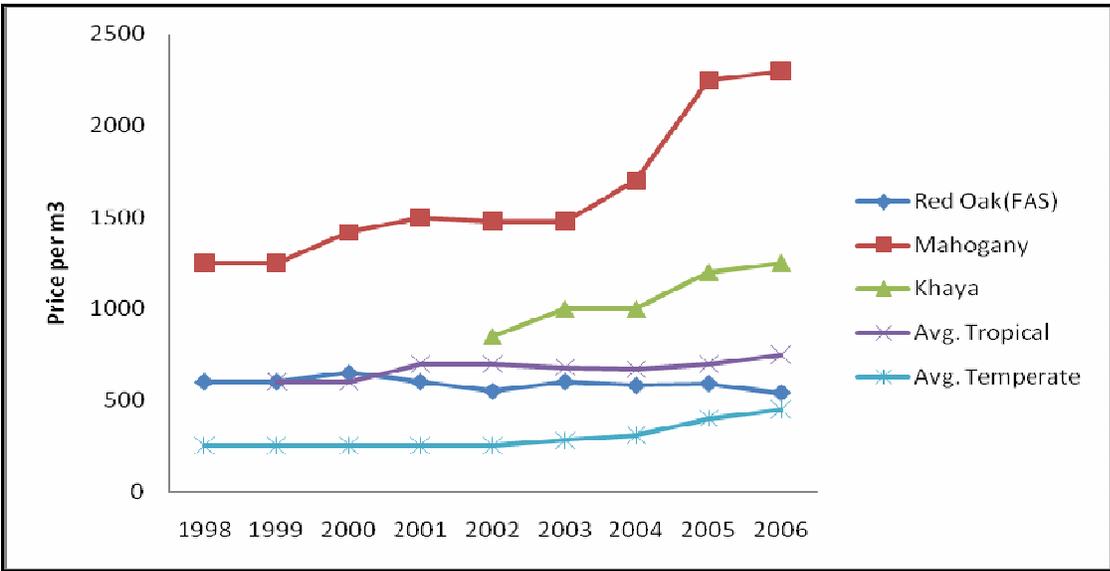
Figure 13: Representative Hardwood Sawnwood Prices in US Market
Source: ITTO (2007) citing Weekly Hardwood Review

In terms of value, the major exporter of tropical sawnwood to the US in 2006 was ITTO

producers followed by Indonesia, Brazil and Malaysia (Figure 14).
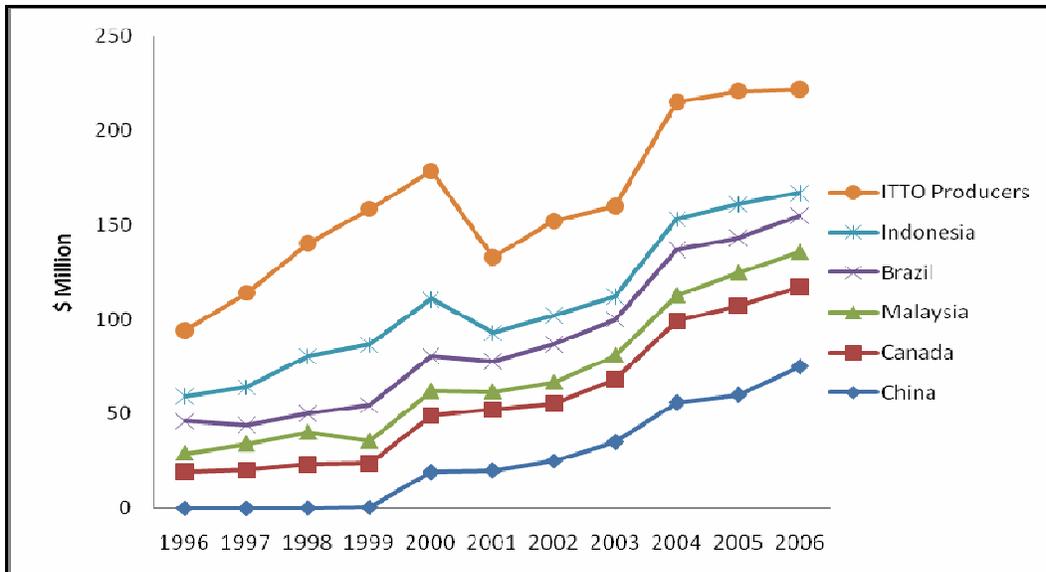
Figure 14: Major Exporters of Sawn wood to US in 2006
Source: ITTO, 2007

In purchasing rotary veneers, consistency in quality and thickness are most important criteria due to its use in the furniture industry, while color, texture, figure and ability to align and match grain are considered very crucial when buying sliced veneer. The sliced veneers are usually used in the manufacture of furniture and architectural woodwork applications. Furthermore, core stock and exposed are also produced from tropical veneers. The core veneers are in the range of 4.1 – 4.2 mm, and 3.2 – 3.6 mm in thickness depending on its origin. Those from Africa tend to be thicker than those from Asia (ITTO, 2007)

Ghana, Cote d'Ivoire, and Gabon were the main suppliers from the tropical region to the US in 2006 and accounted for 16% of the total US hardwood veneer imports (Table 4). Even though the US imports significant volumes from China and Europe, they mostly originate from Africa (ITTO, 2007). It is believed that Brazil has become one of the major suppliers of veneers to the US market due to scarcity and environmentally driven export restrictions on some tropical wood species such as Mahogany (ITTO, 2007).

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Table 4: US Tropical Hardwood Veneer Imports, 2006

	US$ 000	% of Total Value	000 M^2	% of Total Volume
World	$ 39,561	100%	27,907.8	100.0%
ITTO Producers	$ 16,466	41.6%	13,749.8	49.3%
Ghana	$10087	25.5%	8653.2	31.0%
Italy	$9547	24.1%	2680.0	9.6%
China	$6056	15.3%	8362.7	30.0%
Cote d'Ivoire	$2784	7.0%	2174.1	7.8%
France	$2091	5.3%	318.1	1.1%
Spain	$1830	4.6%	1361.9	4.9%
Germany	$1181	3.0%	476.8	1.7%
Gabon	$1046	2.6%	1073.5	3.8%
Brazil	$987	2.5%	695.3	2.5%
Canada	$820	2.1%	403.3	1.4%
All Others	$133	7.9%	1708.8	6.1%

Source : ITTO (2007)

POTENTIAL CONSTRAINTS IN US MARKETS FOR TROPICAL WOOD

The US market is very lucrative and wood products exporters, particularly from the tropical countries, need to keep abreast of measures and constraints that may impede competing in the US market. These measures may either be tarriff or non-tarriff related. By understanding these measures that are in place in the US,firms can be better suited to do business and increase its competitiveness in this market.

According ITTO (2007), the US has relatively low tariffs on wood products . In its classification of wood products, the US uses the Harmonized Tarriff Schedule (HTS). In this schedule, most wood products enter the US market duty-free. Any changes to the HTS need to be understood when exporting to the US market.

CITES (Convention of International Trade in Endangered Species of Wild Fauna and Flora) has some restrictions on some tropical wood species and ensures that there are parameters by which legal trade of those species can be done. This regulation has impacted trade in targeted species. The tropical wood species listed depend on the extent of being threatened and imminent

disappearance. The most strictly prohibited category includes Brazillian redwood, for which trade in this species should be purely for research and or specialized purposes. Big Leaf Mahogany (Sweetinia macrophylla) and Ramin (Gonystylus spp) must be accompanied by permits before acceptance into the US . Generally, if a species is listed CITES, it requires some or all of the following prior to entry into the U.S according USDA (2005) are:

- ➢ a general permit issued by the U.S. Department of Agriculture usually valid for 2 years;
- ➢ certificates issued by the CITES representative organization in the exporting country stating that the product will not be detrimental to the survival of that species and that the specimen was not obtained in contravention of the laws of the country for the protection of fauna and flora;
- ➢ certificates issued by the CITES representative organization in the importing country
- ➢ Arrival in a U.S. port authorized to accept shipment of CITES listed species.

CERTIFICATION

From the 1990s to the dawn of the new millenium , forest certification issues have become important in the management of forests and trade of forest products. Exporters who would want to trade in the US market may have to certify that the wood products they sell are from certified forests (EIA, 2006). At present, only small percentage of wood products enter the US market and US importers are not very keen on buying certified products at a premium anytime soon. Tropical wood products manufacturers and exporters should strategically position itself in the forest certification so that they can secure their forest products trade while waiting for market for certified products to intensify.

PHYTOSANITORY REGULATIONS

The introduction of pest and other animals through wood products has been a worldwide problem. In the United States, the regulation on import of plant material to eliminate the

introduction of invasion species is in place. By this regulation, all tropical wood products must be pest-free and should have a certificate to prove the wood products have been fumigated before it can be accepted on the US market (ITTO, 2007). This regulation can impose some constraints when exporting to the US market because when there are no certification attached to the documents wood products will be prevented from entering the US market.

Accordingly ,wood packaging material is expected to undergo treatment with certificate attached before any wood commodity is exported to the US market (USDA, 2004). According to the regulation, the compliance with the International Standard for Phytosanitary Measures (ISPM) 15 is required for all wood packaging material. The rule " all wood packaging material imported to or accompanying goods imported to the US, should be regulated and treated appropriately and marked under an official program developed and overseen by the National Plant Protection Organisation (NPPO) in the country of export (ITTO, 2007) . Therefore, a conscious effort must be exhibited by wood products exporters so that the rules on phytosanitary are followed if their products will gain international and US acceptance.

SUMMARY

The US market for tropical hardwood products large though it accounts for a small proportion of volume of total hardwoods imported. Eventhough the US market is competitive, targeting high-earning products and niche markets is a good strategy for tropical wood product exporters. With the unique attributes of tropical hardwoods, most of species are used for high-value products such millwork and furniture

Tropical wood exporters can take the advantage of strong demand for tropical hardwoods in the US. The proposed research investigates the constraints faced by Ghanaian wood product exporters in the US in terms of value placed on the products by importers, constraints, and challenges Ghanaian exporters face as well as marketing opportunities available. The results

from this proposed research hopefully allow Ghana to be more competitive in the US market for

wood products.

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CHAPTER 4. A CONCEPTUAL FRAMEWORK TO EVALUATE GHANA'S NATIONAL WOOD EXPORT STRATEGIES

INTRODUCTION

In the assessment of Ghana's national wood products export strategy, the framework will be based on International Trade Center's (ITC) National Export Strategy Template (NEST) and Balanced Scoreboard (BSC). According to International Trade Center (ITC), the NEST/BSC framework is for strategic decision making and support tool that provides the strategy-maker with guiding principle to integrate strategic considerations and evaluate a realistic national export strategy for competitiveness (ITC, 2006). To enhance export competiveness in terms of long-term export development, the NEST approach is recommended. The following areas are recommended by ITC (2005):

❖ The current, and required ,export capabilities, capacities and competencies (border-in issues)

❖ The cost of doing business and related trade facilitation consideration (i.e. border out)

❖ Market access and market development(i.e. border-out issues) and

❖ The potential contribution that the export sector can make to overall economic and social development goals , including employment ,rural development and poverty alleviation(i.e. developmental issues)

According to ITC (2005), for a country to make a positive impact in the international market, stratagem must be down to business and all-inclusive, responding to all issues that have an impact on the sector's international competitiveness. It further reiterated that the export strategy must tackle key issues such as: The improvement of the sectors competitiveness and its overall contribution to economic development of a particular country and to realize both competitiveness and development effect the "Four Gears" needs to be addresses (ITC, 2005)
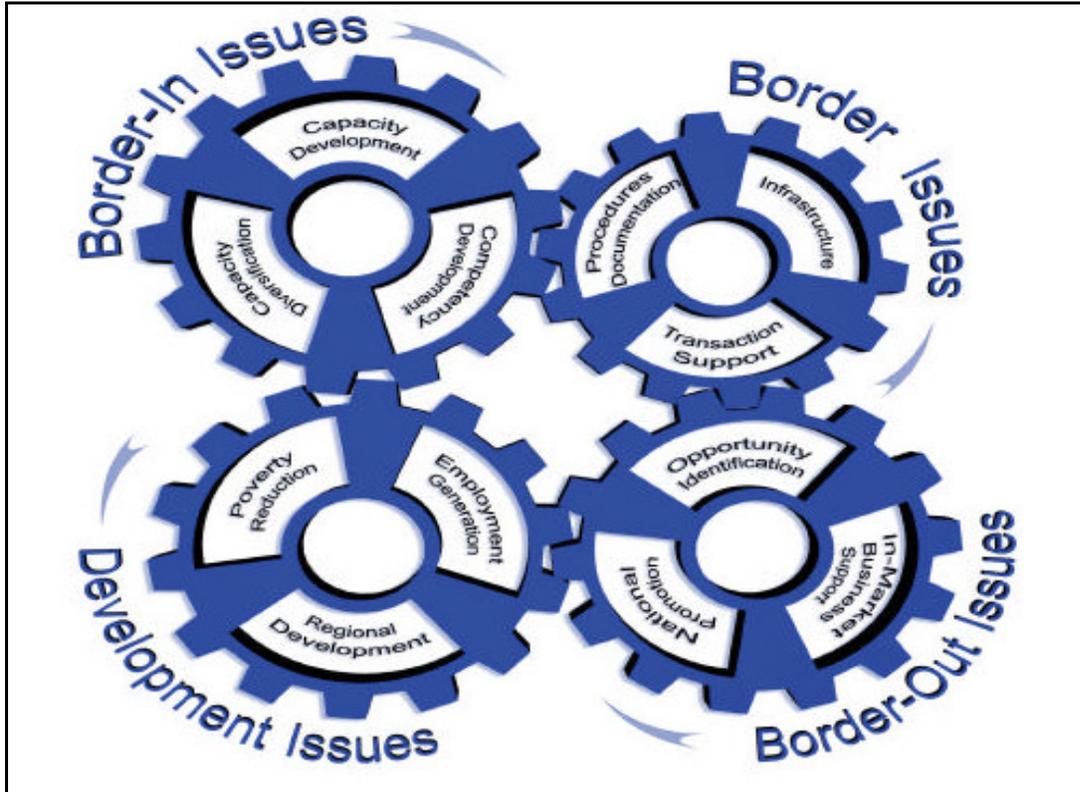
Figure 15: The Four Gears of National Export Strategy (ITC, 2005)

The framework further recommended that export strategy makers should not focus on just one or two of the issues to address but it should encompass all the four issues, as the concentration of a particular issue might be detrimental to realizing the full potential of the strategy. Example while it may be argued that border out programs characterize a vital aspect of the strategy, they do not address the key factors that determine export competitiveness (ITC, 2005). Export competitiveness is a function of the capacity to sell the products demanded in the international marketplace, at the quantity, quality, price and time required but the border-out gear of the strategy does not address these issues (UNCTAD, 2004). Accordingly, when border-in, border and border out issues are adequately addressed, then the long-term international competiveness with the sector be achieved (ITC, 2005)

THE BORDER-IN GEAR OF SECTOR-LED EXPORT STRATEGY

ITC (2005) recommended that export strategies must ensure that the sector's supply side can effectively respond to opportunities in the international marketplace and need to address the following;

➢ Strengthen existing supply side capacity

➢ New capacities need to be harnessed

➢ Emphasize skill and technical competency and encourage entrepreneurship

Accordingly, the export strategy border-issue can be divided into three categories:

➢ Capacity advancement issues involving the production capability-with the focus on productivity, volume, quality and value addition. Enhancing capacity will require the combination of private sector readiness to invest, and the availability of specialized skills within the public and private sectors

➢ Capacity diversification; producing new product lines and producing related products are the main issue concerned.

➢ Human Capital Development; to guarantee that the strategy addresses directly the need to initiate and constantly improve the sectors basic, technical and shop-floor competencies and further promote growth of entrepreneurship within the sector, the human capital development has to be well catered for.

THE BORDER GEAR OF SECTOR-LED EXPORT STRATEGY

Even though the border issues have a momentous influence on the sectors competitiveness and they characterize the sectors working environment and largely dictate the cost of export transaction, the following issues need to be addressed before the sector's international competitiveness can be realized (ITC, 2005);

- Infrastructure Issues: This addresses the constraints in trade related infrastructure i.e. transport and handling problems in particular. These normally affect profit and limits options for market development (border-out) and capacity development (border-in).

- Trade Facilitation Issues: It's related to regulation, administrative procedures and documentation requirements that govern how business (importing, intermediary processing and exporting) is done in the sector. Often the streamlining of import and custom clearance procedures is at the top of the sector strategist priority list

- Cost of Doing Business: An effective export strategy also seek to reduce cost of doing business with the sector i.e. cost of company registration, standards certification, internet access, port fees, inspection charges, insurance premium et cetera must be minimized.

THE BORDER-OUT GEAR OF SECTOR-LED EXPORT STRATEGY

This gear of the export strategy relates to;

- Market access: Tariffs, on-tariffs barriers related entry issues

- In-Market Support Services; Acquisition and dissemination of trade information , identification of commercial opportunities abroad, initiation of contact with potential buyers, generation of interest among prospective foreign direct investors and joint venture partners

- National Promotion: building and reinforcing the sectors image and organizational promotional programs e.g. fairs and missions

The greatest impact can be realized when the border-out strategy focuses on firm that have the capacity and competence to go international (ITC 2005).

THE DEVELOPMENTAL GEAR OF SECTOR-LED EXPORT STRATEGY

The development gear of the strategy buttress the sectors input to economic and social development within the country although the sector competitiveness are dependent on the border-in, border-out gears of the strategy. The development gear of the strategy seeks to deal with important issues that bother around a country economic and developmental need such as

- ➢ Creation of employment

- ➢ Poverty alleviation

- ➢ Environmental protection

- ➢ Affirmative action

- ➢ Development of disadvantaged groups and backward regions.

This aspect of the strategy is very critical, and to ensure widest stakeholder commitment, the strategy must highlight the development perspective (ITC, 2005).

NATIONAL EXPORT STRATEGY TEMPLATE (NEST) FRAMEWORK

The National Export Strategy Template (NEST) framework seeks to embrace the best practice with respect to the design and assessment of export strategies for the sector under consideration and the preparation of supporting strategies covering thematic areas of:

- ➢ Trade information

- ➢ Export finance

- ➢ Export quality management

- ➢ Export competence and

- ➢ Export packaging

The National Export Strategic Template (NEST) framework according to ITC (2005), does not only seek to address the needs of the current exporter, but also the concerns of the potential exporter and those of aspiring exporter. However, the NEST does not however provide

an extensive guidance on how strategy, once designed, should be monitored and impact measured. Due to lack of effective measurement by NEST framework, the concept of Kaplan and Norton Balance Scoreboard (BSC) approach comes in.

THE BALANCED SCOREBOARD APPROACH TO MONITORING THE IMPACT OF NATIONAL EXPORT STRATEGY

The Balanced Scoreboard (BSC) was brought into prominence by Robert S. Kaplan and David P. Norton in the early 1990s. Since its introduction, it has been applied as a management tool in numerous public sector organizations and its main aim accomplish critical management processes through clarifying the long term vision and medium term strategy; ensure cohesion among strategic objectives and identifying the measures by which to determine the extent of their achievement; set targets and align with strategic initiatives and programs and enhance feedback and learning (ITC, 2005)

THE BALANCED SCOREBOARD AND NEST FRAMEWORK

The BSC and NEST framework provides the four perspectives from which to monitor the progress towards achieving the strategic vision in the export sector and these include:

➢ The Economic and Social Perspective

➢ The Client Perspective

➢ The Target Sector Perspective and

➢ Learning and Growth Perspective

It is these four perspectives that give the Scoreboard its balance, thus preventing the favoritism on one perspective which might result in the tendency to focus on specific strategic goals, to the detriment of others (ITC, 2005).

