



ITTO

**STRENGTHENING MARKET INFORMATION SYSTEMS TO ENHANCE TRADE AND
MARKET INTELLIGENCE IN THE FOREST SECTOR OF GUYANA**

TMT-PD 006/11 Rev.3 (M)

**MARKETING STRATEGY
FOR THE GUYANA WOOD PRODUCTS INDUSTRY
SECTOR**

**FEBRUARY 2013
DR KWAME ASUMADU
VERSION 1**

CHAPTER ONE

INTRODUCTION

Guyana's wood products sector is presently characterised by low value primary activities – log harvesting and processing of dressed and undressed green lumber and some plywood manufacturing.

The industry and the government are keen to move the sector progressively to increased value-adding and “zero log export” in the medium to long term, as well as enhance the marketing and promotion of the country's wood products globally.

The Guyana Forestry Commission (GFC) commissioned this consultancy to identify the impediments to increased value adding in the industry, as well as the collective and separate government and industry actions required to address these impediments.

TERMS OF REFERENCE

The Terms of Reference (ToR) required the development of country level marketing strategies for trade development in Guyana.

METHODOLOGY

The success of any marketing strategy developed for Guyana will depend on the government and the industry agreeing to work together to implement it.

The methodology adopted therefore involved prior consultations with the GFC, industry representatives in the Georgetown (the FPDMC, FPA and GMSA), and industry stakeholders in Springland, Canje/New Amsterdam, Linden, Demerara, Parika and Essequibo regions, to seek their views and input through identifying:

- the main constraints to increased downstream value adding in the industry;
- policy issues which require addressing by the government; and
- actions and/or activities required to be undertaken by both the industry and the government in order to achieve the objective of “zero log export” and increased domestic downstream value adding.

SUMMARY OF THE OUTCOMES OF THE INDUSTRY CONSULTATION

In summary, the main impediments to increased value adding in the sector identified during the industry consultation are:

- inconsistent raw material supply;
- inadequate and deteriorated infrastructure;
- out-dated and inappropriate technology;
- scarcity of skilled personnel;
- limited marketing capacity;
- lack of a quality assurance culture;
- lack of access to capital.

OBJECTIVE OF THE STRATEGY

The industry has agreed to adopt the objective of moving to zero log exports over the medium to long terms. Therefore, the aim of the strategy is to progressively move the wood products

sector in Guyana from its current focus on low value primary processing to increased value adding secondary and tertiary processing.

The industry aims to achieve its objective of “zero log exports” through collaboration between the industry, the Guyana Forestry Commission (GFC) and the government to progressively address the identified constraints to increased value adding in the sector, as well as enhanced marketing and promotion to further increase market access globally.

THE STRUCTURE OF THE INDUSTRY

The Guyanese wood products industry is currently characterised by a few foreign owned medium to large enterprises; several family-owned small to medium enterprises; several community chain saw operating associations; and several one-person chain saw operators.

The industry sees itself as predominantly a primary processor involving log harvesting, sawmilling and some plywood manufacturing, and some secondary processing involving furniture parts such as doors and windows.

Primary processing represents about 90% of the industry’s activities. Fifty per cent of logs produced nationally are exported. The remaining 50% is processed into sawn lumber (dressed and undressed) with less than 1% kiln dried. Secondary processing constitutes about 10% of the sector’s activities.

The industry’s products are sold on both the domestic and international markets. The products for the domestic market are mainly green sawn timber used for building and construction.

The main international markets are:

- The Caribbean (for dressed and undressed green sawn timber for building and construction);
- North America (for dressed and undressed green sawn timber);
- EU (for dressed and undressed green sawn timber);
- China and India (mainly for logs); and
- Middle East(for dressed and undressed green sawn timber).

CHAPTER TWO

SWOT ANALYSIS OF THE INDUSTRY

Strengths

Two of the industry's main strengths are the availability of raw materials (notwithstanding the relative low productivity of Guyana's forests) and proximity to some of the country's major markets i.e. North America and Caribbean.

Raw Material Supply

The pressure from the major consuming markets of Europe and North America for tropical timber producing countries to implement sustainable forest management strategies, coupled with the introduction of log export bans by some of the major exporters of tropical logs, have resulted in the progressive decline in the supply of tropical industrial round wood globally. According to FAO and ITTO reports, this trend will continue.

Since the ITTO diagnostic mission to Guyana in 2002, the government, through the GFC and in collaboration with the industry, has implemented a number of positive changes to Guyana's forest management policies and systems aimed at the sustainable management of the country's forest resources.

The FAO estimates the rate of deforestation in Guyana to be one of the lowest in South America. In 2011, Pöyry Forest Industry concluded that the actual deforestation rate over the period 1990-2009 was 0.02 percent. The annual rate of deforestation since the recent mining boom in Guyana is also estimated at 0.0545 % of forested area.

With its low rates of forest loss, continued implementation of SFM should ensure ongoing supply of raw material for the industry into the future, which is a major strength for Guyana.

In comparison, due to previous unsustainable practices, Ghana, once a high forest cover country, is now looking to import raw materials in order to ensure the survival and continuity of its wood products industry sector.

Proximity to markets in North America and the Caribbean

As one of the few countries in the Caribbean region with large tracts of relatively intact forests, the country's proximity to the major wood consuming markets of North America and the Caribbean is also strength for the industry.

In addition, unlike the markets of the EU and North America, the Caribbean market is not yet demanding certified wood products. With low consumer awareness of environmental issues related to the management of tropical forests, this market is largely focussed on consistent availability of supply.

The industry consultation indicated that many companies in the sector are already active in the Caribbean and North American markets.

Weaknesses

Some of the industry's weaknesses relative to its global competitors are:

- essentially being a primary processor;
- limited ability to produce to meet global quality standards;
- low levels of managerial and technical skills required for high level performance; and
- high cost of production.

Essentially being a primary processor

The industry sees itself essentially as a primary processor producing low value added products such as logs and dressed and undressed green sawn lumber. This is a major weakness because it effectively makes the industry a “price taker” rather than being able to dictate its price for the country’s highly valued and prized wood species. Tropical timber is valued globally for its unique properties such as colour, strength and durability.

The industry’s low position on the value-adding spectrum arises from reluctance to invest in new product development and new production processes. It also arises from the industry’s historical focus on the domestic market where because of price demand for low value added products has been enough to sustain the industry. In addition, the continued availability of raw material at cheaper prices has not provided a sufficient disincentive for the industry to maximise the use of logs through the production of a diverse range of possible products, but instead, has relied on deriving increased value from processing more logs.

FAO and ITTO reports indicate that most of the major tropical timber producers are moving away from primary processing and focussing on secondary and tertiary processing such as furniture and builders joinery products. Unless the industry in Guyana can similarly move away from primary processing, it may not be able to compete in the highly lucrative markets of Europe and North America.

Even countries such as Malaysia which have well established and developed industries focussing on secondary and tertiary processing are continually examining how they can further improve their competitiveness globally through enhanced value adding. The main focus of Malaysia’s third timber industry plan, 2009 to 2020, is on increased value adding involving secondary and tertiary processing and using modern processing and manufacturing technologies.

Limited ability to produce to meet global quality standards.

The industry recognises that the products of most of the companies in the sector do not meet global quality standards, defined as “the ability to produce products to meet the customer’s expectations in terms aesthetics, functionality and structural integrity.” This is a major weakness which will continue to affect the competitiveness of Guyana’s wood products internationally.

Telephone surveys conducted in Europe, North America and Australia as part of this assignment indicated that, consistently, customers in the main consuming markets of Europe, North America and Japan rate Asian producers such as Malaysia, Thailand, Vietnam, China, Taiwan and the Republic of Korea, and South American producers such Brazil as being among the countries that consistently produce and market high quality wood products internationally.