COMBINING THE TWO FRAMEWORK

For the national export strategy to be assessed effective, the Balanced Scoreboard (BSC) and National Export Strategy Template (NEST) framework should be merged to effectively

(ITC, 2005). When incorporating the strategic applications contained in NEST into the

BSC/Strategy Map framework (Figure 16):

➢   the micro-oriented "financial" perspective of the BSC becomes the macro-oriented "Economic and Social" perspective;

➢   the BSC's "Customer" perspective becomes NEST's "Client" perspective;

➢   the "Internal Business Process" perspective becomes the "Trade Support Network" perspective; the definition of the "Learning and Growth" perspective is believed to be indicative of what national trade support network programs seeks to do to be effective. Accordingly the support network should constantly be innovating for improvement in the learning and growth perspective to be realized (ITC, 2005).
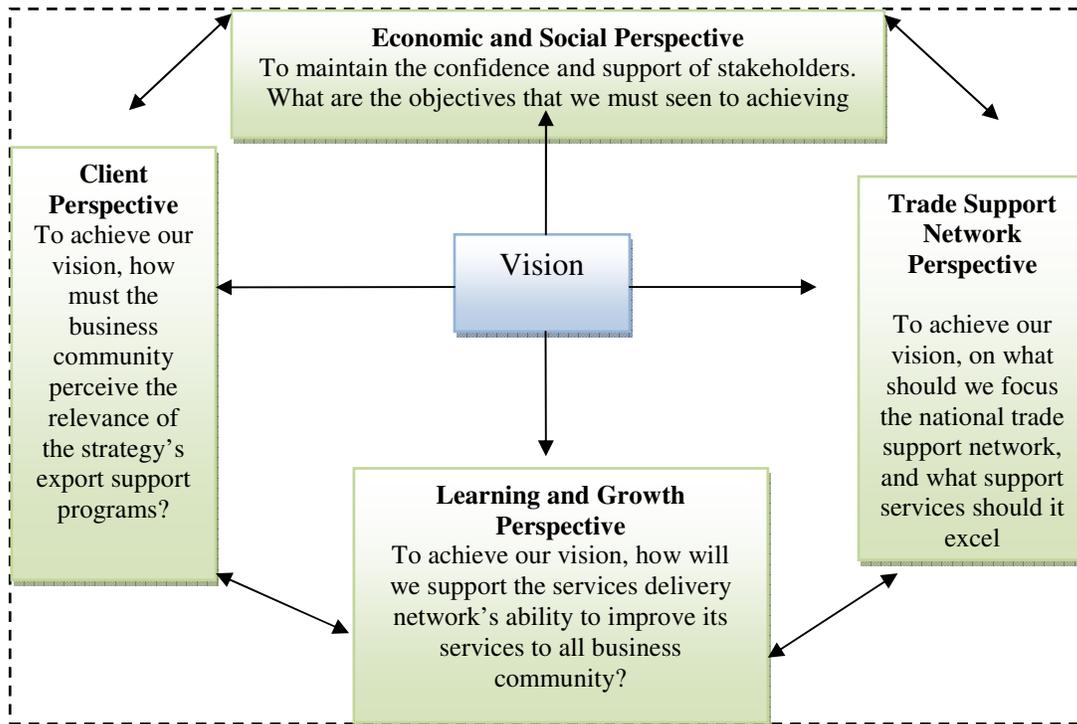
Figure 16: Export Strategy-Maker's Framework (ITC, 2005)

Economic and Social Perspective (NEST 4-Gear approach to strategy design)

DEVELOPMENT
Poverty Reduction
Employment Generation
Regional Development

BORDER-IN
(Improve Asset Utilization)
Capacity Development
Competency Development
Capacity Diversification

BORDER
(Minimize Cost)
Infrastructure
Transaction Support
Procedures/Documentation

BORDER-OUT
(Expand Export Opportunities)
Identifying Opportunities
In-Market Business Support
National Promotion

Wood Sector Focus

Client Perspective (Pertaining Exporters)

Current Exporters
Border-Out

Potential Exporters
Border-Out and Border-In

Aspiring Exporters
Border-In

Value Chain | Cross-Sectoral Focus | Competitive Analysis

Trade Information | Export Quality Management | Export Competency Development | Export Packaging

Learning and Growth Perspective (Intangible Assets)

Maintaining Trade Support Networks in Helping Business Changing Needs

Competency Development
(Human Capital)

Information
(Information Capital)

Organizational Capital

National Export Council | Members, Service Delivery Network | Role of Trade Promotion Organizations

Public-Private Sector Partnership

Figure 17: Detailed Measurement Framework .Source: International Trade Center, 2005

Furthermore, this framework can effectively be used in diverse performance analysis and in environments such as businesses and organizations. The framework (Figure 17) will be the overarching foundation by which Ghana's national wood export sector strategy will be examined analytically.

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CHAPTER 5. RESULTS: MARKETING CONSTRAINTS IN EXPORTING WOOD PRODUCTS FROM GHANA TO THE UNITED STATES

RESEARCH OBJECTIVES

Marketability of Ghana's wood products has been researched in recent times; but to date very scanty research has been done on the competitiveness of Ghana wood products in the international markets, especially the United States. Currently, many timber-producing countries are developing effective competitive strategies to compete with the Ghanaian product mix; as a result, the Ghanaian industry is thus placed in a mix of competitors who, in many cases, are already advanced in specialized skills to manufacture value-added products (Donkor, 2004). To compete effectively, the industry needs to develop competitive advantages. A way of developing competitive advantage is to compete favorably in the US market. There is therefore the need to identify and assess the constraints Ghanaian wood exporters encounter on the US market. This identification process often reveals where resources need to be committed to strengthen an industry to be very competitive (Donkor, 2004). This research seeks to assess factors influencing Ghana's wood product export to the United States (US), finding niche markets, and making appropriate recommendations. The results are intended to be unbiased input for Ghana's wood products industry and policy makers.

Accordingly, this proposed study will strategically analyze constraints and how to capitalize on the opportunities that exists in the US markets. The specific objectives of this research are:

1. Identify the Marketing Constraints that Impede Wood Exports to the United States

2. To make recommendations on how to effectively overcome the constraints

RESEARCH METHOD AND DESIGN

Data were gathered at two levels to achieve the proposed research objectives. The first level consisted of secondary data obtained from relevant government institutions including the Timber Industry Development Division (TIDD), Ghana Export Promotion Council, Ghana Investment Promotion Council, Forestry Commission (FC), Ministry of Trade and Industry and Statistical Service Department of Ghana. It involved collection of statistical information as well as review of technical reports and published articles on Ghana's wood exports. This was done to obtain appropriate data to assess the national export strategies and policies impacting the wood products exports.

Furthermore, the information on Ghana forest products industry used in this study came from the export records of Timber Industry Development Division. It is comprised of yearly data on volume of ten major forest products exported from 2001 to 2006. The products include air-dried and kiln-dried lumber, panels (plywood, rotary and sliced veneers) and machined products (processed lumber, molding, profile board, furniture parts, dowels and flooring). Data on export destination was also collected, and the geographical markets include Europe, America, Africa, Oceania and Asia.

The second component was qualitative (interviews) and quantitative (surveys) gathered from policy makers and focal persons in the sector ministry (i.e. Ministry of Lands and Forestry), departments and agencies on the institutional and policy environment that relate to the development of the timber industry in Ghana. Key personnel in the formal and informal were interviewed on the changes in government export policies that relate to wood products industry. Questionnaires to be used in Ghana were developed and tested by a focus group discussion. This focus group was comprised of industry consultants, millers, buyers' representatives, exporters, industry association, and government representatives. This step was done to create

questionnaires to capture the needs and structure of the industry.

According to Donkor (2003), accessing primary data from the formal and informal operatives in the timber industry is difficult and limited. In the formal processing sector, this emanates principally from fear amongst the operatives of exposing themselves to government investigation by divulging company data, an approach which was used by a previous government in the late 1980s to crack down on the industry for 'irregular activities' such as smuggling, evasion of taxes and nonpayment of royalties and fraudulent invoicing. The research was conducted using mail surveys and interviews. In general, sampling, survey procedures, follow-up efforts, and data analysis were conducted using well document and verified techniques (Dillman 2000; Fowler 1996). Mail questionnaires, semi-structured and one-on-one interviews were chosen as the most cost effective methods of data collection because they both afford a high degree of anonymity (mail surveys), and detailed responses through direct communication (interviews).   The survey process included: testing the questionnaire on a random sample of 20 from the population of Ghanaian wood product exporters; sending a pre-notification postcard one week prior to the first mailing to inform the recipients of the intended survey; mailing the initial survey accompanied by a signed cover letter promising a free summary of the questionnaire is completed and returned, and a postage-paid, pre-addressed envelope; a follow up reminder call and postcard one week after sending the questionnaire; and a second survey mailing to companies that did not respond to the first mailing.

SAMPLE DESIGN

The sample used in this research was 250 companies involved in wood products exports in Ghana. The list was drawn from records of Timber Industry Development Division, TIDD (Forestry Commission) and from the informal wood associations. The industries first 250 firms were used as the sample size. Because of the precarious nature of the research, all the selected

companies were issued with copies of the survey to ensure adequate response. A letter was sent

directly to either the managing director or the general manager of the companies so as to have

their consent and consensus effort from all and sundry to adequate cooperate in respondent to the

survey.

<u>NON RESPONSE BIAS TEST</u>

The non-response bias was tested by comparing the responses of those who return

the first mailing of the questionnaire to those who return the second mailing. Those who return

the second questionnaire were in effect, considered a sample of non-respondents (to the first

mailing).The number that responded to the first mailing were 59 and 20 responded to the

second mailing. It was found out statistically, there were no significant differences between

the mean responses of these two respondents using T-test at 0.05 levels.

<u>DATA ANALYSIS</u>

The data from the questionnaires were coded, entered, and analyzed using the Statistical

Package for the Social Sciences (SPSS) and Excel. These statistical tools were used to provide

description and tests to identify the linkages between firm's sizes, location, and product group on

the various wood export constraints to the US market

MARKETING AND EXPORT CONSTRAINTS OF GHANA'S WOOD PRODUCTS TO THE US

<u>PROFILE OF GHANAIAN COMPANIES EXPORTING TO THE US</u>

Figure 18 shows the regions in Ghana. The distribution of respondents represents all

regions in Ghana. The Ashanti Region had the highest response rate (35%), followed by Western

(22%) and Volta Region had the least response (1%) (Figure 19). Out of these respondents,

twenty-seven (27%) of respondents are exporting to the US.
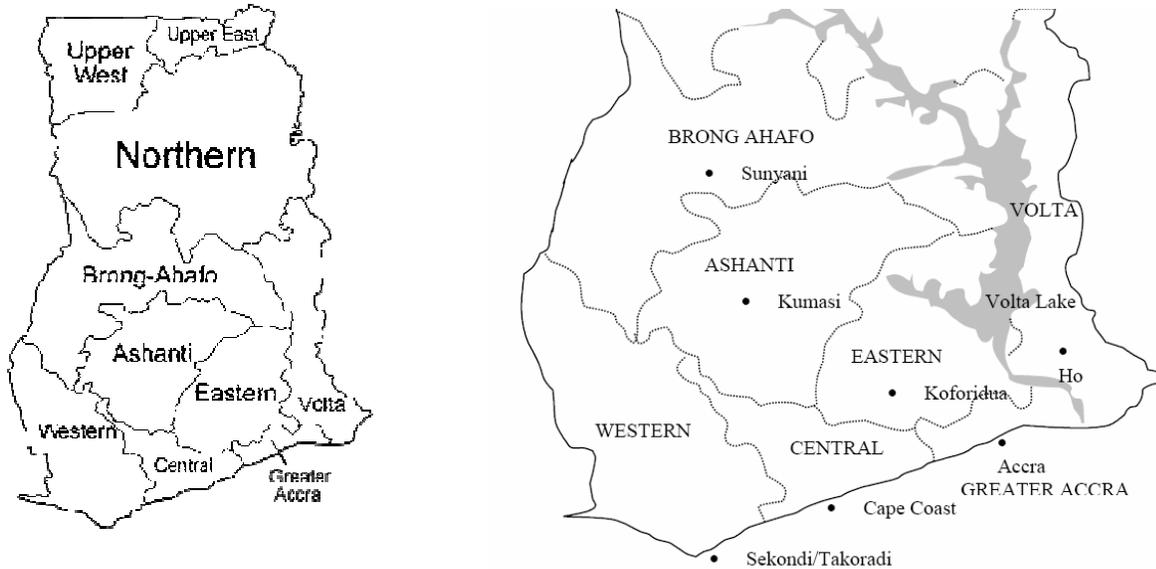
Figure 18: Ghana Regions

Product groups are predominantly veneers, kiln-dried lumber, moldings and veneers (Figure 20). Of the 70% not exporting to the US, 80% said they will be prepared to export to the US and the remaining 20% did not show much interest in exporting to the US. The 20% of respondents that did not export to the US cited the high cost of freight charges, the distance in shipping to the US which takes approximately three to four weeks to get to its destination while Europe has a maximum of two weeks on high seas before reaching its destination will ensure that they have continuous cash flow due to the shorter distance.

Furthermore, about 50% of non-exporters to the US are willing to export to the US. The respondents stated they were not very acquainted with the US market and its wood product specifications making it difficult for them to export to the US. The respondents also complain of the US specification and lots of constraints they perceived exist in the US market. The major product groups the respondents export to the US are Kiln-dried Lumber, Air-dried Lumber and Machined Products (Figure 20)

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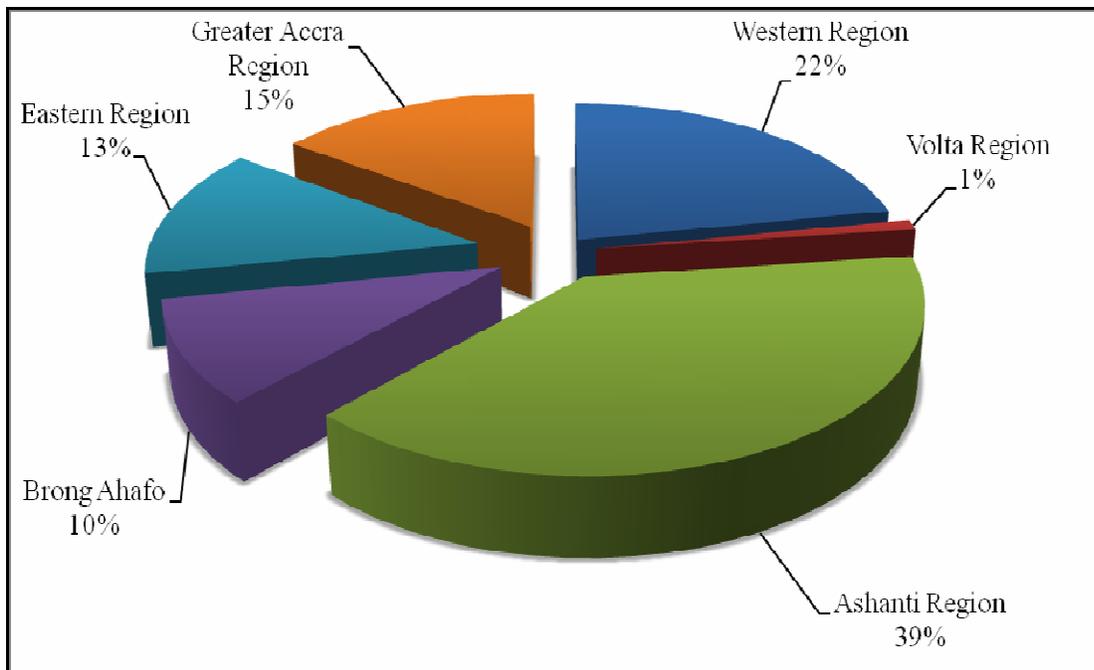
Figure 19: Sample Distribution by Region (n=79)

The US has been one of the major buyers over the years. From the survey, four percent (4%) of respondents have been exporting for past 20-25years to the US, nineteen percent (19%) have been exporting between 11-15 years and thirty-three percent (33%) had been exporting between one to five years (Figure 21).

Further, about 50% of non-exporters to the US are willing to export to the US. The respondents stated they were not very acquainted with the US market and its wood product specifications making it difficult for them to export to the US. The respondents also complain of the US specification and lots of constraints they perceived exist in the US market. The major product groups the respondents export to the US are Kiln-dried Lumber, Air-dried Lumber and Machined Products (Figure 20). The US has been one of the major buyers over the years. From the survey, four percent (4%) of respondents have been exporting for past 20-25years to the US, nineteen percent (19%) have been exporting between 11-15 years and thirty-three percent (33%) had been exporting between one to five years (Figure 21).
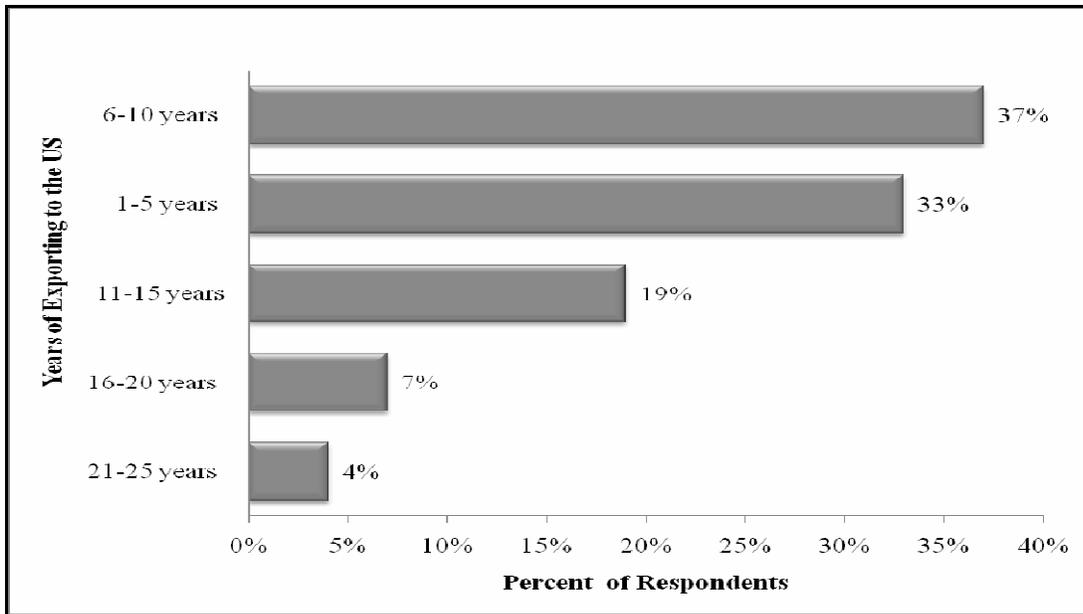
Figure 20: Product Groups Exported to the US (n=27)
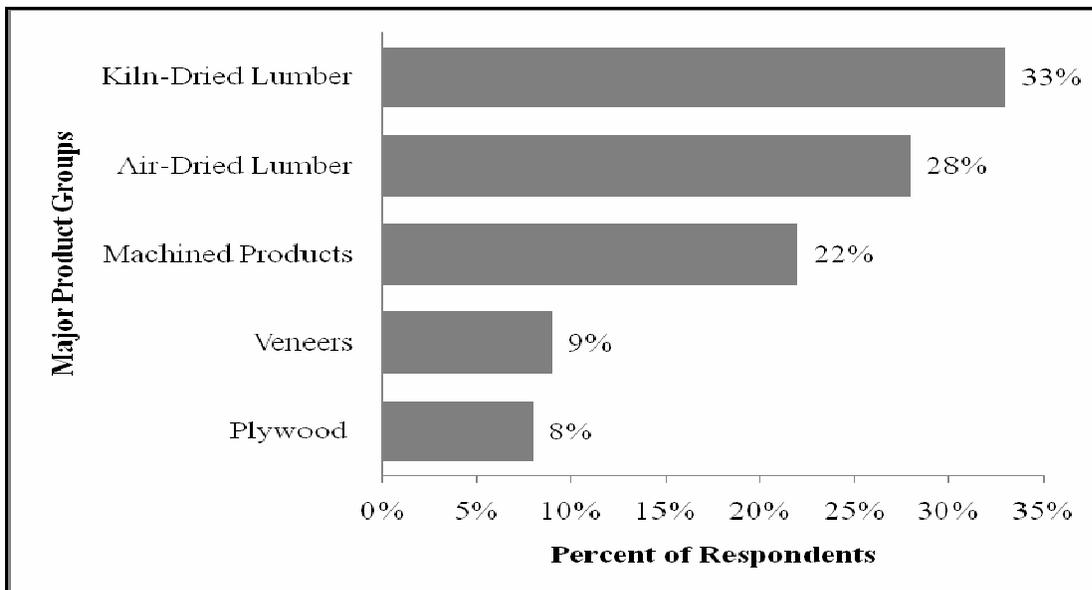
Figure 21: Distribution by Major Product Groups (n= 27)

CONSTRAINT ANALYSIS OF GHANA WOOD EXPORTS TO THE US

Respondents, seventy-nine (79) wood exporters were asked on their perception in

venturing into the US market and they were to rate their perception based on a 5-point Likert

scale, 1= Not Important 3=Important 5=Very Important. From the constraints listed, the

respondents indicated that lack of reliable buyer, lack of requisite technology, and lack of capital