Historically, the industry’s focus on the domestic and Caribbean markets that demand low value products because of price, has not provided the incentive for the industry to produce to meet global quality standards.

Low levels of managerial and technical skills required for high level performance.

One of the major weaknesses of the sector is the low levels of both managerial and technical skills required for high level performance, due to the reluctance of the industry to invest in the human resource development needs of the sector.

In contrast, since the 1980s, Malaysia has consistently invested in the development of its wood products sector’s human resource through the establishment of institutions such as the

Wood Industry Skills Development Centre (WISDEC), the Furniture Industry Technology Centre (FITEC), Terengganu Timber Industry Training Centre (TTITC), Sarawak Timber Industry Development Corporation (STIDC) and the Forest Research Institute of Malaysia (FRIM).

These institutions work closely with the industry to develop training programs that specifically meet the human resource and skills needs of Malaysia's timber industry.

With the exception of the Forest Training Centre and the Forestry Department at the University of Guyana, the country does not have comparable human resource development institutions able to meet the on-going skills needs of the sector into the future.

Globally, the wood products industry is moving away from labour-intensive production systems using low to semi-skilled labour to technologically-intensive operations requiring highly specialised skills in automation and ICT.

The industry's future competitiveness therefore depends on its ability to attract and retain well trained and highly specialised personnel including managers/supervisors, wood machinists, saw doctors, carpenters, jig makers, prototype makers, finishers and grinders.

Opportunities

The Canada-CARICOM Free Trade Agreement (FTA) Negotiations

The Canada-CARICOM Free Trade Negotiations being negotiated is both an opportunity and a threat for the industry. While the Agreement will further increase market access in Canada for Guyanese products including wood, it will also enable Canadian wood products (particularly pine boards) to enter the Guyanese market free of duty.

Canada is a low cost and efficient producer of high quality wood products compared with Guyana. Thus the successful negotiation and coming into force of the free trade agreement can be a major disadvantage for the Guyanese wood products industry, unless the Guyanese government in collaboration with Suriname (another tropical wood producer who will be impacted negatively by the agreement) successfully argue to exempt wood products from the agreement on national interest grounds.

The views from some industry participants is that exemption of timber from the FTA is highly unlikely because powerful non-timber producing countries in the Caribbean such as Trinidad and Tobago and Barbados, will not allow exemption of timber from the Free Trade Agreement to become a deal breaker.

Uniqueness of tropical hardwoods

Notwithstanding the threats posed by both wood and non-wood substitute products, there is a strong demand for tropical timber in Asia (China, India, Taiwan, Republic of Korea, Thailand and Vietnam), EU, Middle East, Caribbean and North America, because of tropical timber's unique properties.

This is an opportunity for the industry given the availability of raw materials resulting from the country's low rates of deforestation, and the new emphasis on developing the country's lesser used species.

Negotiations with the EU on a Voluntary Partnership Agreement (VPA)

Given the perception in some of Guyana's major markets of the country as a high risk source of illegal timber, the successful conclusion of the VPA negotiations with the EU will be a major opportunity for the industry, as it will allow Guyanese suppliers to supply VPA-

licensed tropical wood products to the global market, particularly to the highly lucrative markets requiring legally certified timber.

Being at the lower end of the value adding spectrum

Being at the lower end of the value adding spectrum is an advantage because it means that the industry has an as yet untapped downstream value adding potential, which it can capitalise on to develop the sector further.

It also has the advantage of learning from how competitor countries have industrialised their wood products sector and the mistakes they made in the process, so as to avoid them.

Threats

Competition from Africa, Asia and South America

Although Europe, Asia and the Middle East also offer market opportunities, Guyana's competitiveness in these markets is likely to be impacted by freight costs. Generally suppliers of wood products from tropical Africa have a competitive advantage in freight to the EU market, whereas Asian suppliers such as Malaysia, Indonesia, Papua New Guinea and the Solomon Islands have freight advantage to Japan, India, China, Taiwan and the Republic of Korea.

Imported wood and non-wood substitute timber products

As the industry identified during the consultations, the sector is already facing increased competition both from imported non wood (concrete, steel, aluminium, plastic, plasterboard) and wood (Pine boards, MDF, Particleboards) substitutes.

The imported non-wood and wood substitutes are better quality, easier to work with and often cheaper than the local lumber. Unless the industry can improve the quality of its product offering on the domestic market, it will continue to lose market share to imported products.

This situation has arisen out of years of industry complacency, and the reluctance to invest in new equipment to improve productivity, efficiency and quality, as well as reduce the unit cost of production.

Lack of certification

The lack of forest management certification and the perception in the major markets of the EU and North America of Guyana as a high risk source for illegal timber is a threat, at least in the short term, until the VPA with the EU is concluded.

The amendment to the US Lacey Act and the new EU Timber Regulations due to come into force on 13th March 2013 are putting pressure on tropical timber producers to implement verification systems to comply with these requirements. The indications are that many of Guyana's competitors are taking steps to ensure they meet these requirements.

During the industry consultations, many industry participants pointed to the tagging of logs by the GFC as indicating that they can supply legal timber. The GFC timber tracking system is a positive development and will help companies seeking verification of legal origin certification. However, the GFC timber tracking system in its current form may not address the responsibility of individual companies to be able to demonstrate legality of origin to their customers as required by the US Lacey Act and the EU Timber Regulations.

The EU and Lacey amendments put the onus on the individual company to conduct due diligence to meet the requirements of legal origin verification. Further work will be required to ensure that the GFC log tagging system offers the verification of legal origin certification required in these major tropical timber consuming markets.

Reluctance to invest in new processing technology

The industry's reluctance, historically, to invest in new processing technologies and capital equipment which the industry participants attribute to lack of finance, is a major weakness for the sector.

Lack of investment in new processing technology and capital equipment means that the industry will continue to rely on long depreciated old and inefficient equipment, which results in poor use of the nation's valuable timber resources through poor product recovery and generation of high levels of waste.

Another consequence is the inability to embark on new product development, as well as the inability to produce quality products to meet global standards. High quality products not only attract high prices but also have easier access to the more sophisticated and lucrative markets.

China is now a major supplier of high quality wood processing equipment at affordable prices. Chinese equipment and technology are competing effectively globally against the traditional equipment manufacturers from Europe in terms of functionality, reliability and after sales support at much cheaper prices.

Countries such as Malaysia, Thailand, Philippines and Vietnam are increasingly relying on Chinese equipment and technology to further improve their industries and thus compete effectively internationally.

High cost of production

The unit cost of production in timber industry in Guyana is high due to a number of factors including the following:

- high freight cost due to the location of the main shipping harbour of Georgetown
- absence of deep harbours which limits the size of ocean freighters that can come to Georgetown. Large ocean freighters are able to offer more competitive freight costs due to economies of scale;
- cost of electricity and other power sources;
- cost of labour;
- reliance on old and inefficient processing equipment, which results in lower rates of product recovery and the generation of high level of waste;
- the inability of the industry to use wood efficiently through the production of a wider range of products other than green sawn dressed and undressed lumber; and
- limited transport infrastructure that does not support efficient transport of goods and services throughout the country.

CHAPTER THREE

ISSUES IMPACTING ON INCREASED VALUE ADDING AND NEW PRODUCT DEVELOPMENT

During the industry consultations, the sector identified a number of constraints. Chapter 3 discusses these constraints as background to developing strategies for addressing them.

Inconsistent raw material supply

According to the industry, the low productivity of Guyana's commercial forests, coupled with high species diversity and non-uniform distribution within the country's forests, results in the limited availability of the commonly traded species in volumes/quantities sufficient for large scale commercial value-adding operations.

A consequence of the non-uniform species distribution is often the abundance of raw material in some regions and scarcity in others. It has also led to customers selectively preferring some commercial species to others. For example, the main commercial species in the Berbice/New Amsterdam region are Mora, Kabukalli, Shebadan and Crabwood. These species are apparently not preferred in the main market of Georgetown, where Purpleheart and Greenheart are the favourite species.

Inadequate and deteriorated infrastructure

Guyana's infrastructure such as electricity generating and distribution systems, water, road, port and communication facilities are old, unreliable and inefficient in today's ICT-dominated world. The country's antiquated infrastructure results in high costs, and reduces the industry's overall competitiveness.

Similarly, the country's port facilities are generally inadequate, in terms of depth of harbour, bulk-handling facilities and also unloading capacities. This results in long transit times to markets as well as high freight costs.

Out-dated and inappropriate technology

The industry is generally characterised by old and inappropriate processing technology, which results in low recovery rates, poor product quality, inefficiencies in production and an overall high unit production cost.

While the age of equipment is an important consideration, the main issue that needs addressing in the short term is the poor maintenance culture within the industry. Many sawmills have old equipment which is not maintained regularly, to ensure optimum performance.

Scarcity of skilled personnel

One of the major constraints to increased value adding in the industry is the general scarcity of skilled personnel, at both managerial/supervisory and operational levels. According to one industry observer, often the managers, who invariably are also the owners, have no technical skills or understanding of wood processing, and therefore are unable to provide guidance to shop floor staff/operators in the efficient and safe operations of machinery and equipment to maximise product recovery and reduce waste.

Limited marketing capacity

With the exception of a few of the medium to large scale foreign-owned and locally owned companies which have the capacity to both market their products and seek new market opportunities, the majority of the companies in the industry have limited marketing capacity and capability.

Although the Forest Products Development and Marketing Council (FPDMC) exists to support the marketing and promotion of Guyanese wood products, it became evident during the industry consultations that many of the operators within the industry, particularly the community associations and individual chain saw operators, are not aware of its existence. Consequently, they do not use the services of the organisation to fully maximise their market opportunities, particularly in the domestic market where they operate.

Lack of quality assurance culture

The industry is fast losing market share, even on the domestic market, to imported substitute wood products such as pine boards, MDF, pine plywood and particleboard. This is because these imported products are consistently of high quality and cheaper, compared with the locally produced hardwood lumber.

The bulk of tropical hardwood lumber the industry sells internationally and also on the domestic market is green and often undressed. When used as green lumber, some species such as Greenheart shrink in service as it dries, and this causes quality issues such as warping of floor boards, poorly fitting doors and windows and unevenness of ceilings and walls. These quality problems discourage the domestic consumers from buying locally produced lumber.

Although there are national lumber grading rules, according to the industry, these are often not monitored and enforced, which results in the lumber yards consistently offering lower quality products to the consumer.

Often, the average consumer is uneducated about wood selection, and therefore has limited knowledge about the adequate and/or reasonable price to pay for the level of quality being offered by the lumber yards.

Lack of re-investment in the sector

Guyana's wood products sector is characterised by old equipment, which has long been depreciated. However, there is general reluctance within the industry to re-invest, which the sector blames on the lack of access to finance.

To address the industry's complaints, some have argued for government intervention through the provision of soft loans and direct financial grants, whereas others have even suggested the creation of an industry development bank by the government, as existed previously, to specifically fund the sector's capital needs.

However, on close examination, it would appear that the sector's complaint is more about the cost of finance (rate of interest charged by the financial institutions on borrowed fund) rather than access to capital *per se*. Indeed, it would appear that there is excess liquidity in Guyana's banking sector.

In general, the high cost of finance is usually a reflection of the assessed level of risk in lending money. In the case of Guyana, the industry argues that the local banks' assessment of the sector as high risk for loans is due to a general lack of understanding of how the sector operates.

Poor knowledge, coupled with the lack of understanding of how the industry operates results in the banks requiring exceptional security guarantees in the form of collateral.

But it is also true that often, loan applicants from the industry are reluctant to risk real assets as collateral for bank loans. Instead, they prefer to use SFPs and WCLs. These instruments are not acceptable to the banks as security.

First, they are of limited duration (Wood Cutting License is issued for 3 to 10 years, and covers forests of between 8,000 and 24,000 hectares, and State Forest Permissions are given for one to two years and cover areas of less than 8,000 hectares) with no guarantee of extension.

Second, they are non-tradable and non-exclusive leases. Thus in the case of default, the banks may not be able to convert them into liquid assets to defray the loans.

The banks also argue that the low levels of lending to the sector, particularly to the small operators, is often due to the inability of applicants to provide sufficient information on their businesses, including up-to-date accounts, cash flows and security or collateral, to enable proper assessment of the applications, because of poor documentation and record keeping.

Shortage of labour

Four issues are relevant here. First, there is a general shortage of labour due to the mining boom in Guyana. The industry reported that it is unable to find qualified labour because the mining sector's attractive wages lure qualified workers away from the other sectors including the wood products industry.

Second, there is a general lack of training of workers within the industry, both at the operational and managerial and/or supervisory levels.

Third, there is a general lack of some critical skills in the industry. The example given during the industry consultations was "tree spotting" or "tree identification." Accurate identification of tree species is critical to the successful development of Guyana's Lesser Used Species, yet companies are unable to find skilled and qualified personnel for these tasks.

The fourth issue relates to the general reluctance of companies to train staff for fear that they may lose them to other sectors within the economy. While this is understandable, this is not unique to Guyana.

CHAPTER FOUR

STRATEGIES TO ADDRESS SOME OF THE CONSTRAINTS TO INCREASED VALUE ADDING

The strategies suggested in this Chapter assume that, in the short to medium terms, the industry will continue to be a primary processor exporting logs, producing green sawn dressed and undressed lumber and producing some plywood.

However, it is expected that some of the strategies suggested, if implemented effectively, could provide sufficient encouragement and incentives to some companies to buck the existing industry trend and undertake meaningful value adding investments in secondary and tertiary processing.

Possible products that could be produced from Guyana's timbers include the following:

- Kiln and air dried sawn wood
- Plywood
- Rotary cut veneers
- Sliced Veneers
- Mouldings
- Dowels
- Block boards
- Laminated boards
- Floor boards (finished and blanks)
- Furniture parts
- Interior and garden furniture
- Decking (Profiled and blanks)
- Windows and window parts (frames)
- Garden stakes
- Doors and door parts
- Fence Posts
- Tool handles
- Garden trellises
- Fence palings
- Picture frames
- Jewellery boxes
- Pallets and pallet blocks
- Engineered flooring
- Window shutters (finished and blanks)

- Do-It-Yourself (DIY) products and components (Boards for shelves, Cubby houses, etc.)

There are markets for all these products globally, particularly in Japan, Europe, North America and the Middle East.

Improve the quality of green sawn and air dried lumber

As indicated above, it is reasonable to assume that in the short to medium terms, the majority of the industry's products will be green sawn lumber with some air drying and limited kiln drying. Some companies are already selling reasonable quantities of sawn green and air and kiln dried lumber to the Caribbean, North American, European and Middle Eastern markets.

In the short to medium terms, the emphasis should therefore be on strategies to improve the quality of the sawn lumber exported by the industry. In particular, the industry should aim to produce sawn lumber based on international lumber grading standards, including the dimensions required by international buyers.

One of the major issues with rough sawn lumber is the uneven thickness. The industry should be encouraged to only export dressed lumber (both green and dried), wherever possible, so as to improve Guyana's image internationally as a producer and exporter of quality sawn lumber.

In this context, it is suggested that the FPDMC should obtain information on the products, as well as the quality specifications and dimension requirements of each market - Caribbean, Europe, North America, Japan, India, China, the Middle East, and provide this information to the industry on a regular basis.