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to go large scale were three topmost criteria that are hindering the exporters (Figure 22).
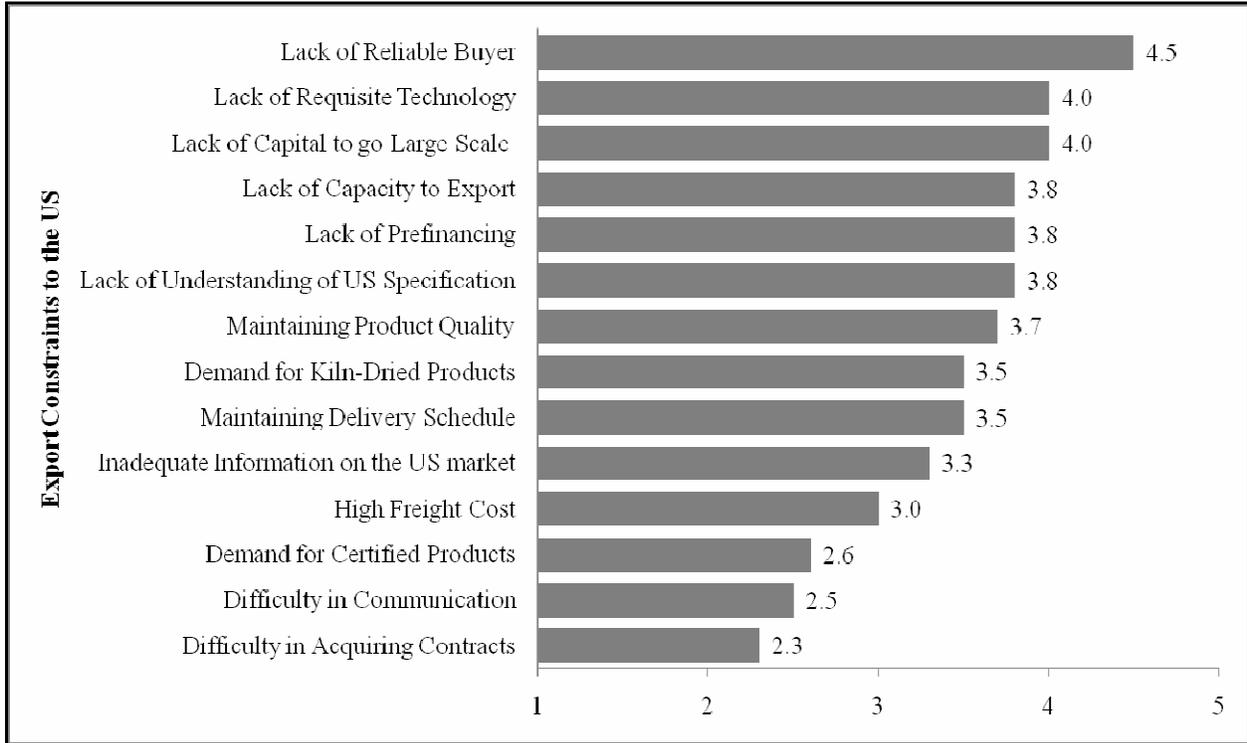
Figure 22: Export Constraints in Exporting to the US in Ghana (n=79) (scale: 1= Not Important at All, 3=Neither Unimportant nor Important, 5=Very Important)

Product quality, demand for kiln products and maintaining delivery schedule were

According to the exporters, it usually depend on the end use product the US importers intend to use the primary products they purchase. Example any product buyers order which does not conform to their specifications; either the wood products are rejected at right or the buyers pay a lower price. Lack of pre-financing constraint according to the respondents can be attributed to the ease by which the wood product can be obtained by the buyer, the quality and the reliability of supply. The type of species was also listed as a factor an international buyer may consider before pre-financing an exporter. However, when the exotic species are used in manufacturing a particular product, the buyer might only pre-finance when assured of the finest product or the scarce commodity that is the reliability of supply .Trust also plays a major role in whether to get

a pre-financing from a buyer according to the respondents.

CONSTRAINT ANALYSIS BY PRODUCT GROUP

To further assess the constraint by product groups, companies within the five (5) product groups were asked to give their perception on the major constraints in exporting to the US market (Table 5). A Likert scale was used with 1= Not Important 3=Important 5=Very Important. The results indicate the product group affects the constraints. The results indicate, with difficulty in acquiring contracts, plywood exporters believe it's not very critical while kiln-dried lumber , air-dried lumber and machine wood producers indicated its very critical constrain in their inability or ability to enter the US market. Getting a reliable buyer was very important to ensure constraint streaming of inflows and the export activities. Air-dried lumber , kiln-dried lumber exporters pointed out it's a critical factor , but that of veneers and machined product exporters didn't think it's a very critical but can place it as somehow important criteria . To identify whether the US system of classification by way of measurements and conversions, it came to light that most exporters in the plywood ,kiln-dried and air-dried category perceives that to be a constraint since most of exporters uses the metric system of specification but not the US measurements system. Machined products manufacturers didn't perceive that to be critical constraint.

Air-dried lumber exporters perceived high cost of freight to be a major constraint while machine and veneer exporters indicated it's somehow a constraint and all of them were basing their perceptions on the distance from Ghana to the US as compared to shorter route to Europe. In analyzing inadequate capacity as a constraint, it came out almost all of respondents perceived most US importers require huge volume and due to lack of investment as the result of modern equipments lacking, they might are not able to meet the huge volume resulting in contractual issues. A lack of understanding of US specifications and pre-financing were the two constraints

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Table 5: ANOVA for Export Constraints to the US by Product Group (scale: 1= Not Important at All, 3=Neither Unimportant nor Important, 5=Very Important)

Export Constraints	Mean					P-Value
	Veneer (n=7)	Plywood (n=6)	Kiln-Dried Lumber (n=12)	Air-Dried Lumber (n= 30)	Machined Products (n=17)	
High Freight Cost	3.5	4.2*	3.5*	3.8*	2.1*	.342
Lack of Understanding of US Specifications	3.0*	4.3*	3.6*	3.4	2.4	.014 **
Maintain Product Quality	3.5	2.6	3.2	4.1	2.8	.163
Maintain Delivery Schedule	2.5	3.5	3.4	3.2	2.8	.310
Scarcity of Reliable Buyers	3.5	4.1	3.5	4.3	3.1	.358
Difficulty in Acquiring Contracts	3.1	2.6	2.6	3.4	2.3	.793
Communication Difficulty	3.8	4.2	3.2	3.1	2.4	.087
Lack of Pre-financing	3.1	4.3*	3.1	3.4*	2.4*	.009 **
Lack of Market Information on the US Market	3.5	4.2	3.2	4.1	3.0	.389
Lack of Capital	2.7	4.4	3.6	4.3	4.2	.554
Lack of Requisite Technology	2.8	2.1	3.5	3.4	3.8	.964
Demand for Kiln Dried Products	3.5	3.4	3.4	3.3	2.5	.398
Demand for Certified Wood Products	2.3	3.1	3.5	4.3	3.1	.919
Lack of Capacity to Export to the US Market	3.5	4.3	4.2	4.3	4.5	.342

*Significance difference between firms at α=0.05, **Significance at α=0.01

that were significant at α=0.05. There was a significance difference between firms that export

veneer, plywood and kiln-dried products at α=0.05.

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To further assess the constraint by firm location, companies within the five regions were asked to give their perception on the major constraints in exporting to the US. The findings indicated constraints were affected by also affected by location (Table 6). The results show, difficulty in acquiring contracts, plywood exporters believe it's not very critical while kiln-dried lumber , air-dried lumber and machine wood producers indicated its very critical constrain in their inability or ability to enter the US market. Getting a reliable buyer was very important to ensure constant streaming of inflows and the export activities. Air-dried lumber and kiln-dried lumber exporters pointed out it was a critical factor, but those of veneers and machined product exporters did not think it was a very critical but they perceive it as somehow important criteria.

Wood export constraints were further tested statistically using Posthoc test based on firm location. The results indicated lack of US specification, maintaining product quality, maintaining reliable delivery schedule, lack of Lack of capacity to export to the US market, reliable buyer, difficulty in communication, lack of market information and lack of capital or finance to go large scale were significantly difference by firm location, which indicates the specific location of the firm has a significant constraint to its wood exports to the US. There was significant difference between Greater Accra and Western Region on high freight cost, while Eastern and Greater Accra region had a significant difference with lack of US specification. Difficulty in acquiring contracts, lack of requisite technology and demand for certified wood products had the location of firms not significantly different from each other.

CONSTRAINT ANALYSIS BY FIRM SIZE

To further investigate the wood export constraints to the US, firm size; small, medium and large were analyzed. The export firms in between small, medium and large firms

were also analyzed. The results indicate some constraints were not significantly different by firm size at a 0.05 level of significance (Table 7).

Table 6: ANOVA for Ghana's Products Export Constraints to the US by Firm Location (scale: 1= Not Important at All, 3=Neither Unimportant nor Important, 5=Very Important)

Export Constraints	Mean					P-Value
	Brong Ahafo Region (n= 8)	Eastern Region (n=10)	Greater Accra (n=12)	Ashanti Region (n= 30)	Western Region (n=17)	
High Freight Cost	3.9	2.5	3.1*	4.3	4.1*	.003**
Lack of Understanding of US Specifications	4.2	2.8*	3.2*	2.6	3.0	<.001**
Maintain Product Quality	2.5*	4.0	3.2	4.1*	3.8*	<..001**
Maintain Delivery Schedule	3.4	2.4*	3.4	3.2*	3.2	<.000**
Reliable Buyer	4.1	2.1	3.5*	4.3*	2.8	.018*
Difficulty in Acquiring Contracts	3.1	3.7	2.6	3.4	3.4	.775
Communication Difficulty	3.9	4.2	3.2*	3.1*	4.0*	<.000**
Lack of Prefinancing	3.0	3.4*	3.1	3.4	2.3	<.000**
Lack of Market Information on the US Market	3.6	4.2	3.2	4.1	3.2	<.000**
Lack of Capital	3.2*	4.4	3.6*	4.3*	3.4*	.002**
Lack of Requisite Technology	4.1	2.1	3.5	3.4	2.6	.871
Demand for Kiln Dried Products	3.2	3.4	3.4*	3.3*	4.5	.009
Demand for Certified Wood Products	2.5	2.5	3.5	4.3	3.8	.228
Lack of Capacity to Export to the US Market	3.5	4.3*	4.0	4.2*	4.3	<.001**

*Significance difference between firms at α=0.05, **Significance at α=0.01

High freight cost, difficulty in acquiring a contract, lack of requisite technology, demand for kiln-dried and certified wood products were not significantly different from firm sizes.

Lack of understanding of US specifications was significant difference between small and medium firms. With the firms' ability to maintain product quality, there was significant difference between small and medium firms. Furthermore, there was significant difference between large and small firms on capital inadequacy.

Lack of pre-financing; there was significant difference between small, medium and large firms. It was also the same for lack of pre-financing as opinions of small and small-medium firms were significantly different, other firms were not. Lack of requisite technology was also identified as an important criteria and the significant ones were small-medium and medium-large firms. Kiln-dried product demand was also significant at a 0.05 level of significance.

Demand for certified wood products constraint was also significant between firm size, and the difference were with small, medium-large and large firms, and when the adequate capacity of the firms to export to the US was analyzed , small, medium and medium-large firms were significantly different from each other.

Table 7: Export Constraint Analysis by Firm Size (scale: 1= Not Important at All, 3=Neither Unimportant nor Important, 5=Very Important)

Export Constraints	Mean			P-Value
	Small Firm (n= 58)	Medium Firm (n=28)	Large Firms (n=6)	
High Freight Cost	4.3	3.5	1.8	.002**
Lack of Understanding of US Specifications	3.2*	4.3*	2.4	.000**
Maintain Product Quality	4.3*	3.1*	2.8	.000**
Maintain Delivery Schedule	4.0	3.4*	2.8*	.000**
Reliable Buyer	4.4*	3.5	3.1*	.000**
Difficulty in Acquiring Contracts	4.2*	2.6	2.3*	.000**
Communication Difficulty	3.2	3.2	1.8	.663
Lack of Pre-financing	4.2*	4.3*	2.4*	.002**
Lack of Market Information on the US Market	4.5*	3.2	3.0	.011**
Lack of Capital	4.3*	3.6	4.2*	.002**
Lack of Requisite Technology	4.3	3.1	2.6	.000**
Demand for Kiln Dried Products	3.0	3.4*	3.0*	.000**
Demand for Certified Wood Products	2.5	3.5	3.1*	.000**
Lack of Capacity to Export to the US Market	4.4*	4.2*	4.2	.000**

*Significance difference between firms at α=0.05, **Significance at α=0.01
+ Small Firm= Less than 1000 M^3, Medium Firm = 1001- 10,000 M^3 , Large Firm= 10, 000-20,000 M^3

From the results, the overall Ghana wood export constraints to the US, from very important to least important are; lack of reliable buyers, inadequacy or lack of requisite technology, capital to go large scale, lack of pre-financing and inadequate market information on US wood products specification in that order. Meanwhile, constraints identified as least in their export activities to the US are; demand for certified products, communication differences and difficulty in acquiring contracts to execute.

The findings were that, only few product groups are exported to the US by Ghanaian wood export firms. While US demand for the tropical hardwood is insatiable in lots of product groups such as millwork, furniture, engineering wood products etc, tropical wood products exporters can easily tap into this market and compete favorably. Currently, there are innovations and technologies in the global wood products industry so Ghanaian wood products exporters should also innovate aggressively to catch up with the rest of the world in terms export competitiveness. For example, hardwood paneling which was widely used, have been replaced by hardwood plywood and veneers, and recently, MDF (Medium Density Fiber) and particle board are slowing taking over. These "ground-breaking" wood products also turn out to be high value-added products and high earning. These suggest that Ghanaian wood products exporters can should target these high-earning, by producing more value products. In addition, the uniqueness of tropical wood species used for high value added products is an advantage tropical wood exporters can capitalize on the US market. This assertion is supported by Metafore (2006) that the successful tropical wood suppliers should focus on more on its unique species when targeting the US market.

Recognizing the strategic and unique nature of the US market, uniquely due to its large size, specialty and high-earning, there is the need to develop our capacity, skills and

innovations in order to gain access to that market (Porter, 1980). Product diversification and expansion in semi-finished, finished or value-added products should be the focus of companies who really want to compete in the global market. It is important that companies take a critical and unbiased view of their positioning and strategy when entering attractive markets, especially the U.S. market (Grimm et. al., 2006). Grimm et al. (2006) further reiterated that to be competitive in the US market, the marketability for the product in terms of size and growth in that market and the competitive positioning and what will it cost to implementation should be assessed and addressed. The research further seems to concur to Chudnovsky (2001) findings that to strive the high road to competitiveness, both large and small firms in developing countries have to put together and continuously enhance their capabilities and it needs to be applied to add value to existing activities and to make new products that can compete in the global economy.

INTERVENTIONS FOR PERCEIVED EXPORT CONSTRAINTS TO THE US

To address the high freight cost, export firms should consider economies of scale when shipping to the United States. This is by way of containerizing the wood products and export in bulk instead of exporting in bits and pieces. Shipping in full load of 40-footer container of a particular wood product will be economical then exporting in 20-footer containers. Also the timeliness of acquiring and signing contracts to coincide with when a particular shipment to the US will be due is another option. Another strategic option is to shift the cost to the buyer. Contracts should be mostly F-O-B, in this case, the transportation and the loading cost will be borne by the exporter to the port of shipment. The buyer then pays freight, insurance, unloading costs and transportation from the arrival port to the final destination. The passing of risks occurs when the goods pass the ship's rail at the port of shipment and internationally, the term specifies the port of loading.

Lack of understanding of US specification can be dealt with by making it a conscious

effort by management to understand the US specifications if one wants to enter the US market. To further understand the grading and the species US importers are interested in , Ghanaian firms need to attend trade shows and seminars usually organized in the United States. Wood exporters can also get more information on US market by contacting the commercial section of the US embassy where valuable information on US wood products industry can be obtained. Ghana Timber Industry Development Division officials can assist in this regard. Using an agent in the US is also an alternative and strategic partnership with US importers can help a lot because the US importers can help the exporters in understanding their specification by inviting them to their companies and vice versa. This assertion has been corroborated by Metafore (2003d).This research is in congruent that, to do well in the US market, suppliers need to dedicate adequate time to understand the US systems, grading and its market extensively (Metafore 2003a; USDA, 2005). Wood exporting firms as a matter of urgency need to improve upon its skills and production capacity if they are to fulfill and capture significant market share.

To maintain high product quality, there is the dire need for the government to assist export firms to invest in more efficient machinery and frequent training of personnel to upgrade their knowledge. This can be achieved by the government encouraging financial institutions to provide competitive financing schemes for the wood products manufacturers and exporters. Furthermore, this will ensure that prospective exporters are export-ready and be able to execute contracts timely and this might go a long way to alleviate or curb this issue. Wood Industry Training Center offers quality courses for wood workers and will be laudable for wood product exporters build their skill capacity by enrolling its personnel from the center. In short, regular upgrade of skills and technology needs to be a core value in the wood export sector.

Reliable buyer constraint can be addressed by producing quality products, at the right time, right price and to the buyer's taste. Serving the buyer strictly following the marketing mix

(product , price ,place , promotion) will as much as possible guarantee a buyer to continually purchase from the exporter, since satisfied buyers will continually buy from companies that see to their needs . Customer life time value also increases with satisfied customers. Satisfied buyers or customers are also good source for promotion for the company through word of mouth. If positive attributes are associated with a product or company, the result is consumers might want to experience these positive attributes and will lead to more buyers. In effect, once the necessary marketing mix is in place, acquiring reliable buyer will not be an issue. Furthermore, wood exporters can conduct a thorough background check on potential firms or buyers once they have a potential buyer. This can be done through the Commercial Section of the US embassy and Ghana's Timber Industry Development Division officials can also be of assist in that capacity. The government can help the exporters in this regard by offering assistance when there is a dispute to be resolved by using its missions in US to arbitrate on the exporter's behalf. Engaging agents/brokers at a small fee in the US can be very important since they can readily check the background information of potential importer from the US.

Investment constraints, which have resulted in low technology and modernization of Ghana's wood export industry, can be addressed by the government putting in place effective and efficient credit scheme for exporters to be able to access and invest in value added equipments. Alternate source of financing should be made available for exporters to adequately access to upgrade its equipment. Currently in Ghana, the Export Development and Investment Fund (EDIF) can borrow up to $500,000 to exporting companies over a five-year period at a subsidized cedi interest rate of 15% and although the scheme is administered through banks, the EDI board maintains the funds (Mensah 2004); but exporters are of the view that the bureaucratic process the exporters would have to go through is unbearable and they might as well not go in for those funds. With this situation, the government would have to put in place

adequate structures to streamline the administration of funds to appropriate exporters to compete favorably internationally. Investment tax credits, tax holidays and other tax structures will further boost the wood products exporters to invest in the industry to improve their performance. This solidifies Porter (2003b) findings that when governments support its industry locally, they tend to be competitive in the global market.

With regards to lack of access to market information to exporters, investments in quality market research and purchasing current wood product information from wood product organizations such as US hardwood, US hardwood organizations, and trade leads can be very beneficial. Trade organizations such as Ghana Export Promotion Council (GEPC), Forestry Commission Newsletters and Ghana Timber Industry Development Division (TIDD) publications can be accessed at a much lesser fee. Ghanaian Wood exporters should form a strategic alliance with other major firms in US so that they can exchange market information in the US market. Pooling of resources by export firms to obtain marketing information is also a step in the right direction. Industry associations such Association of Ghana Industries and Ghana Timber Millers Organization can effectively coordinate to enhance marketing information to firms.

Intervention for lack of pre-financing and difficulty in acquiring contracts should be looked at on the basis of trust. Exporters should let the buyers or importers earn their trust that they have the ability and the capacity to deliver. Trust should also be the key word, since bankers and financiers will also take you by your word so that they can pre-finance your exporting activities. Building credibility is also crucial in maintaining large buyers and being competitive. According to Porter (1998) satisfied buyers can encourage and support firms to invest in their capacity in the promise of potential business thereafter.

RECOMMENDATIONS

From the research, the major export and marketing constraints to the US market are affected by the type of product group, firm location and firm size. For Ghana wood products export industry to compete effectively in the US market, these barriers would have to overcome and these are the recommendations:

1. Periodic market research on the US market should be conducted by Ghanaian firms to keep abreast with current issues to be able to compete favorably

2. Ghanaian firms should form strategic alliance with some of the US wood companies in the area of technology transfer to get into the production of high quality value-added wood products looking at the precarious wood resource availability issues in Ghana

3. The government should assist Ghanaian wood export and manufacturing firm by helping improve their capacity and skills to be competitive on the US market

4. Ghanaian wood export firms should target lucrative niche markets and high-value earnings in the US market by becoming more innovative in producing value added products.

5. The Ghana government should assist wood manufacturers and exporters to have access to competitive financing scheme to execute their contracts to the US market effectively while creating jobs for the country.

RESEARCH IMPLICATIONS

From the research, it can be deduced that very few Ghana wood product exporters are able to make it to the US market and many more would like to explore the US market but they have actual and perceived constraints in entering the US market. According to UNCTAD, World Investment Report (2002), greater competitiveness allow countries move from the export of few product groups and built on their technological and skill capacity and improve upon its

economies of scale, and overcome international market constraints to perform creditably. The

implication of this study is that exporters can perform competitively on the US market by better

understanding the major constraints that hinders the execution of their exports to the US market.

It also brought to fore the export constraints both affect export firms based on size, location and

the product line. As a result, Ghanaian exporters in understanding what pertains in the US market

and the current competitors, they can map up strategies to effectively compete in the US market

RESEARCH LIMITATIONS

Perceptions and views on the major constraints were obtained from the Ghanaian wood

exporters but these constraints can also be verified from the importers from the US, and therefore

a research that will seek to obtain their perception of the major importers will help address the

constraints Ghanaian and other tropical wood exporters face in the US market. Furthermore,

research on constraints faced by other tropical wood exporters might be a step in the right

direction, so as to understand the constraints tropical wood exporters in to the US encounters in

general.

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CHAPTER 6. RESULTS: GHANA WOOD EXPORT STRATEGIES

RESEARCH OBJECTIVES

Assessment of Ghana's wood products export strategies, structures, and the competitiveness of Ghana wood products in the international markets is crucial if wood products export will achieve sustained performance. Currently, many timber-producing countries are developing effective competitive strategies to compete with the Ghanaian product mix. The Ghanaian wood products industry is therefore placed in a mix of competitors who, in many cases, are already advanced in specialized skills to manufacture value-added products (Donkor, 2004). To compete effectively, the industry needs to develop competitive advantages. A way of developing competitive advantage is to examine what the government and industry are doing in terms of effective export strategies in order to identify exporters' needs and enhance what is already being done correctly. This identification process often reveals where resources need to be committed to strengthen an industry to be very competitive (Donkor, 2004). This proposed project seeks to assess factors influencing Ghana's Wood exports, finding markets, and making appropriate recommendations. The results are intended to be unbiased input for Ghana's wood products industry and policy makers.

Accordingly, this research will strategically analyze the wood products industry and the national wood export strategy .The specific objectives of this research to:

1. Assess the Current Approach to Export Development in the Wood Sector
2. Investigate the Competitive Indicators of the Wood Industry and Critical Success Factors (CSF) of Ghana's wood exports
3. Construct a Framework or Model for by which the overall effectiveness of Ghana National Wood export strategy be measured

RESEARCH METHOD AND DESIGN

<u>RESEARCH DESIGN</u>

Data was gathered at two levels to achieve the proposed research objectives. The first level will consist of secondary data to be obtained from relevant government institutions including the Timber Industry Development Division (TIDD), Ghana Export Promotion Council, Ghana Investment Promotion Council, Forestry Commission (FC), Ministry of Trade and Industry and Statistical Service Department of Ghana. It involved collection of statistical information as well as review of technical reports and published articles on Ghana's wood exports. This was done to obtain appropriate data to assess the national export strategies and policies impacting the wood products exports.

Furthermore, the information on Ghana forest products industry used in this study came from the export records of Timber Industry Development Division. It is comprised of yearly data on volume of ten major forest products exported from 2001 to 2006. The products include air-dried and kiln-dried lumber, panels (plywood, rotary and sliced veneers) and machined products (processed lumber, molding, profile board, furniture parts, dowels and flooring). Data on export destination was also collected, and the geographical markets include Europe, America, Africa, Oceania and Asia.

The second component was qualitative (interviews) and quantitative (surveys) gathered from policy makers and focal persons in the sector ministry (i.e. Ministry of Lands and Forestry), departments and agencies on the institutional and policy environment that relate to the development of the timber industry in Ghana. Key personnel in the formal and informal were interviewed on the changes in government export policies that relate to wood products industry. Questionnaires to be used in Ghana were developed and tested by a focus group discussion. This focus group was comprised of industry consultants, millers, buyers'

representatives, exporters, industry association and government representatives. This step was done to create questionnaires to capture the needs and structure of the industry.

According to Donkor (2003), accessing primary data from the formal and informal operatives in the timber industry is difficult and limited. In the formal processing sector, this emanates principally from fear amongst the operatives of exposing themselves to government investigation by divulging company data, an approach which was used by a previous government in the late 1980s to crack down on the industry for 'irregular activities' such as smuggling, evasion of taxes and nonpayment of royalties and fraudulent invoicing.

The research was conducted using mail surveys and interviews. In general, sampling, survey procedures, follow-up efforts, and data analysis were conducted using well document and verified techniques (Dillman 2000; Fowler 1996). Mail questionnaires, semi-structured and one-on-one interviews were chosen as the most cost effective methods of data collection because they both afford a high degree of anonymity (mail surveys), and detailed responses through direct communication (interviews).

The survey process included: testing the questionnaire on a random sample of 20 from the population of Ghanaian wood product exporters; sending a pre-notification postcard one week prior to the first mailing to inform the recipients of the intended survey; mailing the initial survey accompanied by a signed cover letter promising a free summary of the questionnaire is completed and returned, and a postage-paid, pre-addressed envelope; a follow up reminder call and postcard one week after sending the questionnaire; and a second survey mailing to companies that did not respond to the first mailing.

SAMPLE DESIGN

The sample used in this research was 250 companies involved in wood products exports in Ghana. The list was drawn from records of Timber Industry Development Division, TIDD

(Forestry Commission) and from the informal wood associations. The industries first 250 firms were used as the sample size. Because of the precarious nature of the research, all the selected companies were issued with copies of the survey to ensure adequate response. A letter was sent directly to either the managing director or the general manager of the companies so as to have their consent and consensus effort from all and sundry to adequate cooperate in respondent to the survey.

<u>DATA ANALYSIS</u>

The data from the questionnaires were coded, entered, and analyzed using the Statistical Package for the Social Sciences (SPSS) and Balanced Scoreboard (BSC) and interpreted. These statistical tools were used to:

1. Identify the linkages and matrices within the various variables, markets, export strategies, marketing   strategies, technologies and other factors hindering Ghana's wood products export industry.
2. Analyze differences between demographics, firm size, export volume and other factors that influence the wood products exports.

RESULTS

<u>NON-RESPONSE BIAS AND RESPONSE RATE</u>

In the summer of 2007, the surveys were mailed to the 250 firms. Many of the firms were very reluctant due to the conception that researchers tend to release their companies information either to the government or the public domain which in effect leads to tax officers distressing them with tax issues. As a result of this, it was extremely difficult having the firms completing the survey. Even those that provided vital information such as their annual revenues gave out figures far below what they actually make when compared to the TIDD export permits over the years. The nature of the firms' responsiveness to survey made it difficult to just send first survey and second mailing but actually the researcher making phone-in reminders and several personal visits to be able to get a relatively good response rate. Out of the 250 surveys

sent out, 79 were received which accounts for 31.2 % (adjusted response rate). All surveys received were usable and none returned as undeliverable.

Figure 24 shows the regions in Ghana. The Ashanti region was the area with a highest percentage of respondents (Figure 25). Other regions that were in the sample frame were Western, Eastern, Greater Accra, Brong Ahafo and the Volta Region.

Figure 24: Ghana Regions (n=79)
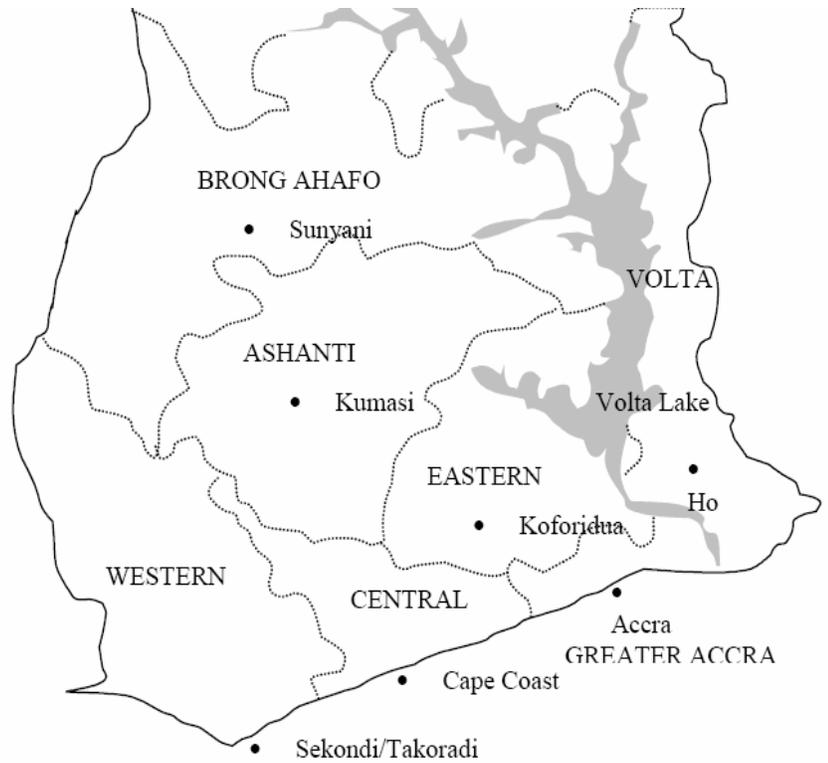
Figure 23: Map of Ghana Showing Sampled Regions

The distribution by product group shows that those firms that export kiln-dried lumber was the highest with 33% followed by Air-dried lumber 28%, with plywood exporters the least 8% (Figure 26).
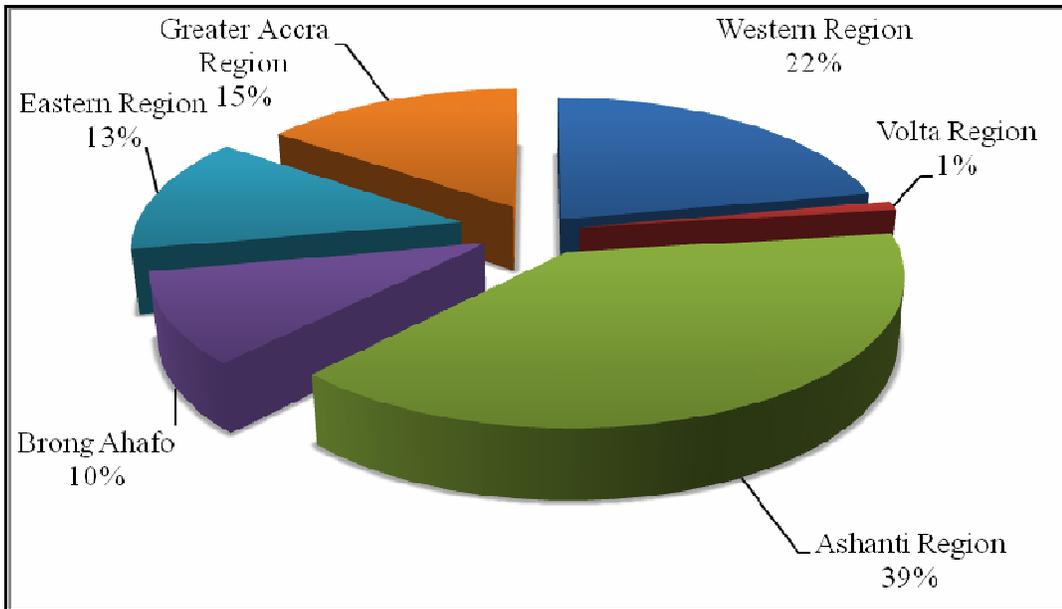
Figure 25: Respondents by Regions
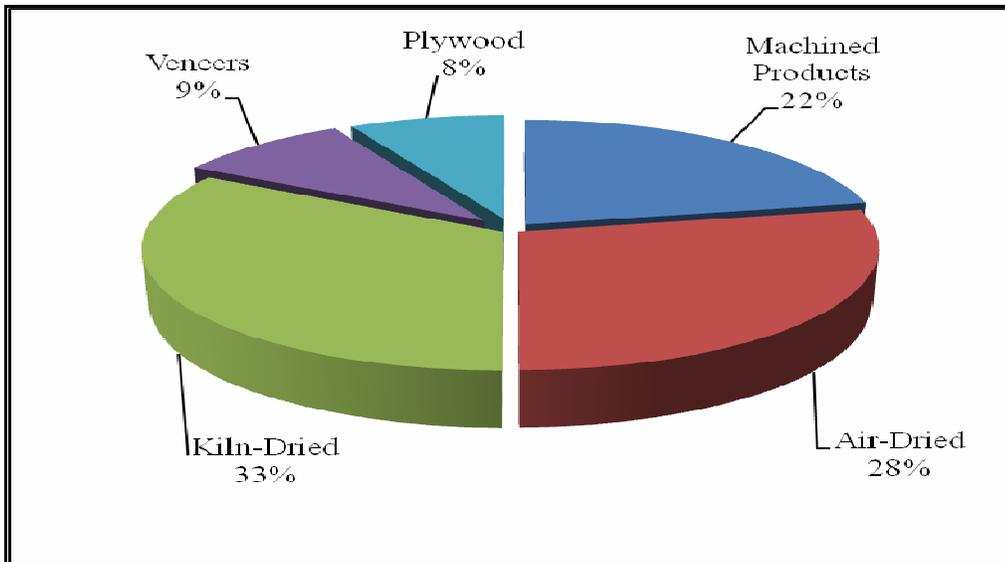
Figure 26: Distribution of Firm by Product Group (n=79)

The average annual export volumes of respondents indicate 501-1,000 m^3 had the majority of respondents (38%), followed by those that export 1,001-5,000 m^3 (24%) while firms that export higher volumes had the lowest (4%) (Figure 27). About 20-30% of exporters whose export volumes were 100 m^3-500 m^3 were traders who source the wood products from other manufacturers since they don't have mills of their own. As a result, they only manage to acquire small volumes from the mills before they are able to export.
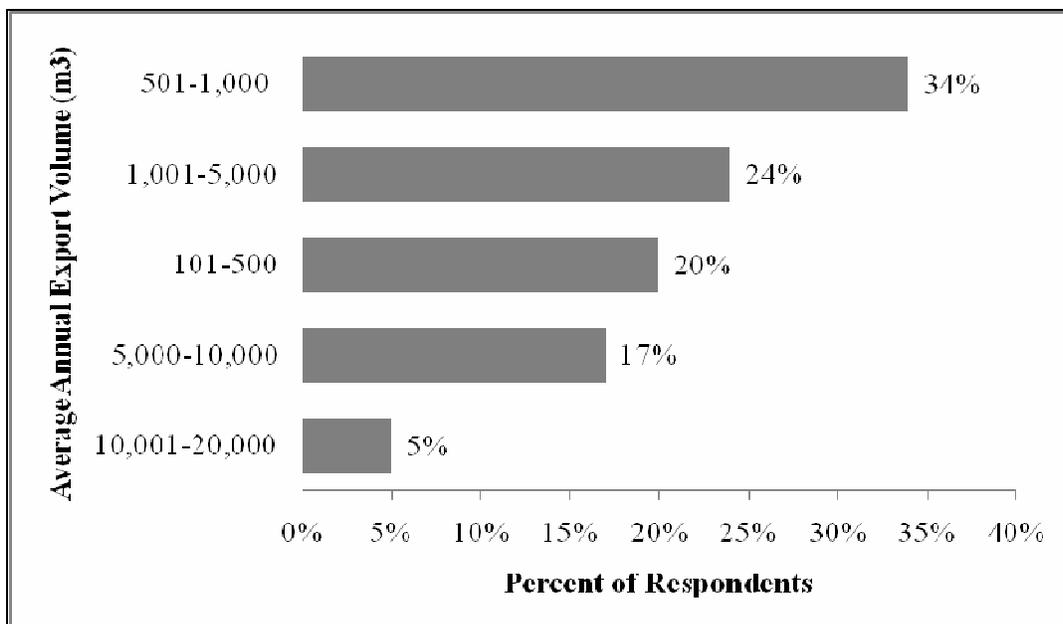
Figure 27: Distribution of Firms by Average Annual Export Volume (n=79)

<u>FIRM SIZE AND NUMBER OF EMPLOYEES</u>

More than 50% of respondents export between 100-5,000 m^3 annually from Ghana (Table 8). Twenty-two percent of respondents export between 5,000-10,000 m^3 annually. Since it proved difficult to obtain the assets of respondents to assess the size, the use of the number of employees as a surrogate of firm size may not hold true for this research. Furthermore, since the Spearman correlation between the number of employees by firms and its average annual volume of export, the average annual export volume will be use an indicator of firm size later in this research.

GHANA WOOD EXPORTS PERFORMANCE

The trend for Ghana's wood products exports in terms of both volume and value have been declining over the past 6 years. R^2 values for volume and value are -0.308 and -0.197, respectively (Figure 28). Market diversifications of Ghana's wood products over the past six years indicates the trend for its traditional market, Europe, is on the decline in terms of both

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volume and value (Figures 29 and 30).

Table 8 : Cross-Tabulation of Average Annual Export Volumes and Number of Employees

		Number of Employees			Total
		< 50	51 - 100	101 - 200	
Average Export Volume (m^3)	101- 500	8	4	4	**16**
	501-1,000	14	8	5	**27**
	1,001- 5,000	6	10	3	**19**
	5,001-10,000	8	5	0	**13**
	10,000- 20,000	1	2	1	**4**
Total		**39**	**29**	**13**	**79**
		Value	Asymp. Std. Error (a)	T (b)	Sig.
Interval by Interval	Pearson's R	-.191	.099	-1.704	.092(c)
Ordinal by Ordinal	Spearman Correlation	-.137	.110	-1.215	.228(c)

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation

Critical assessment of the market diversification illustrates products to lucrative markets such as Europe and America is rather on the down-turn, while exports to the neighboring African countries are on the increase. Export to the Oceania countries has been relatively stable over the past six years but the volumes exported were very minimal .The Middle East and Asia/Far East were some of the emerging markets for Ghana's wood products over the past six(6) years.

The trend for value indicated by Asia/Far East is increasing while trend for the Middle East is quite encouraging. The emerging markets in Asia and the Far East, including India, Malaysia, Taiwan, China, Singapore and Thailand, together contributed 23 million Euros (13.64) to total export value in 2005
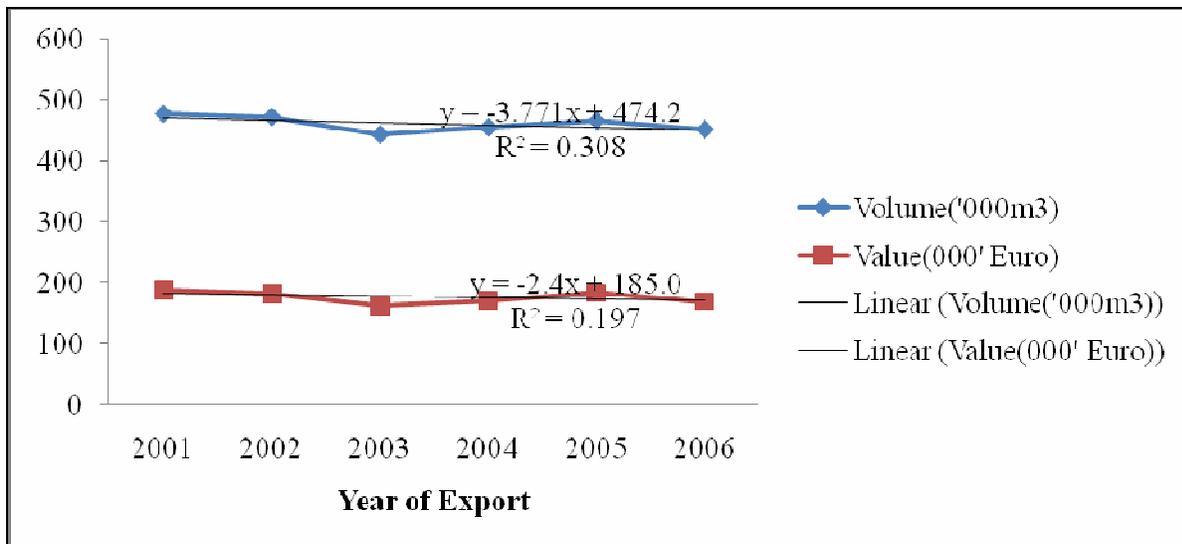
Figure 28: Ghana Wood Product Export Trend Depicting R^2 Values (2001-2006)
Source: Ghana Timber Industry Development Division Export Permit, 2001-2006