Generic information on international lumber quality standards is available on the Internet. However, many of the companies and individual operators in the industry may not have access to the Internet. To assist them, the FPDMC should access this information and provide it to the industry.

Initially, it may be necessary for the FPDMC to send an officer to visit some of the major industry associations in these markets to understand how they service their members, and also establish contacts for accessing the market information the industry needs.

GFC should consider using the ITTO's Freezailah Fellowship Program more regularly to support staff working for the industry improve their skills and international contacts. Up to \$US10,000 per candidate is available under the ITTO's Freezailah Fellowship Program. To date, only two candidates from Guyana have benefitted from the ITTO's Freezailah Fellowship Program.

It is strongly recommended that the GFC aims to obtain, at least, one Fellowship for Guyana per each ITTC session effective from this year.

Information about the ITTO's Freezailah Fellowship Program including the deadlines for submitting applications, is available at the ITTO website: http://www.itto.int/feature20_01/.

Offer sawn lumber instead of logs to the emerging markets of Asia

In recent years, Asian markets such as China and India have become important for Guyana's logs. In the short to medium terms, the industry should aim to reduce its export of logs, and increase the supply of sawn lumber to these markets, even if in green form.

These markets are hungry for raw material, both for domestic consumption and also re-processing for export. Buyers in these markets will accept sawn lumber if they cannot obtain logs. According to ITTO reports the majority of wood products exported to China, India,

South Korea and Taiwan during 2011/2012 from Malaysia, Thailand, Philippines and Vietnam were secondary processed wood products such as sawn lumber, builders' joinery products and furniture and furniture parts.

With improved sawing techniques and regular maintenance of existing equipment, the industry can increase substantially the volume and quality of sawn lumber exported to these emerging markets for Guyana.

It is suggested that, as soon as it is practicable, the FPDMC should lead a trade delegation to India and China to investigate opportunities for supplying sawn lumber rather than logs to these markets. The proposed trade mission should be planned in collaboration with the main industry associations in each market, to ensure that the major buyers will be available to meet the delegation.

The proposed trade mission will also provide the opportunity for the FPDMC and any companies that participate in the trip to establish contacts with buyers, as well as educate themselves about the product and quality requirements of these markets.

Encourage the industry to increase the volume of kiln dried lumber

In the medium to long terms, the objective should be to export only dried lumber. This can be achieved through imposing an export tax on air dried and green sawn lumber. Over the past 30 years, Ghana has successfully used a similar export tax to encourage its industry to increase the export of kiln dried lumber in place of air dried lumber. Ghana still maintains an export tax on air dried lumber.

Timber kiln drying equipment is now available in China at reasonable prices. For example, on the Internet, a 60 m³ timber kiln from the Hangzhou Linan Nanyang Wood-Working Machinery Co., Ltd. sells for between \$USD10, 000 and \$USD12, 000.

The trade delegation to Asia suggested above, if implemented, could also investigate companies that can supply timber kilns to the industry at competitive prices. Bulk purchase price including after sales service and supply of spare parts can be negotiated as part of a purchase deal for the industry.

While information about equipment manufacturers and suppliers is easily available on the Internet, many companies in the industry may not be able to access it because of the limited access to the Internet. The FPDMC should therefore access this information and provide it to the industry.

It would appear that the common mindset in the industry is that it is the responsibility of the government, in particular the GFC, to do for them everything they require including finding buyers for them. This is unfortunate, however, it would appear that for the majority of the companies in the industry, nothing will happen unless the FPDMC and the GFC "spoon feed" them with all the information they require and provide them with all the assistance they need in order to move the sector forward.

Prohibit the export of sawn lumber that does not meet international quality grading rules

An option for encouraging the industry to focus on producing lumber that meets international quality specifications is for the industry and the government to consider introducing legislation that prohibits the export of substandard sawn lumber.

To achieve this may require government legislation, which empowers the GFC to inspect and approve all lumber intended for export, and to impound lumber that do not meet minimum grading standard.

The cost of the pre-export inspection should be borne by the exporter. Impounded lumber should also be disposed of at the exporter's cost. While these measures may seem harsh, it is going to require strong government action to bring about meaning and lasting change within the industry. The private sector changes an established behaviour or practice only when government policies and actions either make it expensive or unprofitable to continue with the *status quo*.

The strategies suggested to improve the knowledge and understanding of domestic consumers and empower them to demand quality sawn lumber, coupled with the suggestion to prohibit the export of poor quality lumber would eventually pressure the industry to take steps to improve the quality of sawn timber for both the domestic and export markets. Lack of markets at home and internationally will be an important signal motivator for the industry to begin to take steps to improve the quality of its products.

Market Guyana's wood products as "Mixed Tropical Hardwoods"

With the progressive diminishing globally of premium species in tropical wood producing countries, many producing countries are developing and commercialising their so called "lesser used species" which were previously not harvested.

Ghana is one of the tropical timber producing countries which has successfully developed and commercialised many of its lesser used species.

There is evidence, through the available technical and promotional materials that the GFC is also aggressively developing and commercialising some of Guyana's lesser used species.

In many tropical timber producing countries, some of their lesser used species are not available in sufficient volumes to be promoted and marketed individually. Malaysia, for example, has addressed this problem by grouping species together and marketing them as "Mixed Hardwoods" based on common attributes such as "colour" and "end-use" application.

There is opportunity for the industry in Guyana to adopt a similar strategy. Possible product categories could be "Mixed Guyanese Tropical Hardwoods" based on attributes such as:

- Colour e.g. "Mixed Guyanese Red Tropical Hardwoods" and "Mixed Guyanese White Tropical Hardwoods"; and
- End-use application such as "Structural" and non-structural "Decorative" e.g. Mixed Guyanese Structural Tropical Hardwoods" and "Mixed Guyanese Decorative Tropical Hardwoods."

Encourage regional specialisation based on commercially available species

Similarly, the constraint imposed by the natural occurrence of some species only in some regions can be addressed through regional product specialisation.

During the industry consultations, stakeholders in the Canje/Berbice/New Amsterdam region consistently expressed concern that, because consumers in Georgetown only prefer Greenheart and Purpleheart, which do not occur in their region, they are continually faced with the situation where they cannot find markets for their products.

The majority of the producers are community associations and chain saw operators, and the common species they process are Mora, Kabukalli and Shebadan with no Purpleheart or Greenheart.

One option for addressing this problem is for the government to work with producers in the region to focus on producing export-quality products from these species for the EU, North

American and Asian markets where the demand for raw material is the most important consideration.

Create Log Consolidation Centres

The lack of sufficient volumes of raw materials to make commercial processing feasible, which has been cited by the industry as part of the reason why increased value adding has not occurred in Guyana, can be addressed through encouraging a secondary market for logs to develop through the creation of “Log Consolidation Centres.”

The “Log Consolidation Centres” could be regionally-based, based on the dominant species available in the regions. Companies seeking logs, either for local processing or export, can bid for the available logs at the Log Consolidation Centres based on competitive market prices.

An advantage of this strategy is that, if implemented correctly, it could provide the incentive for community associations and individual chain saw operators, which largely produce very poor quality lumber for the domestic market, to ultimately move away from lumber production and focus on producing logs for sale to the “Log Consolidation Centres.”

Successful implementation of this strategy would over time, also address the industry’s concern that these “unsophisticated” producers undermine the commercial viability of the domestic market by selling poor quality products based on price alone.

Similarly, the constant complaints by these producers themselves that lumber merchants frequently take advantage of them by offering them lower than market prices for the products (due to the poor quality) can be addressed by removing them from the value adding supply chain and focussing them on producing logs for the Log Consolidation Centres.