. Though the trends for Ghana's wood export volume and value to various markets was relatively not stable, there was major plunge in value for Europe which was very significant, this was attributed to macroeconomic indicators such as foreign exchange since the Euro and dollars loss grounds to the Cedi (Ghana's currency), leading to the plunge in value for the European market.
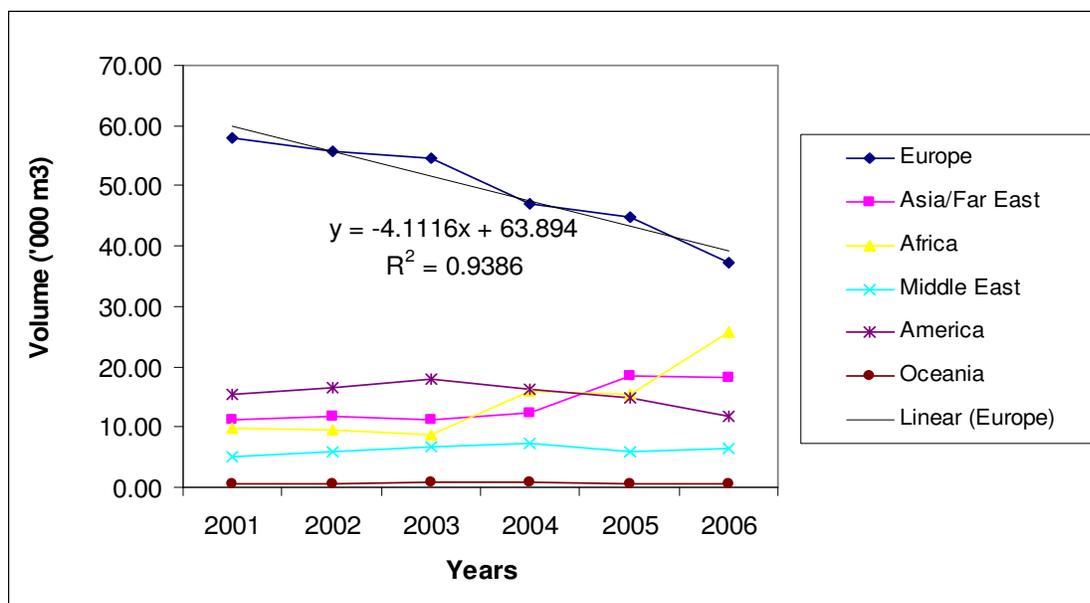
Figure 29: Export Destination by Volume (2001-2006)
Source: Ghana Timber Industry Development Division Export Permit, 2001-2006
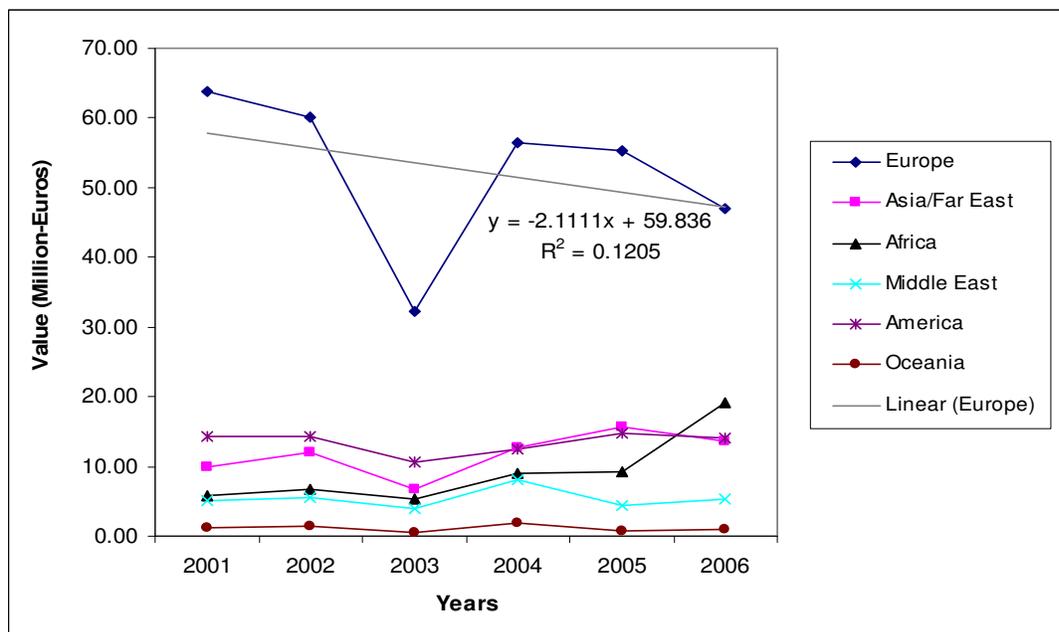
Figure 30: Export Value by Region (2001-2006)
 Source: Ghana Timber Industry Development Division Export Permit, 2001-2006

VALUES AND BEHAVIORS THAT ENCOURAGE COMPETIVENESS IN THE WOOD EXPORT SECTOR

Export firms were asked to indicate whether there are the existence of values and behaviors that enhance the wood sector competitiveness (Figure 31). They were asked to indicate Yes or No to the questionnaire. The results indicate that 57% believe there is private and public sector cooperation. Forty-three percent indicated Ghana has social organization that encourages local competitiveness. Only 20% have confidence in public institutions in Ghana

MACROECONOMIC ENVIRONMENT FOR WOOD EXPORT SECTOR DEVELOPMENT

In assessing the macroeconomic environment of Ghana's wood export sector, a majority of respondents (84%) indicated there is intense local competition (Figure 32). Respondents reiterated that the demand for wood products in the international markets is insatiable. Inflation control in Ghana has been a considerable issue. On the whole, fifty percent of respondents presume there is tight control in that respect. Respondents perceive that there isn't competitive and stable foreign exchange and private business investment was considered low due to lack of credit facilities from banks and financial institutions. There was a significant difference between

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firm size of competitive banking system and competitive and stable foreign exchange rate.

GHANA WOOD EXPORT SECTOR COMPETITIVENESS INDICATORS AND FACILITIES

Majority of respondents (86%) perceived there is adequate and competitively priced sea cargo, and fifty percent (50%) indicated there is efficient and competitively priced telecommunication for doing effective business (Figure 33). Forty nine percent indicated there are transparent custom procedures and only 35% indicated there is efficient and competitively priced electricity and efficient warehousing. For the industry to have the perception that the macroeconomic indicators are positive, it helps the border-out to be addressed.
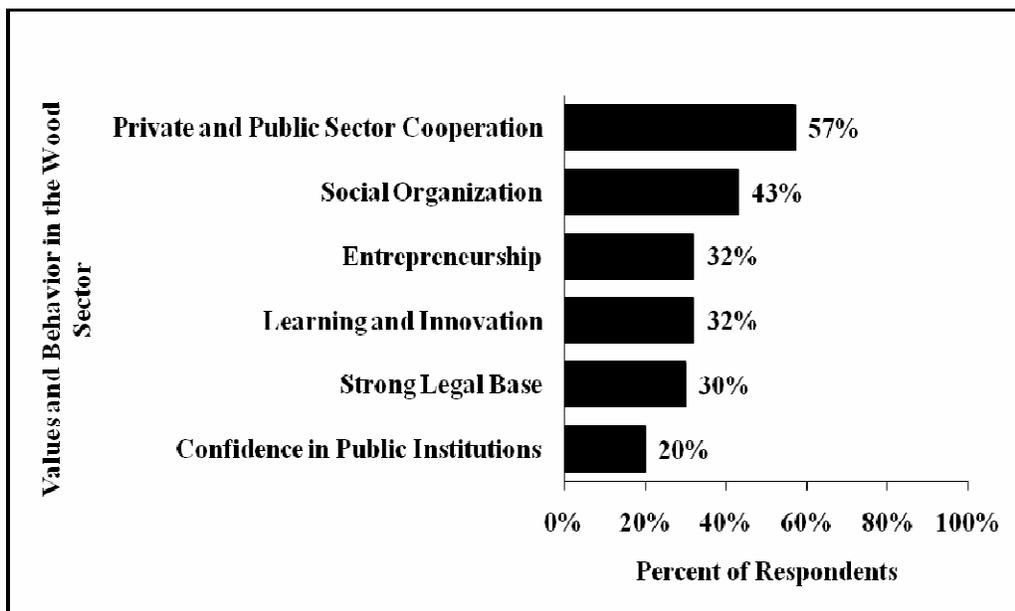
Figure 31: Values and Behaviors in the Wood Sector (n=79)(multiple responses possible)

There was significant difference in response by firm size at the 0.05 level of significance for efficient and transparent custom procedures, competitive priced air cargo, water and efficient warehouse facilities.

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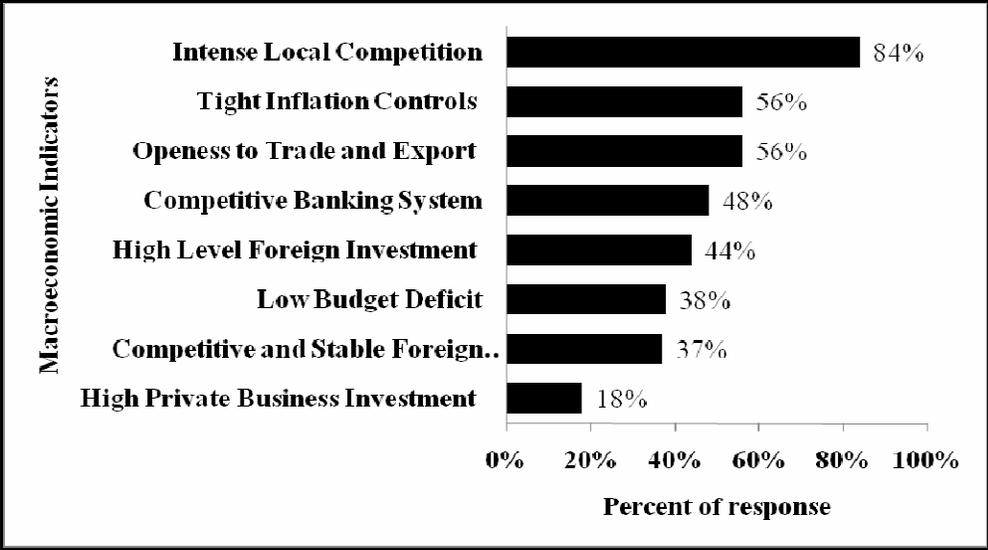
Figure 32: Macroeconomic Indicators for Enterprise Development (n=79)
(multiple responses possible)
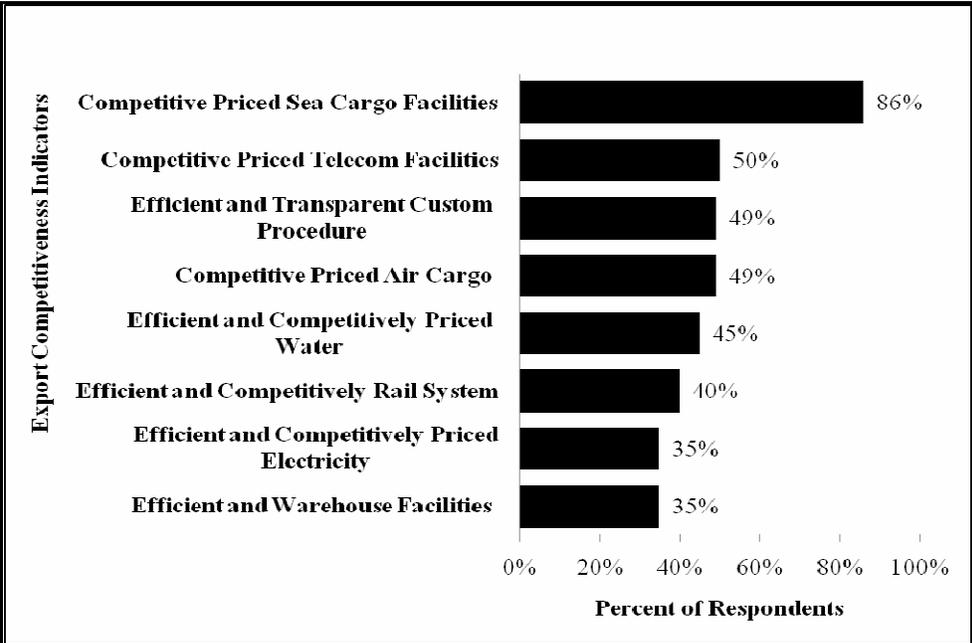
Figure 33: Enterprise Competitiveness Indicators (n=79) (multiple responses possible)

CURRENT APPROACH TO WOOD EXPORT SECTOR DEVELOPMENT

A majority of respondents (87%) indicated the current approach to wood sector

development in Ghana is predominantly export oriented (Figure 34). Forty-nine percent of

respondents also believe that there is less concern about property right protection in the industry

and this has resulted in lack of innovation in the industry.

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Thirty-two percent assumed there is relatively non-existing or lack of support of investment in research and development. This assertion was significantly different across firm size.
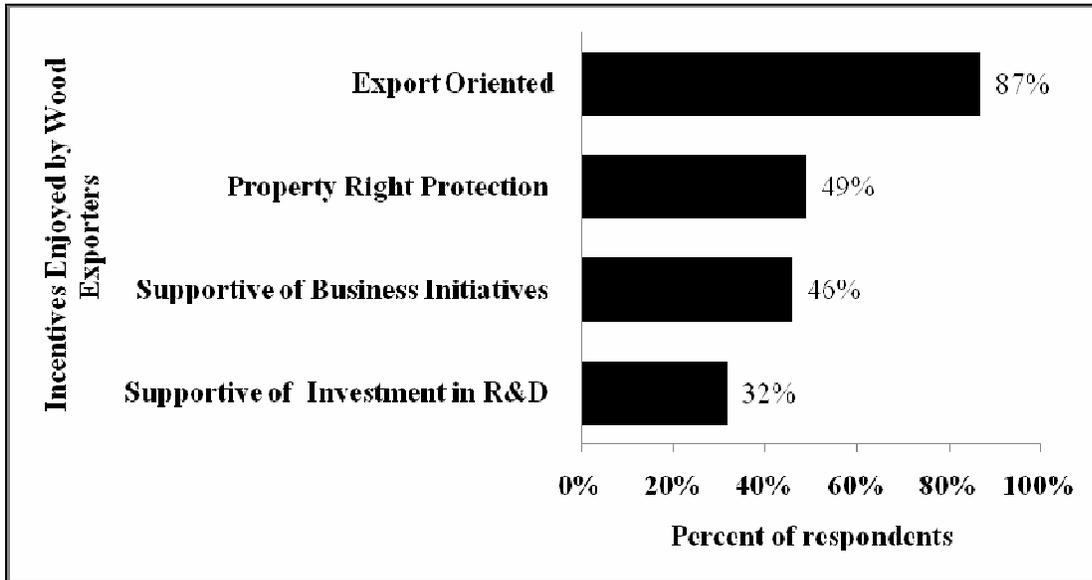
Figure 34: Government Support for Wood Export Sector Development (n=79) (multiple responses possible)

PRIVATE SECTOR SUPPORT ENVIRONMENT FOR GHANA WOOD PRODUCTS EXPORT SECTOR

Affordable business consultations for helping firms in the industry were believed to exist in the wood export sector by 77% of respondents (Figure 35). Sixty-two percent also indicated there are adequate business association assistance. Only 17% agreed they have been getting access to technical training for their employees on regular basis.

The private sector support environment indicators are extremely vital in achieving both national and international competitiveness. When these indicators are meticulously analyzed and it is working effectively in the wood sector, exporters can be equipped and will enhance them to compete favorable in this global market. However respondents indicated technical support and human capital development are lacking.

Furthermore, there are no tax incentives for training personnel and this has resulted in most export firms not training their personnel. Most of the respondents indicated training of their

human resources put a train on their finance and man hours as most of the top management after

obtaining adequate training sponsored by the firm; they quit their job which normally has an

effect on the firm.
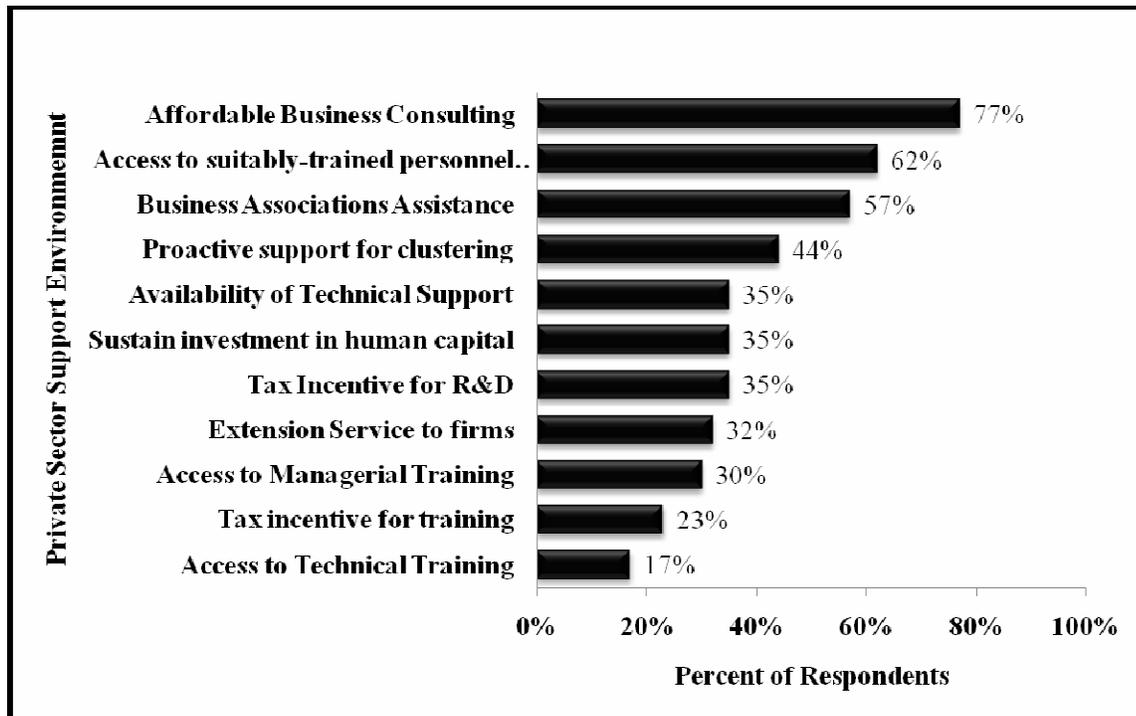
Figure 35: Private Sector Support Environment Indicators (n=79)
(multiple responses indicated

WOOD EXPORTER BUSINESS ATTITUDES COMPARED TO INTERNATIONAL COMPETITORS

Half of respondents indicated they continuously improve performance, while 39% said

they continually upgrade technology absorption capacity (Figure 36). Only 23% continuously

raise efficiency. With regard to the perception of business attitude of the wood sector industry

indicates, 77% of respondents indicated they achieve advocacy through business associations

such as the Association of Ghana Industries (AGI) and the Ghana Timber Millers Association

(Figure 37). Assessing the industry revealed, different product groups had different perception on

how the achieve advocacy through the various associations. Some the exporters reiterated some

of the association such as Furniture and Wood Manufacturers Association of Ghana (FAWAG)

seem not to be working and the exporters believe they are not effective and will classify that

association as defunct. No one firm can be very competitive on the international market unless the industry is adequate competitiveness to be globally competitive.
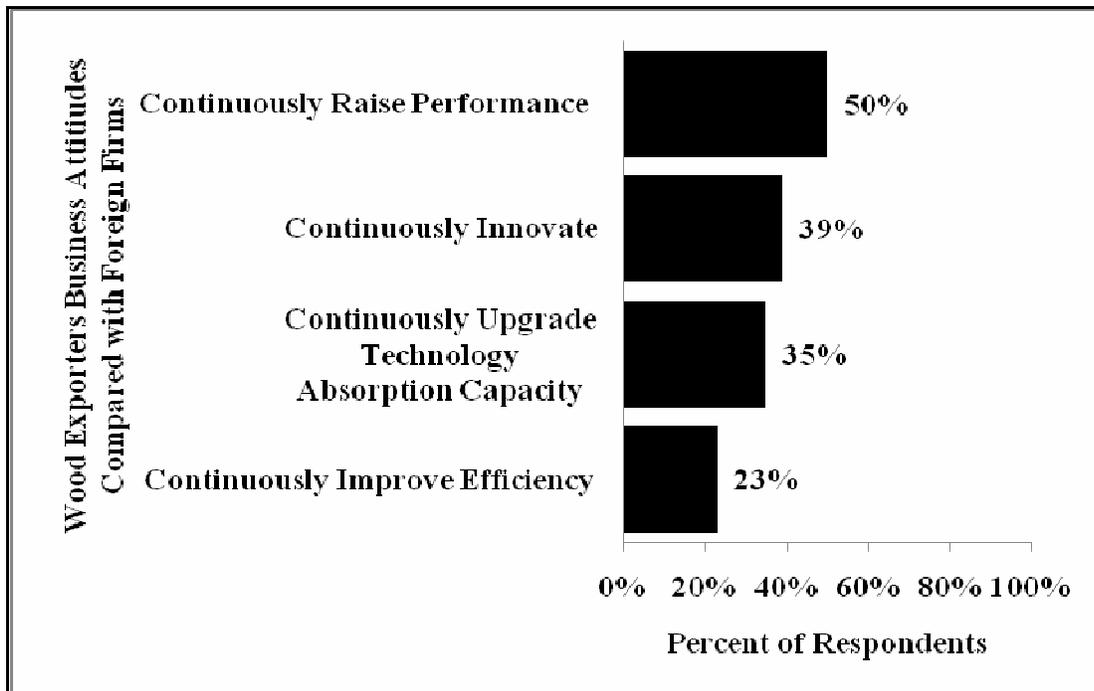
Figure 36: Business Attitudes compared to Foreign Competitors (n=79 (multiple responses possible)

Forty-three percent pursue realistic business strategies and sixty-two percent (32%) enter alliance with other firms in the partnerships and acquisition. Pursuing a more realistic strategies and alliance formation by firms is an indication of an industry's preparedness to compete nationally and internationally, therefore the low percentages (43% and 32%, respectively) does not show the wood product industry prepared to be effective in the international market (Figure 37). The business attitude in the industry also indicated partnering by exporters by way of forming alliances was not common as the respondents indicated. In an industry, the capacity of members to form strategic alliances and therefore increase economies of scale is very important issue in achieve international competitiveness. Though the respondents indicated they achieve the need advocacy through their business associations, the respondents also indicated the

associations they are more familiar with were Association of Ghana Industries (AGI),Ghana

Timber Millers Association (GTMO) and other product related associations such as ATAG.
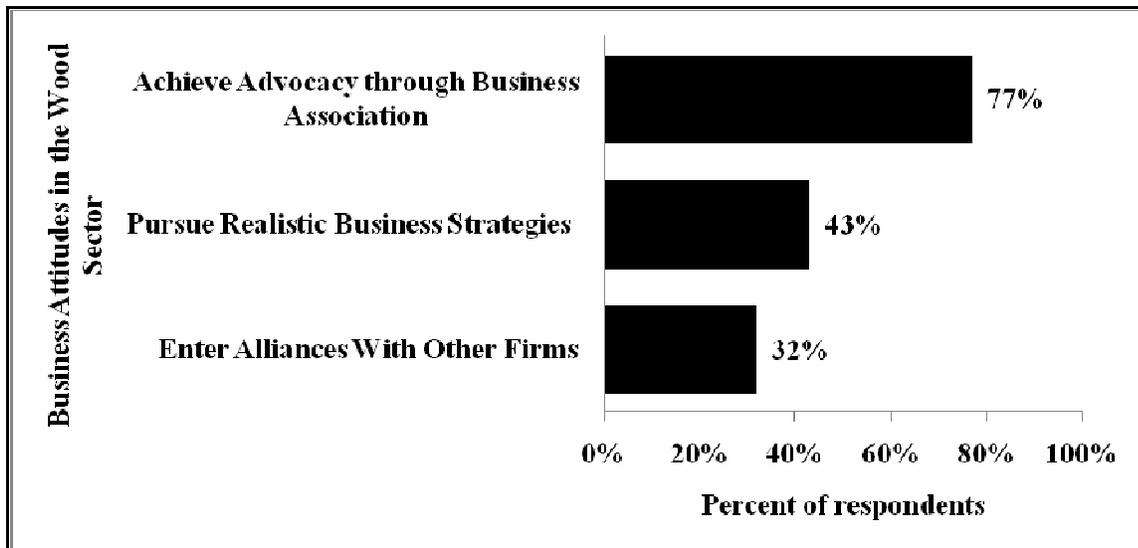
Figure 37: Business Attitudes in the Wood Export Sector (n=79)
(multiple responses possible)

TRADE INFORMATION SERVICES AND THE WOOD EXPORT SECTOR

Fifty percent (50%) of respondents perceived there is an existence of export training

while 92% perceived the export training being offered is more informative and about fifty

percent agreed the training is more practical trade information services equip the exporters in a

great deal to achieve export competitiveness. To identifying some of key trade information

services from respondents, the export transaction facilitation i.e. acceptance of letter of credit,

export development for aspiring exporters , investment and operating capital availability and

grand matching schemes were determined from exporters whether they are existing in the

industry, the results show export transaction had the highest mean (3.8) while availability of

grant matching scheme had the least (Figure 38).The respondents perceived they hardly hear of

grant schemes being announced.

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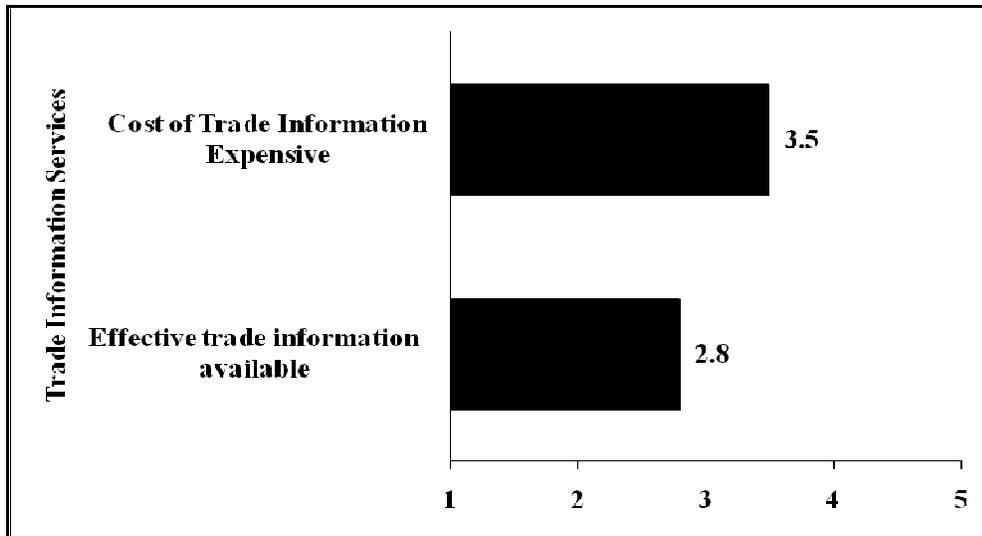
Figure 38: Trade Information Services (n=79) (scale: 1= Not Important at All, 3=Neither Unimportant nor Important, 5=Very Important)

EXPORT DEVELOPMENT INITIATIVES IN THE WOOD EXPORT SECTOR

In assessing the export development incentive in the Ghana wood export industry, respondents were asked to indicate their perception on the programs that exist and help them achieve competitiveness
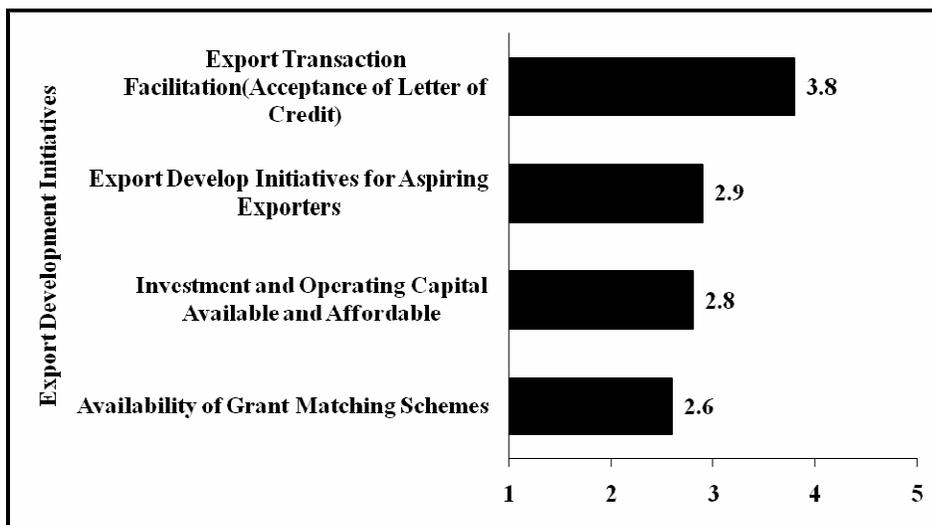
Figure 39: Export Development Incentives (scale: 1= Not Important at All, 3=Neither Unimportant nor Important, 5=Very Important)

The program that respondents perceived to be above average was export transaction facilitation (Figure 39).The remaining trade-related services do not appear to be

constraints to respondents.

EXPORT QUALITY MANAGEMENT SERVICES IN THE WOOD EXPORT SECTOR

Export quality management services ensure that exporters are performing exporting activities effectively. Eighty percent of respondents aren't sure whether there is adequate information on voluntary/mandatory requirements in the various markets (indicated by an average of 2.8 or 2.9 for all constraints) (Figure 40).
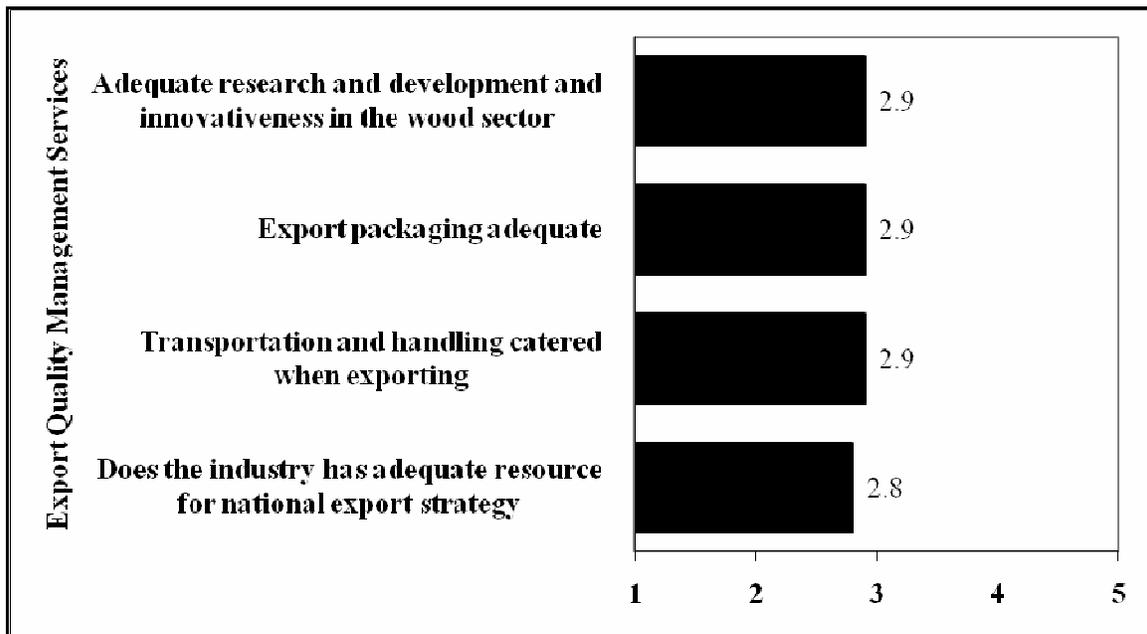
Figure 40: Existence of Export Quality Management Services in the Export Wood Sector (n=79)   (scale: 1= Not Important at All, 3=Neither Unimportant nor Important, 5=Very Important)

OTHER TRADE SUPPORT SERVICES IN THE WOOD EXPORT SECTOR

Trade information services are crucial in fulfilling effective export performance and these calls for effective research and resources in the industry to achieve that. Most respondents said that they neither agree nor disagree if there are adequate additional trade support services (Figure 41).
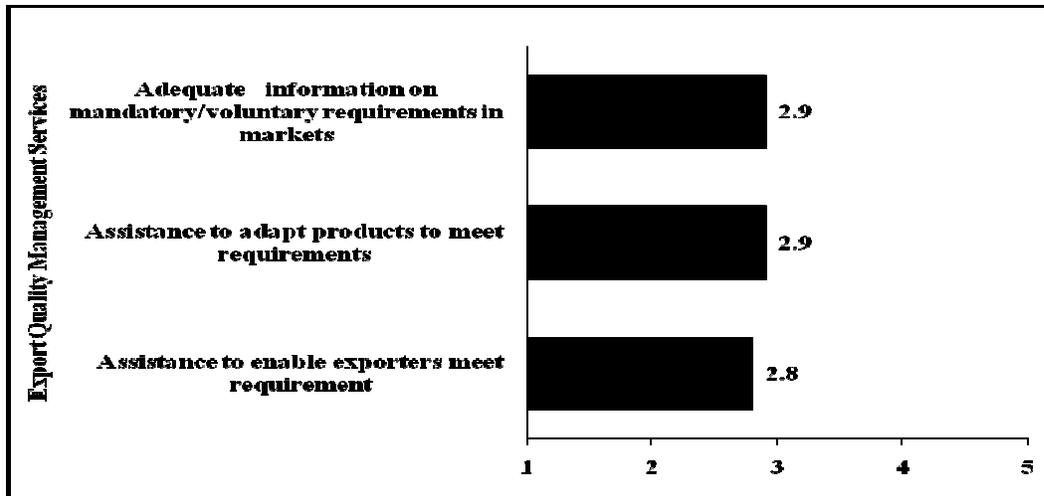
Figure 41: Firms Responding to the Existence of Other Trade Support Services in the Wood Sector (n=79) (scale: 1= Not Important at All, 3=Neither Unimportant nor Important, 5=Very Important)

GHANA'S WOOD EXPORTERS ABILITY TO MEET INTERNATIONAL BUYERS PREFERENCES.

Respondents were asked what factors their buyers look for and what was their ability to meet those factors (Figure 42). To assess the ability of Ghanaian wood exporters meeting their buyers' preferences/bias, it was realized reliable delivery schedule (3.8) and quality of product (3.8) were major criteria buyers look out for when buying wood products from the Ghanaian exporter.

Meeting the required moisture content was a critical factor considered by buyers, and was significantly different across product groups (Table 9). Certified products and packaging of wood products was least considered when buying. There was significant difference by product group with regards to the response to international buyers requiring their products to be well packaged. The significant difference might be due to which product group the buyer's orders. The differences were found between kiln-dried lumber, air-dried lumber and machine wood exporters for the moisture content whilst the significant difference for packaging was found between machined products and kiln-dried lumber exporters. Containerization seems to be the major packaging process used by Ghanaian exporters according to respondents.

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In verifying the international buyers' preference relative to Ghanaian wood exporters, it was found that all of their preferences, the meeting the required moisture content of the wood product was significant at 0.05 level of significance, while other factors were not significant between product group (Table 10). Furthermore, to ascertain the preference by firm size, there was significant in mean difference between small and large firms at the .05 level of significance with moisture content. That means firm sizes had effect on moisture content.

Figure 42: Firms Ability to Meet Buyers Preferences (n=79) (scale: 1= Not Important at All, 3=Neither Unimportant nor Important, 5=Very Important)
** Significant difference at $\alpha = 0.01$ between product groups

Table 9: ANOVA Analysis of International Buyers Preference Based on Product Group (n=79)

Buyers Preference	F-Value	Sig.
Large Volumes	.824	.442
Price	.497	.611
Quality	.817	.445
Moisture Content	4.322	**.017***
Phytosanitary Certification	.324	.724
Supply Consistency	.026	.975
Reliable Delivery	1.331	.270
Packaging	.	**0.00****
Certified Products	2.160	.122

*Significant difference between firms by product group α=0.05
**Significant difference between firms by product group α=0.01

Table 10. ANOVA for Analysis of International Buyers Preference from Exporters

Scheffe

Dependent Variable	(I) Number of Employess	(J) Number of Employees	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Large Volume	Small Firms	Medium Firms	.169	.267	.818	-.50	.84
		Large Firms	-.358	.353	.600	-1.24	.52
	Medium FIrms	Small Firms	-.169	.267	.818	-.84	.50
		Large Firms	-.528	.372	.371	-1.46	.40
	Large Firms	Small Firms	.358	.353	.600	-.52	1.24
		Medium Firms	.528	.372	.371	-.40	1.46
Price	Small Firms	Medium Firms	-.231	.227	.597	-.80	.34
		Large Firms	-.250	.300	.708	-1.00	.50
	Medium FIrms	Small Firms	.231	.227	.597	-.34	.80
		Large Firms	-.019	.316	.998	-.81	.77
	Large Firms	Small Firms	.250	.300	.708	-.50	1.00
		Medium Firms	.019	.316	.998	-.77	.81
Product Quality	Small Firms	Medium Firms	.295	.254	.510	-.34	.93
		Large Firms	.092	.335	.963	-.74	.93
	Medium FIrms	Small Firms	-.295	.254	.510	-.93	.34
		Large Firms	-.204	.353	.847	-1.09	.68
	Large Firms	Small Firms	-.092	.335	.963	-.93	.74
		Medium Firms	.204	.353	.847	-.68	1.09
Moisture Content	Small Firms	Medium Firms	.143	.185	.745	-.32	.61
		Large Firms	.717*	.245	.017	.11	1.33
	Medium FIrms	Small Firms	-.143	.185	.745	-.61	.32
		Large Firms	.574	.258	.091	-.07	1.22
	Large Firms	Small Firms	-.717*	.245	.017	-1.33	-.11
		Medium Firms	-.574	.258	.091	-1.22	.07
Phytosanitary Issues	Small Firms	Medium Firms	.068	.149	.902	-.30	.44
		Large Firms	.142	.197	.772	-.35	.63
	Medium FIrms	Small Firms	-.068	.149	.902	-.44	.30
		Large Firms	.074	.207	.938	-.44	.59
	Large Firms	Small Firms	-.142	.197	.772	-.63	.35
		Medium Firms	-.074	.207	.938	-.59	.44
Supply Consistency	Small Firms	Medium Firms	-.002	.304	1.000	-.76	.76
		Large Firms	-.067	.402	.986	-1.07	.94
	Medium FIrms	Small Firms	.002	.304	1.000	-.76	.76
		Large Firms	-.065	.424	.988	-1.12	.99
	Large Firms	Small Firms	.067	.402	.986	-.94	1.07
		Medium Firms	.065	.424	.988	-.99	1.12
Reliable Product Delivery	Small Firms	Medium Firms	-1.424	.880	.276	-3.62	.77
		Large Firms	-.017	1.163	1.000	-2.92	2.89
	Medium FIrms	Small Firms	1.424	.880	.276	-.77	3.62
		Large Firms	1.407	1.226	.521	-1.65	4.47
	Large Firms	Small Firms	.017	1.163	1.000	-2.89	2.92
		Medium Firms	-1.407	1.226	.521	-4.47	1.65
Certifies Wood Products	Small Firms	Medium Firms	.350	.188	.184	-.12	.82
		Large Firms	.100	.249	.922	-.52	.72
	Medium FIrms	Small Firms	-.350	.188	.184	-.82	.12
		Large Firms	-.250	.262	.636	-.90	.40
	Large Firms	Small Firms	-.100	.249	.922	-.72	.52
		Medium Firms	.250	.262	.636	-.40	.90

*. The mean difference is significant at the .05 level.

ASSESSMENT OF GHANAIAN WOOD EXPORTERS' ABILITY TO MEET CRITICAL SUCCESS FACTOR IN SPECIFIC TARGET MARKETS.

Wood exporters were asked to indicate their perception on critical success factor respondents consider very crucial in the export sector as determined by the market condition and international buyer preferences and to determine the extent to which wood products exporters comply with these critical success factors (Table 11). Respondents stated market access is a critical success factor. Sixty-seven percent of respondents indicated the distribution across specific geographic region and the breakdown have the following distribution for the market access: Europe 56.6%, United States 28.3%, Asia and Africa markets were only 7.5%. The Pearson chi-square value in the assumption significance (2-tailed) column was 0.444 and greater than .05 indicating the responses were not independent from each other. This means markets access is distributed similarly across different geographic markets namely Europe, the US, Asia and Africa. However, respondents that were in confirmatory of technical barriers to trade such as regulations, standards, testing and certification procedures being critical success factor were 89.9% and they went on to indicate the distribution across the geographic regions and the breakdown was as follows. Exporters that indicated market access to Europe were 60.6%, United States 28.2%, Asia and Africa markets were only 7.0% and 4.2% respectively. The Pearson chi-square value in the assumption significance (2-tailed) column was 0.754 and greater than .05 indicating the rows and columns of the distribution were not independent from each other. This means markets access is distributed similarly across different geographic markets namely Europe, the US, Asia and Africa.

Respondents considered technical barriers such as standards, certification to be a critical success factor in the international market. The respondents indicated the major market they consider very crucial with regards to technical barriers to their export business in Europe, followed by the US and Africa being least (Table 12). The non-significant value indicated there

was no significant difference between responses

Table 11: Market Access As a Critical Success Factor Across Geographic Markets

| | | | Geographic Market | | | | |
			Africa	Asia	Europe	United States	Total
Market Access	Yes	Count	4	4	30	15	53
		% within Critical Success Factor	7.5%	7.5%	56.6%	28.3%	100.0%
		% within Geographic Market	100.0%	80.0%	62.5%	68.2%	67.1%
		% of Total	5.1%	5.1%	38.0%	19.0%	67.1%
		Adjusted Residual	1.4	.6	-1.1	.1	
	No	Count	0	1	18	7	26
		% within Critical Success Factor	.0%	3.8%	69.2%	26.9%	100.0%
		% within Geographic Market	.0%	20.0%	37.5%	31.8%	32.9%
		% of Total	.0%	1.3%	22.8%	8.9%	32.9%
		Adjusted Residual	-1.4	-.6	1.1	-.1	
Total		Count	4	5	48	22	79
		% within Critical Success Factor	5.1%	6.3%	60.8%	27.8%	100.0%
		% within Geographic Market	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	5.1%	6.3%	60.8%	27.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.809[a]	3	.422
Likelihood Ratio	4.065	3	.255
N of Valid Cases	79		

a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is 1.32.