The Log Consolidation Centres can be owned and operated entirely by private sector entrepreneurs, or they can be operated as joint ventures between the government and the private sector. However, given the general reluctance of the industry in Guyana to invest in the sector, it may be necessary, initially, for the government to fully fund and operate one or two Log Consolidation Centres as models.

Promote the sector effectively to the local financial institutions

Since the advent of economic rationalism in the 1980s and 1990s, governments globally have either completely removed themselves from, or reduced considerably their involvement in, activities and services which they consider the private sector can better undertake or provide, and Guyana is not an exception to this development.

There is no policy (national interest) or economic justification for arguing that the government should be the bank of last resort for Guyana’s wood products sector. However, given the importance of the sector to the national economy (estimated at between 3 and 5% of GDP), there is a role for the government to engage the local financial institutions, and to encourage them to consider seriously the capital needs of the sector.

This can take the form of strong public pronouncements by the government on the strategic importance of the sector to Guyana’s economy, and encouraging the financial institutions to support the sector on national interest grounds.

There is also a role for the FPA and the GMSA to better educate the local financial institutions about the sector’s operations and activities so as to dispel the current mindset about the sector being a higher risk for lending money compared with other sectors of the economy.

Through enhanced engagement and education, there is an opportunity for the sector, with the support of the government, to work with the local financial institutions to develop lending packages and services that specifically address the capital needs of the wood products industry.

In this regard, the briefing provided by the Republic Bank to the Essequibo Coast stakeholders during the recent industry consultations on the Bank's lending policies, practices and requirements, provides a useful model, and the other local financial institutions should be encouraged to emulate this example.

Encourage the European Investment Bank (EIB) to invest more in the sector

On 28th January 2013, the EIB through a media release, announced its interest in identifying new lending opportunities in infrastructure, small and medium sized enterprises (SME) financing and climate action.

According to the media release, between 1978 and 2004, the EIB committed a total of Euro 63 million in Guyana for the financing of sectors such as forestry (5%), mining (58%), water and sanitation (15%) and the financial sector to support micro, small and medium sized companies' development (22%).

In addition to engagement with the local financial institutions on the needs of the sector, the EIB's public announcement provides a further opportunity for the government and the industry to explore how the EIB's financing commitment can be harnessed to benefit the wood products industry, particularly financing for increased value-adding.

China-Guyana Development Fund

To support its trade and economic interest in Africa, China has established the China-Africa Development Fund (CAD Fund) whose primary purpose is to serve Sino-African trade cooperation through market-based mechanisms by reducing risk to Chinese investors in Africa.

It does this by providing bridging finance, financial advice, Africa specific managerial advice, and identifies potential investment opportunities. It also helps African projects find suitable Chinese investment partners. It aims to invest in low risk projects which provide sustained and consistent returns over a long period of time. This is partly done with the objective of helping Chinese firms operating in Africa to expand their market share, get closer to end consumers, or secure natural resources.

The CAD Fund now has offices in four African countries: South Africa, Ghana, Zambia and Ethiopia.

Given China's current interest in Guyana's mineral and forest resources, the industry and the government should investigate the possibility of encouraging the Chinese government to establish a China-Guyana Development Fund to further support meaningful Chinese investments in Guyana, including the wood products sector.

The recent announcement by Bai Shan Lin Forest Development Inc., the Chinese wood processing company operating in Guyana, to establish a large scale trade park in Georgetown, could provide the impetus for such negotiations.

Decentralise FTC's Training to the sector

Guyana's Forestry Training Centre (FTC) provides hands on technical and vocational training services to the industry, whereas the courses offered by the Forestry Department at

the University of Guyana and other tertiary institutions are more focussed on academic training.

Although there seems to be general recognition that the FTC's training programmes are useful to the industry, one of the issues identified during the industry consultation was the centralisation of training in Georgetown.

Several regional stakeholders complained that it was logistically difficult for them to send staff to the FTC in Georgetown for training.

With the country's current limited ICT bandwidth, online training may not be an option in the short to medium terms. One option for addressing the immediate training needs of regional stakeholders is for the FTC to consider conducting training at the regional centres on a rotational basis.

It would be useful for FTC's management to initiate negotiations immediately with the regional stakeholders, with the view to developing training programmes that specifically met their needs, for delivery at the regions on a cost-recovery basis.

Preliminary discussions with the FTC's management indicated that delivery of training at the regions is possible, although, because of the equipment needs of some programmes, not all training can be done outside Georgetown.

With careful pre-planning, this impediment to training at the regional centres can be addressed by using the premises, facilities and equipment of some of the well-established regional companies.

Import skilled labour in the short to medium terms

Globally, many resource-rich countries where the mining industry is booming are facing similar challenges to Guyana. Not only are other sectors of their economies losing skilled labour to the mining sector but there is also a general labour shortage.

Australia is addressing these challenges through a number of strategies which Guyana could consider adopting. In the short term, with the agreement of the local trade unions, the Australian government has introduced a new visa category to enable companies to import skilled labour.

To ensure that qualified Australians are not disadvantaged, companies taking advantage of the new visa categories are required to demonstrate to the government and the unions that they have unsuccessfully tried to recruit locally. The trade unions also ensure that the working conditions offered to these migrant workers do not create unintended consequences by undermining established industry award rates and other employment conditions.

It is recommended that the GFC, FPA and the GMSA work with the government to consider facilitating the importation of migrant workers, in the short term, to alleviate the shortage of skilled labour.

In the long term, it may be necessary for the industry to work with the FTC, the University of Guyana and other tertiary institutions to develop academic and vocational/technical courses and training programmes, that will deliver the skills needs of the industry into the future.

The success of any training programme implemented for the sector, both academic and vocational/technical, will depend on the total support and commitment of the industry. While the FTC was conceived as an industry-driven initiative, the reality has been different in practice. In general, the industry has been reluctant to provide the necessary financial support for the Centre's operations and activities.

The industry and the government should consider how best to fund the short and long term training needs of the industry through a combination of scholarships, government and industry grants and cost recovery.

Assistance can also be sought through bilateral aid programmes from countries such as the EU, Canada and the US, to support the industry's long term human resource development needs.

Encourage consolidation of industry value adding at “Wood Processing Centres”

The model whereby industries with common needs and requirements, such as infrastructure and labour, are encouraged to consolidate their operations at a physical location has been used successfully by many countries to promote enhanced manufacturing and value adding.

Referred to by various descriptions such as “industrial parks” or “special economic development zones” they offer a number of advantages including the following:

- economies of scale in production and manufacturing;
- reduced costs through sharing of common services and facilities;
- better targeted government assistance such as infrastructure support;
- sharing of knowledge and experiences; and
- effective and cost-effective skills and technology transfer.

The rapid development of Malaysia's manufacturing sector since 1986 including the timber industry is attributed in part to the government policy of encouraging industry clusters or SME colocation at designated special economic development zones, and providing incentives for investment in manufacturing, including value adding.

Ghana's Free Zone model described below may offer a template for the sector and the government to consider for Guyana.

The concept of “Wood Processing Centres” would be a useful addition to the creation of the “Log Consolidation Centres.” Indeed, the two should be co-located if the government and the industry decided to implement this recommendation. The main advantage of co-location will be ready market for log producers, and for the processors, easy access to raw materials.

Co-location of the log consolidation centres and the wood processing centres will also enable the government to better offer incentives and support to the sector in a cost-effective manner.

Initially, it is recommended that the establishment of Log Consolidation and Wood Processing Centres be considered immediately for Berbice/New Amsterdam, Linden, Demerara and Essequibo regions.

Ghana's Free Zones Programme

The Ghana Free Zones Programme was established in 1995 by an Act of Parliament to enable the establishment of free zones in Ghana for the promotion of economic development.