Respondents also indicated consumer preference should strictly be followed if one has to succeed in the international market. The trend of response was the same as the market access, but within the geographic market United States had the highest percentage of 81.8%, Africa 75.0%, Europe 79.2% and Asia 60.0%. But the Pearson Chi-square of .313 indicating the

responses were not different from respondents (Table 13).

Table 12: Technical Barriers As a Critical Success Factor Across Geographic Markets

| | | | Geographic Market | | | | |
			Africa	Asia	Europe	United States	Total
Technical Barriers to Trade	Yes	Count	3	5	43	20	71
		% within Critical Success Factor	4.2%	7.0%	60.6%	28.2%	100.0%
		% within Geographic Market	75.0%	100.0%	89.6%	90.9%	89.9%
		% of Total	3.8%	6.3%	54.4%	25.3%	89.9%
		Adjusted Residual	-1.0	.8	-.1	.2	
	No	Count	1	0	5	2	8
		% within Critical Success Factor	12.5%	.0%	62.5%	25.0%	100.0%
		% within Geographic Market	25.0%	.0%	10.4%	9.1%	10.1%
		% of Total	1.3%	.0%	6.3%	2.5%	10.1%
		Adjusted Residual	1.0	-.8	.1	-.2	
Total		Count	4	5	48	22	79
		% within Critical Success Factor	5.1%	6.3%	60.8%	27.8%	100.0%
		% within Geographic Market	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	5.1%	6.3%	60.8%	27.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.198[a]	3	.753
Likelihood Ratio	1.061	3	.787
N of Valid Cases	79		

a. 5 cells (62.5%) have expected count less than 5. The minimum expected count is .86.

Respondents were asked which market they presume to have competitive position advantage. From the empirical results, about more than half of respondents indicated Europe and United States indicated as the market they perceive to have the competitive urge (Table 14).

Table 13: Consumer Preference As a Critical Success Factor Across Geographic Markets

			Geographic Market				Total
			Africa	Asia	Europe	United States	
Consumer Preference	Yes	Count	3	3	38	18	62
		% within Critical Success Factor	4.8%	4.8%	61.3%	29.0%	100.0%
		% within Geographic Market	75.0%	60.0%	79.2%	81.8%	78.5%
		% of Total	3.8%	3.8%	48.1%	22.8%	78.5%
		Adjusted Residual	-.2	-1.0	.2	.4	
	No	Count	1	2	10	4	17
		% within Critical Success Factor	5.9%	11.8%	58.8%	23.5%	100.0%
		% within Geographic Market	25.0%	40.0%	20.8%	18.2%	21.5%
		% of Total	1.3%	2.5%	12.7%	5.1%	21.5%
		Adjusted Residual	.2	1.0	-.2	-.4	
Total		Count	4	5	48	22	79
		% within Critical Success Factor	5.1%	6.3%	60.8%	27.8%	100.0%
		% within Geographic Market	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	5.1%	6.3%	60.8%	27.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.559[a]	3	.313
Likelihood Ratio	5.631	3	.131
N of Valid Cases	79		

a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is .96.

According to respondents, easy and quick means of transportation and efficient cash transaction system in markets make it more efficient for them to export products. Respondents said the distance to Asia is their major concern and with Africa markets, trading or exporting there has its own issues in terms of language differences and cross border issues. The respondents stated paying of levies across borders increases their cost of operation and therefore

most have abandoned the African markets. Mostly exporting to African countries usually use of trucks as their means of transportation.

Table 14: Competitive Position As a Critical Success Factor Across Geographic Markets

| | | | Geographic Market | | | | Total |
			Africa	Asia	Europe	United States	
Competitive Position	Yes	Count	4	5	34	17	60
		% within Critical Success Factor	6.7%	8.3%	56.7%	28.3%	100.0%
		% within Geographic Market	100.0%	100.0%	70.8%	77.3%	75.9%
		% of Total	5.1%	6.3%	43.0%	21.5%	75.9%
		Adjusted Residual	1.2	1.3	-1.3	.2	
	No	Count	0	0	14	5	19
		% within Critical Success Factor	.0%	.0%	73.7%	26.3%	100.0%
		% within Geographic Market	.0%	.0%	29.2%	22.7%	24.1%
		% of Total	.0%	.0%	17.7%	6.3%	24.1%
		Adjusted Residual	-1.2	-1.3	1.3	-.2	
Total		Count	4	5	48	22	79
		% within Critical Success Factor	5.1%	6.3%	60.8%	27.8%	100.0%
		% within Geographic Market	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	5.1%	6.3%	60.8%	27.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.559[a]	3	.313
Likelihood Ratio	5.631	3	.131
N of Valid Cases	79		

a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is .96.

CURRENT APPROACH TO WOOD EXPORT DEVELOPMENT IN GHANA

Results from the interviews, respondents indicated some form of wood export strategy that exist but it's not comprehensive and lacks some form of documentation. The scope and the emphasis of the current export development in Ghana is predominantly on market penetration and development (Border-out) approach with limited focus on border-in, border and

development issues. The export development or strategy is public sector led instead of joint collaboration between private and public sector led. As to whether the current wood export strategy or development in Ghana specifies priorities, respondents indicated priorities are specified; market and product diversification are the main priorities the wood products industry focuses. This strategy of prioritization is currently under implementation though it has not achieved much success especially product diversification. The principal initiative of the wood export strategy is more on sustained trade and diversification of market of Ghana's wood products. The key organization concern with the strategy in Ghana is Ghana Forestry Commission.

The most effective initiative in the wood product export sector was the willingness in selling products instead of species and technical information. The public-private partnership in the strategy design is lacking as there are no collaboration between them. The lack of partnership seem to be due to resource constraints namely; financial, institutional and personnel. Currently the area the wood export development is failing is species diversification and lesser used species (LUS). Up till date, Ghanaian wood exporters focus on the traditional timber species as the lesser use species have not gain market recognition yet. Critical look at the current export development in the wood products sector indicates new initiatives needed are the increase in promotional budget for a more effective research into new product development in the lesser used species (LUS). All in all, respondents believe the current wood export development is partly working and the major lesson is there is hope for the development of markets for lesser used species (LUS).

In terms of current approach to wood export activities in Ghana, it came up that wood product exports are subject to a one percent levy of the value of export in hard currency for the Timber Industry Development Division (TIDD) London office, and two percent in local currency

for the Forestry Commission. However, tertiary products such moldings and semi-finished products do not attract the one percent levy. Currently, the incentives that the industry is enjoying are levy exemptions if one exports kiln-dried products and to promote the use of lesser used species as well, the government introduced air-dried levy to curb the exports of air-dried lumber and promote value added products instead. Other incentives they industry enjoys are; tax holidays, tax reduction exempted and in ensuring there are development in the rural areas, wood manufacturing and exporters sited at the rural areas are offered incentives to improve upon the development perspective of the export strategy .

GHANA'S WOOD PRODUCTS EXPORT DOCUMENTATION

Wood Products Export Requirements: To be able to export wood products in Ghana, the requirements by Timber Industry Development Division (TIDD) to obtain approval are

- Certificate to Commence Business

- Business Incorporation Certificate

- Tax Clearance Certificates

- Investigation of the Source of Wood Resources and Report by TIDD to confirm the capability and legibility of the business activities of exporters.

Shipment Inspection and Documentation: According to Ghana Timber Industry Development Division (TIDD), there are different documentations/paperwork that needs to be considered when exporting wood products in Ghana and the very significant ones are include: Veneer Inspection Certificate: required from exporters who are into veneers; Lumber Inspection Certificate: required from exporters who are into lumber; other wood inspection certificate: required from exporters who are into other forms of wood product.

Export Permits Records

These records are further demanded by the Timber Industry Development Division to be able to export wood products and the procedures include; Approved Timber Industry Development Division Contract of Sale (COS),Approved Bank of Ghana Exchange Control Form A2,Standards verification by TIDD inspection to meet international buyers requirement The buyers' representative the endorses the Specification sheet in consultation with the Timber Industry Development Division, Ghana Payment is then verified, after which export can take place

COMBINING THE TWO PARADIGM: NATIONAL EXPORT STRATEGY TEMPLATE (NEST) AND BALANCED SCORE CARD (BSC)

MEASURES, MANAGING AND WEIGHTING OF PERSPECTIVES AND APPROPRIATE MEASURES

Though there is no formal, comprehensive and documented wood export strategy on Ghana, specific strategic issues and measures were duly assigned. The measures were created from the existing wood export practices in Ghana. Questionnaire, interviews and personal observation was used to arrive by measures. The measures were stated in quantifiable terms from the survey. Questionnaires were administered to policymakers; government institutions, wood product exporters and private institutions. The scoring for the measures was based on the following criteria: Means were calculated for each measure and the appropriate score arrived at. Where Yes or No was included, numeric values were assigned to Yes =3 and No= 0, Unsure =1. These were then converted to conform to the range 1 to 5 for easy score rating (Table 15). The number of measures was also selected based on the country's circumstances, and it is dependent on the facilities the country have (ITC, 2005). As a result, weight of 25% was assigned to each perspective.

Table 15. NEST/BSC Rating Scales

Mean Rating	Score Rating	Interpretation
1.0 – 2.0	0	Strategy Doesn't Exist
2.1 – 3.0	1	Strategy Below Expectation
3.1 -4.0	2	Strategy Somehow Existing
4.1- 5.0	3	Exists and Working Effectively

Table 16. NEST/BSC Scores for Respondents by Strategic Consideration-Economic & Social Perspective

Economic & Social Perspective (Weighing = 25%, Measures =12)			
Strategic Consideration	Measures	Score	Comment
Development Issues	1. Level of export related investments getting into less developed regions in Ghana		
	2. Number of wood export related activities in areas designated as poor	1 1	
	3. There is growing number of export oriented expanding operations in the rural areas	0	
Border Issues	1. Availability of appropriate transport (air, rail, road, sea)	2	
	2. Reduction in Export Transport Cost	2	
	3. Decreasing Level of non-tradable cost	2	
Border-In Issues	1. Upgraded capacity in terms product and value addition	1	
	2. Reduction in Trade Dispute	2	
	3.Increase enrolment in wood export management training	2	
Border-Out Issues	1. Level and extent of opportunity dissemination through trade services	2	
	2. Availability of efficient trade support services in Ghana export sector	2	
	3.Increase in firms participating in trade fairs and mission programs	2	

	Sub-Total (Maximum possible score = 12x3=36) Score for this perspective(19/36) =	19 52%	Weighted Score 52% of 25= 13

Table 17. NEST/BSC Scores for Respondents by Strategic Consideration-Client Perspective

Client Perspective (Weighing = 25%, Measures =12)			
Strategic Consideration	**Measure**	**Score**	**Comment**
Current Exporters	1. Performance in establish market by volume and country 2. Performance in new market 3. Exporters continually innovate into new products and finding new markets	2 2 1	
	Sub-Total (Maximum possible score = 3x3=9) **Score for this Perspective(5/9) =**	**5** 56%	**Weighted Score 56% of 25 = 14**

Table 18. NEST/BSC Scores for Respondents by Strategic Consideration-Targeted Sector Perspective

Targeted Sector Perspective (Weighing = 25%, Measures =12)			
Strategic Consideration	**Measure**	**Score**	**Comment**
Value Chain Analysis	1. Increase in Wood export Volumes 2. Number of suppliers entering Value chain 3. Extent of Investment in Value Chain	2 2 2	
Competitive Analysis	1. Value of New investment both local and Foreign Direct Investment 2. Number of International awards given for innovation to local companies 3.Number of trademarks and patents registered by local entrepreneur abroad	2 1 0	
Export Quality Management	1. Ability of exporters to adapt products to meet international requirements 2. Adequate Information on mandatory/voluntary	2 2 1	

	requirements in markets		
	2. Number of companies receiving ISO9000 and other standard accreditation		
Trade Finance	1. Availability and affordability of investment operating capital	0	
	2. Facilitation of export transaction and payment	2	
	3. Availability of leasing facilities	1	
Export Packaging	1. Increased in packaging material production for wood export	0	
	Sub-Total (Maximum possible score = 13x3=39) **Score for this perspective(17/39) =**	**17**	**Weighted Score 43% of 25 =11**

Table 19. NEST/BSC Scores for Respondents by Strategic Consideration-Learning & Growth Perspective

Learning & Growth Perspective (Weighing = 25%, Measures =12)			
Strategic Consideration	**Measure**	**Score**	**Comment**
Export Competence Development	1. Extent, level and cost of business counseling and advisory available	2	
	2. Level of enrolment in wood export management and related training programs	1	
	3. Availability of training programs for export managers	2	
Trade Information	1. Rapidity of business information dissemination	1	
	2. Availability of specialized information units providing information for wood exporters	0	
	3. Level of "e-based" information exchange	1	
Coordination of Export Support Network	1. Capacity of Trade Promotion Organizations to address trade information and trade finance queries	2	
	2. Level of production, marketing and managerial expertise within the wood export network	2	

	3. Extend of public sector funding in the Wood Sector	1	
Coordination of Service Delivery Network	1. Degree of integration between export and investment institutions 2. Extend of investment promotion in the wood export sector 3. There is assessment of strength of the public-private partnership in wood strategy management	2 1 0	
	Sub-Total (Maximum possible score = 12x3=36) **Score for this perspective(15/39) =**	**15** **42%**	**Weighted Score** **43% of 35 = 10**

Table 20. NEST/BSC Assessment Summary Scores

Perspective	Score	Weight
Economic & Social	13	25%
Client Perspective	14	25%
Targeted Sector Perspective	11	25%
Learning & Growth Perspective	10	25%
Total	48	100%

OVERALL RATING ASSESSMENT AND INTERPRETATION

According to International Trade Center National Export Strategy Template, when analyzing an export strategy, the overall assessment should be rated as follows:

1. 80 &100: The strategy is generally exceeding expectations, and therefore the momentum should be kept going

2. 66 & 80: The strategy is slightly exceeding expectation and therefore more work need to be done

3. 33 & 66: The strategy implementation is below expectation, and therefore we are not effective

4. Less than 33**:** The implementation and therefore a critical look should be considered

From the assessment, the score was 48% and it shows the current wood export approach is below expectation and therefore lots of work needs to be done to put in place a comprehensive national wood export strategy to address the competiveness of our wood products exports

CHAPTER 7. DISCUSSION AND CONCLUSION

STRATEGIC CONSIDERATIONS ON GHANA'S WOOD EXPORT DEVELOPMENT

<u>DEVELOPMENTAL ISSUES</u>

These were the developmental issues identified to be impacting export development in Ghana: There is virtually lack of empowerment of rural people to be more productive due to lack of skill development in the rural wood industry; poor infrastructure due to neglect by firms to develop the rural communities they are sited ; lack of productive skills among the wood workers ; The disparity between the rural and urban environment is great due to neglect of rural economies as most wood export firms are concentrated in the urban areas creating employment and developing the urban areas as against the rural areas ; skills upgrading is a contentious issue within the wood products industry- since development of both technical/technological skills was wanting within the wood products sector due to the perception of waste of resources on training; Adequate technology is also lacking and access to this information has been lacking. As a matter of concern, there is the need for Government commitment to support institutions such as Ghana Export Promotion Council, Ghana Investment Promotion Council and most of the state funded institutions to step up their duties. Lastly, brain drain in the wood export sector needs to be addressed as high quality personnel are being lost to other sectors due to lack of motivation in the industry as perceived by most people

<u>BORDER-IN ISSUES</u>

In analyzing the border issues of Ghana wood export sector, major export constraints identified were ; high inflation and interest rates that act as a disincentive to investing in the wood product export industry ; Large current account deficit of the economy; The dispiriting investment climate for both foreign direct investment and domestic investment including tax and incentive structures; inadequate pro-export policies that are supportive of the wood products

industry; processing of incentives very slow and bureaucratic; inefficiencies of some statutory institutions; difficulty in accessing reasonably priced finance for inputs and working capital; High cost and uncompetitive pricing of electricity and water and its supplies; over reliance on imported intermediate goods such as inputs (machinery, chemicals for production) ; Lack of capacity to meet both quality and delivery requirements in international markets as a result of lack of requisite technology and delays at the ports when exporting; there is lack of effective clusters to help address competitiveness in the wood export industry and lastly, skill development in production and marketing in the wood industry is not the best .

BORDER ISSUES

The major indicators identified under the border issues included costly transport due to intermittent increases in fuel prices; lack of transparent systems at ports increasing the time it takes to process export documentations; high cost and slow processing spend of pre-shipment inspections; relatively good roads for exporting to neighboring countries; high freight charges for air transport, lack of rail system, lack of synchronization of customs procedures such as GCNet; adequate finances for exporters is lacking as well; documentation processing for exports has lots of bureaucracies leading to delays ; export credit guarantee scheme and pre-shipment financing were some of the issues identified to be lacking in the Ghana's wood export sector.

BORDER-OUT ISSUES

Currently the border-out issues identified during the research can be summarized as; high transportation costs ; non-existing national branding and poor market expansion and development making products unknown to international buyers; participation at trade fairs and other promotional activities is also lacking ; there is high costs of telecommunications; high cost of production making products uncompetitive although there is availability of cheap labor ; lack

of resources and capacity among trade support organizations in Ghana ; inadequate access to market information on the international market with regard to international buyers demand.

<u>VALUE ADDITION AND RETENTION</u>

Increase in value addition and retention in Ghana's wood product is one of the major issues the sector faces. Most of the wood products exported were primary products with very few secondary or value added products. There is the need to extend the value chain and at the same time increase the efficiency of the existing national component of the value chain as it has been recommended by ITC (2005). Wood products from Ghana are also unbranded and therefore, if the national component of the value chain is improved, all the linkages that address the value chain from the log processing to the final product can be improved. Furthermore, Ghana wood products can be branded with positive attributes such certification can be used to increase its value in the international market

<u>TRADE INFORMATION</u>

Lack or inadequate trade information in the wood product sector is also a hindrance to the wood export growth in Ghana. Trade support institutions also have limited capacity therefore leading to limitation in market intelligence, market opportunities and investments. There is the need for the government to build capacities of these institutions and organizations to make trade information current and accessible to wood exporters.

<u>TRADE FINANCE</u>

Trade finance is another important issue that the wood export sector faces in Ghana. High interest rates, low levels of investments are the characteristics of the sector. High interest rates most often resulted in many exporters inability to execute high volume export orders due to inadequate working capital for exporters. Trade finance and export credit is also not well developed putting extra constraint to Ghana wood exporters. The government should come out

with appropriate strategies such as introducing alternative financing scheme with lower interest rate for the wood exporters for them to access

COMPLIANCE AND QUALITY

Since producing high quality products in the international market is very crucial and the sector competitiveness (ITC, 2006), exporters need to understand the need to meet international standards to be competitive. In as much as Ghana Standard Board is the main standardizing organization in Ghana, there is the need to further invest in that sector as quality and conformity standards is a competitive indicator. Developing the quality assurance and compliance needs to be finely tuned if international competitiveness is to be achieved, and the government has a major role to play in that respect.

EXPORT PACKAGING

Export packaging is usually overlooked by wood exporters from Ghana. Packaging is very crucial in achieving competitiveness (ITC, 2005). Therefore packaging wood products from Ghana by way of branding is another way packaging to attract international competitiveness. For now, the export packaging in the wood export sector is not well developed and therefore there is the need build the component of packaging into Ghana's national component of the value chain.

SERVICE DELIVERY NETWORK

Strategic analysis of the service delivery system in Ghana indicates there are a number trade service organizations and institutions that exist, however the service delivery tend to be poor and at times unreliable. Most respondents were of the view that service delivery networks have weakness in terms of performance and are public institutions. Due to lack of funding and management, performance is imperfect. Therefore, there is the need for both public and private sector to work together in making the service delivery more efficient.