The Ghana Free Zones Programme is designed to promote processing and manufacturing of goods through the establishment of Export Processing Zones (EPZs), and, encourage the development of commercial and service activities at sea- and air-port areas to produce goods and services for foreign markets.

The Ghana Free Zones Programme grants licenses to applicants and also assists them in obtaining relevant licenses, permits and acquiring facilities for their commercial activities. The Programme is also responsible for:

- examining and recommending for approval, agreements and treaties relating to the development activities in the free zones;
- monitoring activities, performance and development of Free Zone Developers and Enterprises;
- ensuring compliance by Free Zone Developers and Enterprises of the Free Zone Act and any other laws relevant to free zone activities; and
- registering and keeping records and data on the programme of developers, operators and enterprises in free zones;

It also provides information on investment opportunities in the free zones, as well as issue licenses to approved free zone enterprises, assists in securing other permits from related agencies, provides ready facilities i.e. serviced land and utilities at the Export Processing Zones; obtains work/residence permits for expatriates in the free zones, and provides any other services requested by investors.

INCENTIVES

Incentives provided to Free Zone Enterprises include the following:

- 100% exemption from payment of direct and indirect duties and levies on all imports for production and exports from free Zones.
- 100% exemption from payment of income tax on profits for 10 years which does not exceed 8 per cent thereafter.
- Total exemption from payment of withholding taxes from dividends arising out of free zone investments.
- Relief from double taxation for foreign investors and employees.
- No import licensing requirements.
- Minimal customs formalities.
- 100% ownership of shares by any investor: foreign or national in a free zone enterprise is allowed.

There are no conditions or restrictions on repatriation of dividends or profits; payments for foreign loan servicing; payments of fees and charges for technology transfer agreements; and remittance of proceeds from sale of any interest in a free zone investment.

Free Zone investors are permitted to operate foreign currency accounts with banks in Ghana.

At least 70% of annual production of goods and services of Free Zone Enterprises must be exported; consequently up to 30% of annual production of goods and services of a free zone enterprise are authorised for sale in the local market.

Free Zone investments are guaranteed against nationalisation and expropriation.

Require all large concession holders to submit value-adding proposals

The GFC uses four mechanisms for allocating forest concessions to potential investors, both nationals and foreign. These are:

- State Forest Exploratory Permits (SFEPs), which are issued for survey and feasibility purposes only and do not include cutting rights.
- Timber Sales Agreement (TSA), which covers concessions of more than 24,000 ha and is allocated for a period of more than 20 years.

- Wood Cutting License (WCL) is issued for 3 to 10 years, and covers forests of between 8,000 and 24,000 ha.
- State Forest Permissions (SFP) are given for two years and cover areas of less than 8,000 ha. SFPs are generally issued to individual small-scale operators and community-based associations.

To encourage increased value adding domestically, it is proposed that the government and the GFC should require all existing holders of TSAs and WCLs as well as new applicants, to submit value adding plans.

The plans should include the investment the TSA and WCL holders and the new applicants intend to undertake in the short to medium terms, including clear milestones for achieving their value adding objectives.

These investment plans should be used as the basis for drawing up legally binding agreements between the government and the concession holders and/or the investor, and should be reviewed jointly by the government and the concession holders annually. Any milestone missed should incur a hefty penalty as deterrent to other concession holders. Concession holders should also lose their TSAs and WCLs if they miss major milestones consistently for three consecutive years.

To ensure accountability and transparency, the investment plans should include details of the proposed value adding activity/ies, the capital equipment requirements and evidence of the availability of finance to implement the investment.

Many concessionaires have held their TSAs for inordinate amount of time with no intention of undertaking meaningful value adding within Guyana. Guyana's forests are a natural asset which should be managed sustainably to create wealth for the nation. Concession holders who have no intention or the ability to add value to the resource should not be allowed to continue to hold on to them.

Government must provide incentives to encourage value adding

Globally, governments have used the so-called "carrot and stick" approach to incentivise behaviour change including implementing domestic value adding policies.

Government incentives can take many forms such as changes to policy, direct financial grants, tax concessions, infrastructure support, exemption from payment of import duty and domestic value added tax etc.

Malaysia has used a number of financial and non-financial incentives to encourage increased value adding in the manufacturing sectors of its economy, including the wood products sector.

As described in the case study above, in Ghana, the Free Zones model is used to provide a wide range of incentives to encourage both nationals and foreign investors to invest in manufacturing production in Ghana. Indeed, several of Ghana's wood products companies who export to the EU and North America have Free Zone status, and enjoy all the concessions afforded to Free Zone operators, even though they are locally owned companies.

Government incentives should only be available to companies which invest in meaningful value adding. The GFC, FPA and GMSA should work with the government to develop guidelines on the types of value adding investments that would qualify for government incentives, as well as the type and nature of incentives to be provided.

Guyana has experience with foreign investors using value adding promises to gain TSAs and other government incentives but either do not deliver or only partially deliver the promised investment. Past experience should guide the government and the industry in formulating the suggested investment guidelines so as to avoid some of the previous mistakes.

Stringent monitoring should be implemented by the government, preferably delivered through a private sector accounting and auditing firm, to ensure accountability and transparency, as well as prevention of political patronage. Non-performing companies should not only lose their forest concessions but they should also be made to refund any unpaid taxes and direct government financial assistance and other incentives they may have enjoyed.

Encourage the entry of new investors

The private sector performs better when faced with competition. The GFC and the government should consider inviting new and serious overseas investors, willing to invest in the sector to compete with existing operators who may not have any plans to invest in value adding domestically.

Potential new investors should be vetted properly before being granted TSAs or WCLs. To ensure they are genuine, they should be required to demonstrate their *bona fides* through the payment of performance bonds as a condition for the award of forest concessions.

Similarly, they should be required to submit detailed value adding plans with key milestones, which will be reviewed annually. Persistent non-performance should result in both the loss of the concession, as well as forfeiture of the performance bond.

Increase the tax on log exports

During the industry consultation, it was reported that perhaps the existing export tax on logs do not provide sufficient disincentive to log exporters. If this is the case, the government and the industry should review the existing export tax regime with the view to increasing it so that it creates sufficient disincentive without destroying log export altogether.

Until Guyana is able to competitively add value to its wood resource domestically, it would be inadvisable to implement policies that will completely stop log exports. This is because, any policies that act to either ban or curb log export prematurely could result in oversupply of logs locally, and result in the collapse of the domestic price for logs. If this were to happen, it could exacerbate the existing situation of inefficient wood processing by some operators within the industry.

CHAPTER FIVE

STRATEGIES FOR ENHANCING PROMOTION IN THE DOMESTIC MARKET

Although the domestic market can be an important driver of innovation and product development, it would appear that the industry, to a large extent, has neglected the domestic market. The domestic market is presently dominated by chain saw operators who produce poor quality green sawn lumber for the building and construction sector.

Industry reports suggest that domestic consumers are increasingly turning away from the poor quality sawn lumber being offered by the sector, and preferring to buy imported wood and non-wood substitutes.

Given the industry's existing low level of value adding, any strategy aimed at increasing value adding in Guyana's wood products sector should also involve developing the domestic market.

An advantage of using the domestic market as a springboard to the international market is that it provides the laboratory for product development and experimentation.

The prevailing boom in Guyana's domestic building and construction provides the opportune time for the industry to focus on using the domestic market to kick start the objective of enhancing value adding to achieve the aim of "zero log exports" in the medium to long terms.

Issues impacting on developing the domestic market

The industry consultations identified the following as some of the main issues impacting on the sector's ability to be competitive on the domestic market against imports:

- Poor consumer understanding of timber.
- Lack of appreciation of the environmental benefits of wood compared with non-wood substitutes.
- Poor quality of lumber on offer.
- Lack of monitoring of lumberyards to comply with national timber grading rules.