For a strategy to work well, all stakeholders need to be involved. In Ghana, the strategy support networks are not coordinated. The institutions in charge of strategy support need to be coordinated to be able to achieve the international competitiveness the Ghana dire needs. Export development has been overlooked in Ghana although it is known to generate revenue for the economy; nevertheless, adequate efforts are not in place to address this issue. The strategy support network needs to be up and doing and activities well-coordinated to address the international competitiveness of Ghana's wood products export sector

GHANA'S INTERNATIONAL COMPETITIVENESS THROUGH CLUSTERING ENHANCEMENT

From the research, respondents perceived there were no clusters in the wood products industry. Cluster which involve research institutions, financial institutions, business development services and others form the basis for international competitiveness. However, export development and enhancement are not coordinated within the wood products export sector. The framework (Figure 43) has been devise for the exporting community to be able to achieve a sustainable competitiveness nationally and internationally. Ghana wood export sector should engage more interaction between different groups or players. These should include the wood products exporters, suppliers, research and the universities, trade supporting institutions, government institutions, and export strategy support network as they should be seen to be connecting to each other whilst contributing to the development of the wood products sector. To ensure effectiveness of the cluster in Ghana's wood export sector, there should be adequate communication by major stakeholders, which is currently lacking in the wood export sector in Ghana. To be competitively, clusters need to be in operation and should be seen to be working effectively.
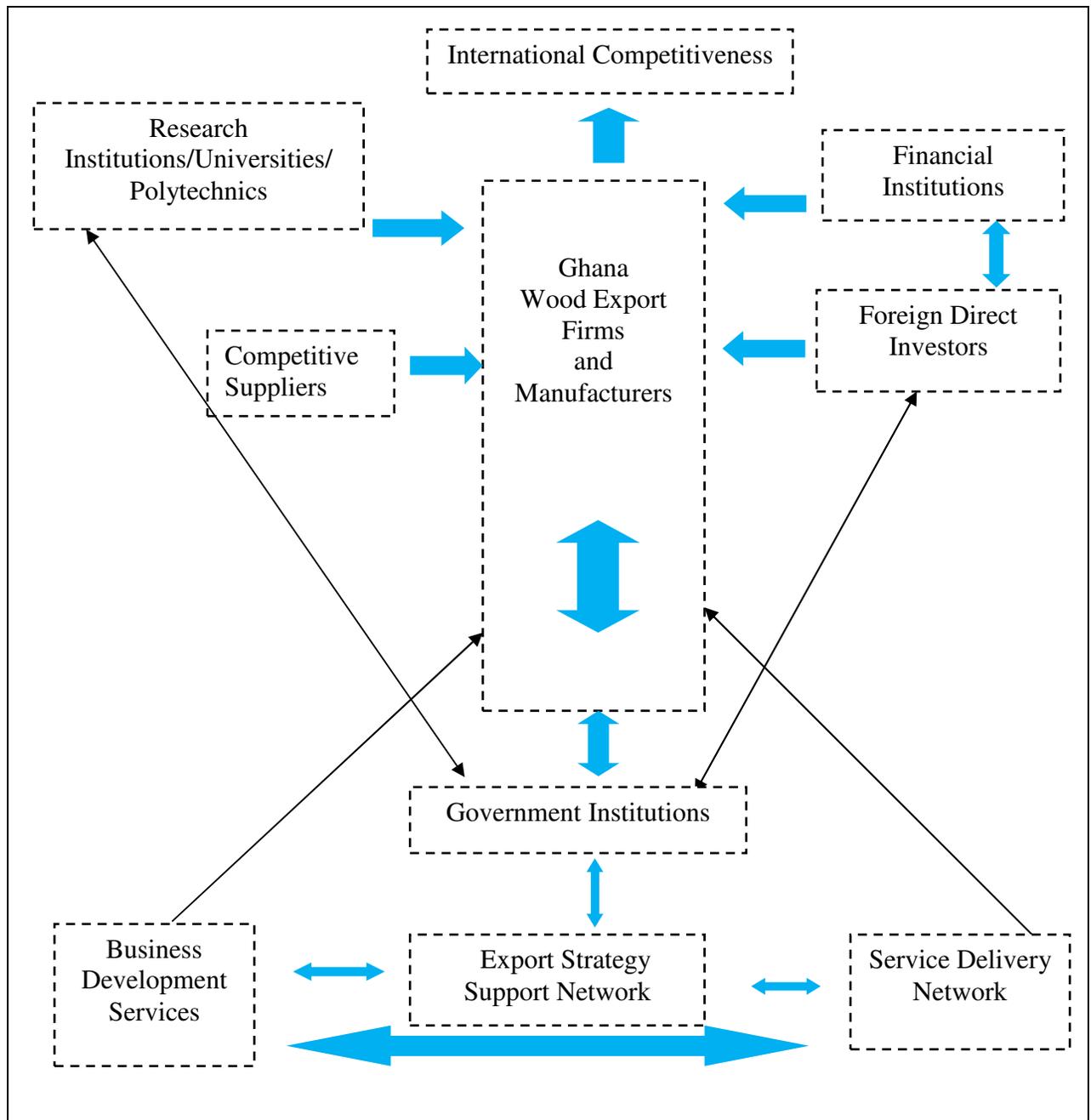
Figure 43: Cluster Framework for International Competitiveness for Ghana Wood Export Industry (Adapted from ITC, 2006)

SWOT ANALYSIS AND CONCLUSION

Table 21 summarizes the strengths, weaknesses, opportunities, and threats in the

competitive environment for wood products export sector in Ghana.

Table 21: SWOT Analysis Summary of Ghana Wood Export Sector

STRENGTH	WEAKNESS
❖ Positive Macroeconomic Indicators ❖ Cheap Labor and Abundant Human Resource (Human Capital) ❖ Presence of Good Political Will by Government ❖ Unique wood species availability that are in demand in international markets ❖ Relatively strong advocacy group	❖ Lack of skilled and experienced staff (Capacity development constraint) ❖ Limited resources in terms of investment capacity (Investment development constraint) ❖ Lack of investment and operating capital for Ghanaian wood exporters ❖ High freight cost ❖ High cost of doing business ❖ Fragmented and small scale exporters unable to export in huge volumes ❖ Infrastructure Inadequacies ❖ Insufficient technology, capacity ,innovation and performance ❖ Inadequate institutional support ❖ Inadequate competitiveness in the industry ❖ Cost of information expensive ❖ Lack of incentives for research and development ❖ Collapse of wood manufacturing and exporting firms as a result of overcapacity and liquidation
OPPORTUNITIES	THREAT
❖ High demand for value added wood products ❖ Promotion of less known wood species ❖ Promotion of unbranded Ghanaian wood products internationally ❖ High demand for engineered wood products internationally ❖ Preferential Trade with USA under AGOA	❖ Demand for certified wood products Imminent ❖ Introduction of High Value Composites replacing other product groups ❖ Shortage of Wood Resource for the Industry

In conducting a SWOT analysis for based on the results, the strength of the current export

development lies in the positive macroeconomic indicators which has resulted in inflationary rate

being relatively stable according to exporters. This has brought relative stability in the foreign

exchange market and interest rates in recent times. This will help in competitiveness of the

exporters by way their ability to access credit facilities from the banks and be prepared to improve upon their production capacity by importing high quality machinery and equipments to improve their product quality, delivery and performance in the international market. Another strong point in the industry is the cheap labor and enormous human resources availability. According to international trade theory, to competitive internationally, a country will have the urge if it produces good or products at a relatively cheap cost with the inputs that it has comparative advantage at. It indicates, since the industry can boast of cheap and relatively skilled and abundant human resource, it can produce at a lower cost which according to Porter (2000), will facilitate international competitiveness.

Furthermore, Ghana has abundant and unique species which has international demand and it places Ghana at an advantageous position to compete with other wood from other tropical countries. The sector can improve on this attribute by branding Ghana's unique wood species to add more value. The industry can also boast of strong advocacy groups that help address their grievances. Some of the group includes Association of Ghana Industry, Federation of Ghanaian Exporters Association and other groups that the industry believes assist them in their export activities.

The weaknesses identified in the sector include lack of skilled and experienced human capacity. Though there are abundant human resource and cheap labor, it is realized the skill level is very low and training of personnel in the sector is very abysmal as most managers of the exporting companies sees training as an added cost to their budget. There is high limitation of resources in terms of investments. Due to lack of investment and upgrade of production capacity, the performance of the sector is not the best and competing effectively internationally cannot be achieved if the present state of investment is allowed to continue. Lack of investments and operating capital for exporters is also serious issue that faces the industry. High freight cost and

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high cost of doing business are also hindering the industry to a greater extend resulting in low performance internationally. Infrastructure inadequacies such as lack of inadequate warehousing facilities, ineffective rail systems, and high shipping cost are all crippling the industry and affect their international performance. Most of the exporters are small and medium scale and as a result their capacity is low and they are very fragmented. The fragmentation has resulted in their inability to achieve economies of scale and not able to meet huge export orders and their international competitiveness hanging in the balance.

Inadequate institutional support, insufficient technical and innovation in the sector have had a huge toll on the performance as well. Research and product development are non-existent in the sector which has further compounded their performance internationally. In as much as Ghana has unique wood species that are in huge international demand, the current state of the resource base has resulted in the collapse of lots of companies, merging and acquisition by larger firms. The rate at which the wood resources is depleting leaves much to be desired and the earlier the industry focuses on high value, low volume product so that the issue of wood resource constraints be meticulously addressed.

In terms of opportunities that the sector can capitalize on, there is huge demand for value added products globally. Some of the value added products includes engineered wood products which are really performing well internationally. If the industry can focus on the production and the export of these value added products, it will go a long way to compete effectively. There are huge opportunities for lots of product groups in the international market and the more the wood export sector extend their product lines to compete in lots of product groups, it will further strengthen the industry performance, increase job and become competitive. Ghana has huge untapped and lesser known wood species which can perform creditably in the international market. The research and development of these lesser known species will help market them and

compete with the traditional species in the market. This will further help in the addressing the raw material issue currently facing the industry and competitiveness as well.

Moreover, the preferential trade agreement with the US under AGOA (Africa Growth and Opportunity Act) opens huge opportunities for wood product exporters from Ghana. Under this ACT, exporters can ship their wood products to the US quota-free and tax free for a specific period of time. If exporters can strategically utilize this opportunity, they can export their products at a relatively lower cost in the US market where competition is very keen from traditional exporters such as Canada and China.

The threats the industry will need to keep abreast with are regards to the current issue of certification. Certification is becoming an immense issue in the wood product industry worldwide and the earlier Ghana wood export sector braces with the issue, the more it can strategically position itself to compete in the global market. Currently, Ghana can boast of just one company that is undergoing the process to get certified to produce and export certified wood products

The advent of value added products such as engineered wood products replacing other product groups such as sawnwood is a huge threat to Ghana wood exporters due to the state of the wood sector industry. The equipment and machinery status in industry now is not in the best of condition and state and to position the industry to compete internationally, there should be a total revamp of the industry in its production and human capacity.

To conclude, the current Ghana's wood export strategy and development need to be revamped to address all the issues that borders on international competitiveness which are economic and social , client ,target sector and learning and growth perspectives of an export-led strategy.

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APPENDIX: RESEARCH SURVEY INSTRUMENT

Dear Exporter/Manufacturer/Policymaker,

This survey is design to collect information about the current wood export strategies, constraints of exporters and finding markets for Ghana Wood Products in US. By completing this survey, you will receive competitive information about the impact of the Ghana's Wood Export Strategies, Marketability of Ghana's Wood Products and Markets in United States. *A complimentary copy of the survey results* will be sent to you as a token of our appreciation for completing this survey.

The survey is confidential and summary information will be reported in the study results. The number at the top of this survey is an identifier only that allows for the tracking of the completed surveys, ensuring that you do not receive subsequent surveys or phone calls .Furthermore, *ONLY YOUR VIEWS* will be included in this survey.

Thank You,
Odoom Domson, Masters Degree Candidate
Forest Products Marketing
Louisiana State University

Section 1: Company Information

1. Which region is your factory/mill located? _____

2. When was your company established? _____

3. What is the total number of employees?
　(1) Less than 50　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　(2)
　　　　　　51-100
　　　　　　(3) 101-200　　　　　　　　　　　　　　　　　　　　　　　　　　　　(4)
201-500　(5) Above 500

4. Which major product category do you import from the Africa? Please select those that apply.
　　　　　　1._____AIR-DRIED LUMBER (INCLUDING BOULES)
　　　　　　2._____ KILN-DRIED LUMBER (INCLUDING BOULES)
　　　　　　3._____ VENEERS
　　　　　　4._____ PLYWOOD
　　　　　　5._____ MOLDINGS, SEMI-FINISHED/FINISHED PRODUCTS
　　　　　　6._____ OTHERS (PLEASE) _____

5. What is your average monthly import volume over the last 5 years? Please check where applicable
1_____LESS THAN 100M^3
　2.____101-500 M^3
3.____501-1000 M^3
4.____1001-5000 M^3
5.____ 5001-10,000 M^3
6.____10, 000-20,000 M^3
7. ____ABOVE 20,000 M^3

Section 2- Thorough Assessment of Wood Export Sector:
Competitiveness Indicators

A. Values and Behavior		
1.My country has	(Yes/No)	Remarks
Social organization (form clusters)		
A strong legal and institutional base		
A system of values that encourages learning and innovation		
A system of values that encourages entrepreneurship		
Mechanisms to encourage cooperation between private and public sectors		
Confidence in the integrity of public institutions and officials		
B. Macroeconomics Environment	(Yes/No)	Remarks
2.My country has a predictable macroeconomic environment for enterprise		

development characterized by :		
Low budget deficit		
Tight inflation control		
Competitive and stable exchange rates		
Intense local competition within the wood sector		
Competition in the banking system		
A high percentage of private business investment (as percentage of GDP)		
A high level of foreign direct investment		
Openness to trade (import and export policies)		
3. The current approach to the Wood Sector development is		
Export-oriented		
Supportive of business initiatives		
Supportive of investment in research and development		
Reinforcement by full protection property rights, including intellectual properties		
C. Private Sector Support Environment	(Yes/No)	Remarks
1. Compared to foreign competitors, the Wood Sector has a competitive advantage:		
2. The competitive advantage of the sector is due to;		
Sustained investment in human capital		
Access to a sizable pool of suitably-trained personnel (basic level)		
Access to a sizable pool of suitably-trained personnel (basic level)		
Access to a sizable pool of suitably-trained personnel (basic level)		
Assistance from industry associations		
Availability of affordable local business counseling and management consulting		
Availability of technological support(including extension services)		
Existence of business of business incubators		
Tax incentive for training		
Tax intensive for research and development		
Proactive support to enterprise clustering		
4. Enterprise competitiveness in the sector is supported by :	(Yes/No)	Remarks
Adequate, efficient and competitive priced air cargo transport facilities		
Adequate ,efficient and competitively priced sea cargo facility		
Adequate and efficient roads and rail networks		
Adequate and efficient warehousing facilities		
Efficient and competitively priced telecommunications		
Effective and competitively priced water utilities		
Effective and competitively priced electricity utilities		
Efficient and transparent custom procedures		
5. Enterprises in the Wood Sector enjoy:	(Yes/No)	Remarks
Export Incentives		
Tax incentives		
Access to competitive finance		
Access to training and competency development scheme		
D. Business Attitudes(in the wood sector)	(Yes/No)	
1. Compared with foreign competitors, enterprises in the Wood sector seek to :		
Continuously improve efficiency		
Continuously raise performance		
Continuously innovate		
Continuously upgrade their technology absorption capacity		
D. Business Attitudes(in the wood sector)	(Yes/No)	
Pursue realistic business strategies		
Enter alliances and cooperation schemes with other firms		

Achieve effective advocacy through business associations eg AGI,GTMO,FAWAG		

Questionnaire for Export Policy Makers
Assessment – Current Approach To Export Development In The Wood Sector

Status	Y/N	Remarks
1.An export strategy exists for the sector		
2. Scope and emphasis of strategy		
Border In(Productivity and Capability)		
Border(Reduced Cost of doing Business)		
Border-Out(Market penetration and Development		
3. The strategy is led by private sector		
4. The strategies specifies priorities		
5. The strategies are under implementation		
6.The strategy's objectives are		
8. The principal initiative of the strategy are		
9.The key organizations concerned with strategy implementation and management include		
9.The more effective initiatives include		
10. The public-private partnership in strategy design and management is effective		
11. Resource constraint mainly are		
Financial		
Institutional		
Personnel		
12. Areas where strategies are failing include		
13. New initiatives are required in the following areas		
14. Overall the strategies are working		
15. The major lessons learnt are		

Assessment – Ability to Meet Buyer Preferences
Country/Market : (Please Complete the matrix for each market)

Buyer Preferences	Relative Importance (%) (I) (0-100%)	Sector Performance Rating (R) (1-10)		Competitiveness (IxR)	
		National	Competitor	National	Competitor
Volume					
Price (Exchange Risk)					
Quality					
Moisture Content					
Phytosanitary Certification					
Supply Consistency					
Deliver Reliability					
Packaging					
Certification					
Total	100%				

Competitive Index (Sum)					

ASSESSMENT OF CRITICAL SUCCESS FACTOR
(BUYERS PERSPECTIVE FROM EXPOTERS)

CRITICAL SUCCESS FACTOR PHYTOSANITARY CERTIFICATION, CONSUMER PREFERENCE	TARGET MARKET (SPECIFIC OR GENERAL)	POSITION VIS-À-VIS COMPETITORS (COMPETIVE ADVANTAGE,DISADVANTAGE,NEUTRAL	ROOT CAUSE OF GAP	RELEVANT LINKS IN THE VALUE CHAIN	IMPLICATION FOR SECTOR STRATEGY/ACTION REQUIRED
PHYTOSANITARY CERTIFICATION	All Countries	Disadvantageous	Reliance on Foreign Inspectors	Processor Link	Accreditation of local inspectors
PHYTOSANITARY CERTIFICATION					
CONSUMER PREFERENCE					
CONSISTENT VOLUME OF SUPPLY					
PRICE					
PACKAGING					
CERTIFICATION					

Section 3: ESSENTIAL TRADE SUPPORT SERVICES: This is likely to be a major determinant of the Wood Sector competitiveness and it's to determine which export support services are essential.

1. Business Competency Development Services	Strongly disagree		Neither disagree nor agree		Strongly Agree	
A. Export training programs are regularly organized for employees	1	2	3	4	5	
B. Training is more practical, than conceptual	1	2	3	4	5	
C. Training is more information-based than competence based						
D. Training lack sector specificity and does not reflect the reality that confront the exporter	1	2	3	4	5	
2. Trade Information ervices	Strongly disagree		neither disagree nor agree		strongly Agree	
A. There is effective trade information services for exporters	1	2	3	4	5	
B. Cost of trade information services expensive but does not serve exporters need	1	2	3	4	5	
3. Trade Finance	Strongly disagree		neither disagree nor agree		strongly Agree	

A. Availability and affordability of investment and operating capital	1	2	3	4	5
B. There is acceptance of letters of credit, elimination of foreign exchange constraints, facilitation of export transactions and payment)	1	2	3	4	5
C. There is creation of grant matching programs, export credit and guarantee schemes	1	2	3	4	5
D. There is financing of aspiring exporters and of "pro-poor" export development initiatives	1	2	3	4	5
4. Export Quality Management Services	Strongly disagree		neither disagree nor agree		strongly Agree
A. There is adequate information on mandatory and voluntary requirements in target markets	1	2	3	4	5
B. There is assistance to adapt the product to meet these requirements	1	2	3	4	5
C. Assistance that enable exporters that the product meets the mandatory and voluntary requirements	1	2	3	4	5
5. Other Trade Support Services					
A. There is adequate research, development and innovativeness in the wood export sector	1	2	3	4	5
B. Export packaging is adequate	1	2	3	4	5
C. Handling and transportation is well catered when exporting	1	2	3	4	5
D. Do you think the industry is has adequate resources(finance, people, institutions, programs) to make the national export strategy a success	1	2	3	4	5

1.   Do you export your wood products to US?

      1.   YES

      2.   NO

IF NO,

1.   WHY NOT

_____

2.   Would you be interested in exporting to the US?

      1.   YES

      2.   NO

   2.   If Yes, how long have you been exporting to the US? _____

   3.   What product group do you export to the US?

        1._____AIR-DRIED LUMBER (INCLUDING BOULES)

        2._____ KILN-DRIED LUMBER (INCLUDING BOULES)

        3._____ VENEERS

        4._____ PLYWOOD

        5._____ MOLDINGS, SEMI-FINISHED/FINISHED PRODUCTS

        6._____ OTHERS (PLEASE) _____

3.   What are the major constraints that impede exports of wood products to the US please indicate the importance of each criterion from the list below. If you are potential exporter to the US market, what is your perception on the following criterion (Please Circle one for each)

	Strongly disagree		neither disagree nor agree		strongly Agree
High Cost of Shipping	1	2	3	4	5
Large Volumes demanded by US buyers	1	2	3	4	5
Lack of Knowledge of US specifications	1	2	3	4	5
Meeting product quality	1	2	3	4	5
Meeting delivery schedules	1	2	3	4	5
Reliability of buyers	1	2	3	4	5
Acquisition of contract is difficult	1	2	3	4	5
Inflexibility in terms of payments	1	2	3	4	5
Difficulty in communicating with buyer	1	2	3	4	5
Buyers not interested in pre-financing	1	2	3	4	5
Requires high quality packaging of products	1	2	3	4	5
Lack of information on US Market	1	2	3	4	5
Lack of capital to go large scale	1	2	3	4	5
Lack of requisite technology	1	2	3	4	5
Insistence on kiln-dried products	1	2	3	4	5
Demand for certified products	1	2	3	4	5

Company's Contact

Name (Contact Person)	
Surname	
Organization/Company	
E-mail Address	
Telephone Number	
Address	

VITA

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