Poor consumer understanding of timber

It would appear that the average consumer in Guyana has a poor understanding of timber generally, and specifically Guyana's hardwoods and their actual and potential end use applications.

A number of strategies are described below, which could assist in improving the consumers' knowledge and understanding of their local timbers, and enable them to accept and feel comfortable about specifying local Guyanese hardwoods in projects, rather than buy imported substitutes.

Public Education about Guyana's hardwoods

It is imperative that GFC/FPA/FPMDC embark on a concerted public education to highlight and emphasise the uniqueness, beauty and durability of the nation's hardwoods including the lesser used species now being promoted. Any public education about timber should also emphasise the environmental benefits of using timber compared with non-wood substitutes.

Develop "Selecting Wood for Housing and Construction" guides for consumers

Immediately, GFC/FPA/FPMDC should consider developing a simple guide on the end-use applications of Guyana's main commercial species to assist consumers, builders, architects, developers and specifiers in selecting Guyana's wood products for projects.

Such a document should emphasise the importance of selecting the correct wood species for the correct end-use application. For example, the guide should list species that can only be used externally (structural) and those species that can only be used internally (decorative and/or appearance). The emphasis in the document should be on the properties that make a species suitable for either internal or external use.

Promote the durability of Guyana's hardwoods

One of the reasons consumers are turning away from timber and preferring concrete, steel, plasterboard and aluminium is the perception that timber is non-durable. Timber can be very durable when used correctly, as can be seen from many of Guyana's iconic timber buildings found around Georgetown.

On the other hand, wood is a natural product which can deteriorate quickly if used improperly without appropriate seasoning and preservative treatment in some cases.

It is suggested that GFC/FPA/FPMDC should consider a national promotion using Georgetown's iconic old wooden buildings, to illustrate how timber can be durable in building and construction when the correct species are used and also dried properly. The emphasis in the durability promotion should be on the correct seasoning or drying of lumber prior to use.

Almost all the lumber from Guyanese hardwoods sold on the domestic market is green sawn. Many industry participants in the industry consultations reported that the common practice in Guyana is for builders or home owners to buy green lumber (because of cheaper price) and air dry it for a couple of months before using it in building and construction projects.

Drying wood to the correct equilibrium moisture content for different end use applications should be done by trained specialists. The equilibrium moisture content for wood must take into consideration the climatic conditions in the destination where the timber will be used.

For example the equilibrium moisture content for timber destined for temperate environments is different (lower between 6 and 12%) to timbers destined for use in high humidity tropical environments (generally higher between 20 and 25%).

The main reason for drying timber properly prior to use is to control excessive shrinkage in service. Drying timber must also be done properly and under controlled conditions to minimise degradation such as checking, bowing and twisting.

The average consumer of wood may not have this knowledge, or be aware of this information which is critical when selecting timber for projects.

It is equally important for the industry to educate builders, architects, specifiers, developers and designers, who just like to the average consumer, may lack the knowledge and understanding of the proper use of wood.

Educate the public about the environmental benefits of wood

Guyana is not the only country where the domestic market is moving away from timber in preference for non-wood substitutes. The effectiveness of the global campaign to highlight the adverse environmental impacts of using wood from natural forests has provided ammunition to producers of non-wood substitutes to attack wood products.

These anti-wood campaigns, targeted particularly at tropical timber, have been highly effective, and have resulted in the progressive erosion of tropical timber's market share in the major consuming markets of Europe, North America and Japan.

The timber industries in these markets, through public education and campaigns, have been promoting and emphasising the environmental benefits of wood generally compared with substitutes, to protect their own domestic industries. Tropical timber benefits from such campaigns because the emphasis is on encouraging more consumption of wood, both temperate and tropical.

Such campaigns also target primary and secondary school students, who are the future consumers. Similarly, these campaigns target tertiary institutions such as technical colleges and polytechnics and universities, where the future professionals for the wood products industries are trained. An architect or a designer who is familiar with wood as part of his or her training is more likely to specify wood in their professional career than one who has no experience with wood.

It is recommended that GFC/FPA/FPMDC consider similar public education and campaigns in Guyana. Such campaigns should be developed and delivered in collaboration with building engineers, architects, designers and specifiers, targeted at the general public but specifically at home owners; builders and contractors; and carpenters and other wood trade artisans.

The focus of the campaigns should be to highlight the environmental benefits of wood such as its high embodied energy (which makes it an excellent insulating material and thus cheaper to cool compared with concrete buildings), low carbon footprint compared with substitutes (in addition to trees absorbing carbon dioxide and therefore contributing to mitigation of climate change, the energy input required to produce a unit of timber is far less than that for steel, aluminium or concrete) and timber as a natural and renewable resource.

Countries such as Canada, the USA and Australia have successfully developed and implemented “Wood is naturally good” promotional campaigns aimed at educating the public about the environmental benefits of wood, which the industry in Guyana could emulate.

Use radio and television as mediums for the public educational campaigns

GFC/FPA/FPMDC should also consider developing and implementing weekly radio and television programs in collaboration with some of Guyana’s popular television and radio stations, where experts (building engineers, architects, designers etc.) can appear in a “Talk Back” format and answer questions from home owners on common issues/problems they may be encountering in using wood for building and construction. Such programs should also discuss issues relating to how to buy and use wood properly for building and construction.

The benefit for the television and radio stations is that such programs can enhance their audience reach and therefore achieve high public “ratings” for them, which impact on their profitability.

Buyers of radio and television advertising generally choose radio and television stations which have better audience reach and high public rating. Such public educational campaigns have been used to good effect in Australia in many industry sectors.

Use government procurement policies to encourage the use of Guyanese timbers

All over the world, governments are major consumers of goods and services, and routinely use this enormous purchasing power to influence public policy and/or change behaviour.

It is understood that the FPMDC has already initiated discussions with the government to ensure the government’s enormous purchasing power is used to influence behaviour in relation to specifying Guyanese timbers in building and construction projects funded by the tax-payer.

Consideration should be given to changing government tender guidelines to require government funded building and construction projects to stipulate that a certain percentage of the material must be “local content” including local Guyanese timbers.

Many countries adopt this strategy in negotiating investment and tender terms with investors. In Ghana, a Chinese contractor which won a government tender to refurbish a major public building was required, not only to source all the doors and windows locally from local manufacturers, but the contract stipulated that the doors and windows must be manufactured from local timber species.

This has resulted in the Ghanaian company which won the tender to supply the doors and windows, investing in new equipment and skilled personnel to manufacture the doors and windows locally for the project.

The company is now a major exporter of high quality wooden doors and windows to Europe and Australia. In addition, the company is manufacturing and exporting high quality garden furniture.

To move away from the existing narrow focus on the premium species of Greenheart and Purpleheart, government tender documents should not specify species but should outline the properties that the timbers to be used in the projects should have, as well as the intended end-use applications such as structural, aesthetics, decorative, appearance etc. Such an approach would assist in further promoting Guyana’s lesser used species in addition to the already well-known premium species.

Encourage the private sector to similarly use Guyanese timbers in projects

GFC/FPA/FPMDC should also actively seek private sector developers/investors who may be planning new investment in large public buildings (resorts/hotels/office buildings etc.) and encourage them to use local Guyanese timbers where ever possible. Again the emphasis should be on the desirable properties for the intended end-use application rather than nominating species.

In many parts of the world, major private sector and public buildings have been used to promote local timbers. As part of Australia’s parliament house completed in 1988, the government made the decision to represent each of the main commercial species from all the states and territories in the country in the new building. Today, Australia’s Federal Parliament building is a living showcase of the beautiful commercial timbers of Australia.

The industry should investigate how it can work with private sector investors in hotels, major office buildings and resorts to similarly represent some of Guyana’s beautiful timbers for promotional purposes. A strategy commonly adopted is to construct a conference or banquet hall with a particular timber species, and name the room after the species such as “Kabukali Room” or “Shebadan Hall.

If it is not too late, consideration could be given to implementing this concept as part of the new Marriott Hotel being built in Kingston, Georgetown.

Promote and celebrate local designs and success stories

As part of the strategy to promote Guyanese timbers, there is an opportunity for GFC/FPA/FPMDC to investigate how wood design, based on local Guyanese timbers, can be incorporated in the curriculum of national arts and design schools such as The Burrowes School of Art.

Private and government sponsorships can be used to organise annual wood design competitions based on Guyanese timbers.

Design competitions can also be held in the regions, with the regional finalists invited to participate in the national competition. Successful participants should be given prominent recognition nationally through the print, radio and television media.

Create a Home Ideas Centre

In Australia, with the support of the timber and allied industries, the sector has created a permanent exhibition centre (Home Ideas Centre) where home owners and/or builders can visit to get ideas and advice on the design of new homes and/or renovation of existing homes.

GFC/FPA/FPMDC could consider creating a similar “Home Ideas Centre” where local companies can display their products made from Guyanese woods. The objective is to provide a “one stop shop” for wood users to see these timbers in service, and also obtain advice on available timbers and their end use applications. Examples of exhibits (which can be supplied by local companies) can include doors, windows, flooring, wall panelling, ceiling panelling etc.

Although the FPMDC already has a similar display at its office in Kingston, the location is obscure, and perhaps the exhibition is not widely promoted.

The permanent exhibition being proposed should stand-alone, and be located in an easily accessible area within the CBD of Georgetown. In addition, it should be promoted effectively and widely through print, radio and television, to encourage its patronage. The Centre should be staffed by specialists who can offer practical advice on wood species, their properties and possible end-uses.

An important adjunct to the Australian Home Ideas Centre concept is the annual Home Ideas Fair, which is private sector organised and funded, aimed to encourage home owners and other building and construction specialists to visit suppliers’ and manufacturers’ exhibitions for ideas and information on new building and construction products as well as latest building designs and fittings.

Create an annual event such as “Guyanese Wood Week”

GFC/FPA/FPMDC should consider creating an annual event “Guyanese Wood Week” as part of “International Forest Day” where the focus is to promote the benefits of using local Guyanese timbers in building and construction, design etc.

Such an event should be very well publicised and should involve popular local radio and television personalities, celebrities, actors; models etc. The advantage of associating high profile celebrities with products is that their popularity provides credibility and authenticity as they are already known and trusted within the community.

Use GFC offices to showcase species specific to particular regions

Given that some species tend to be specific to some regions, another idea is for GFC/FPA/FPMDC to use some of GFC’s regional offices as centres to showcase the timbers unique to these regions.

Local companies can be encouraged to supply the exhibits, which could include their contact details. Each exhibit could also include detailed descriptions of the species as well as the possible end-uses.

Create a national trade magazine

Trade magazines have become an important and integral part of the promotional activities of almost every industry sector. If the timber industry in Guyana does not already have a trade magazine, serious consideration should be given to establishing such a magazine.

The success of any trade magazine, however, depends on the support, through paid advertising, it receives from the industry. Ideally, such a magazine should be a private sector initiative.

Initially, it may not be financially feasible to start a stand-alone timber industry trade magazine. However, the idea can be started by investigating how it can be incorporated in an already existing magazine of an allied industry.

If such a trade magazine was established, the GFC can support it through directing all its advertising and promotional activities to it, including the promotional activities of the FPMDC and the FTC. Similarly the FPA and GMSA can support the magazine through encouraging their members to use it for advertising and promotional purposes.

Ensure the lumber yards to comply with national timber grading rules

In relation to complaints by consumers that the quality of the local Guyanese timbers on the domestic market is poor, the industry consultation identified the lack of monitoring of quality and prices as one of the main causes. One of the main complaints was the great variation in lumber thicknesses due to poor sawing techniques.

Internationally, lumber is priced based on its grade. There are eight hardwood lumber grades in widespread use today, starting from FAS (First and Seconds), which is the highest grade and 3B being the lowest (used widely for pallets and crating). The higher grades of lumber have more large clear areas, as grading is based on the quality of the two faces rather than the thickness of the lumber.

During the industry consultation, it was reported that the lumber yards in Guyana consistently refuse to grade and price their lumber according to the Guyana Lumber Grading rules. The lumber yards are able to get away with this practice because of the general ignorance of consumers about selecting timber for different end-use applications based on the grade and price.

Require lumber yards to price lumber by grade

To engender confidence in consumers to purchase local lumber in preference to imported sawn softwood lumber, it would be important for the GFC, FPA, GMSA and the FPDMC to work with the government to either change government policy or even introduce legislation if necessary, to ensure the lumber yards grade and price their lumber appropriately.

The lumber yards should be required, if necessary by legislation, to display prices based on the grades of lumber, to assist consumers in making informed decisions about their purchases.

Enhance the monitoring of lumber yards

In Australia, to ensure that imported wood products meet Australian standards in terms of safety and performance, the industry associations randomly visit wood product merchants and collect samples of imported wood products for independent testing. The names of timber merchants found to be importing non-compliant products are published in the various trade magazines to alert and inform consumers. In extreme cases of product failure, the importers are prosecuted for endangering public safety.

GFC, FPA, GMSA and the FPDMC could consider a similar approach. Similar to the monitoring of GFC tags undertaken by GFC's Monitoring Unit, experienced GFC grading staff can be deployed to visit lumber yards randomly to check that lumber merchants are correctly grading and pricing their lumber.

Non-compliant lumber yards should be prosecuted as deterrent to others. The cost of monitoring can be jointly funded by the industry and the government. Penalties for non-compliance should include fines, and in the case of repeat offenders, possible jail terms should be considered and included in legislation.

Publish lumber prices by grade to assist consumers and producers

Another common industry complaint was that the lumber yards consistently under-price lumber from the community associations and other chain saw producers. This occurs, partly because of the poor quality of the lumber from these suppliers.

One strategy for addressing this problem is for the FPDMC to publish indicative prices of lumber by grade in the local newspapers. To minimise cost, this information can be published weekly, bi-weekly or monthly, depending upon how frequently the prices change.

Changes in price can reflect changes in the exchange rate between the Guyanese dollar and the American dollar, or changes in the national consumer price index (CPI), which is a measure of changes in inflation, if this information is published by the government.

In Australia, CPI information is published quarterly by the government agency, the Australian Bureau of Statistics (ABS), and is one of the factors the Reserve Bank takes into consideration in setting interest rates.

Establish a telephone hotline for lumber prices

Another strategy is for the FPDMC to establish a “hot line” that both producers and consumers can call to obtain real time information on lumber prices. Similar pricing information can also be provided for logs if the suggested “Log Consolidation Centres” are established.

CHAPTER SIX

STRATEGIES FOR ENHANCING PROMOTION IN INTERNATIONAL MARKETS

Given that the industry is currently producing mainly green sawn lumber for export and also exporting logs, any strategies aimed at enhancing market promotion in international markets must initially focus on the markets which accept these products.

The reality is that the current situation of producing low value green sawn dressed and undressed lumber and export of logs is unlikely to change substantially in the short to medium terms.

The industry consultations identified the Caribbean countries as the main market for Guyana's green sawn lumber, although some companies export some green sawn lumber to Europe and North America.

The Caribbean market

It would appear that one of the major attractions of Purpleheart in the Caribbean markets is its relative stability and low shrinkage in service even in the green form. Purpleheart is also attractive as an appearance/decorative species.

The industry, GFC through the FPDMC and the government should work together to further develop this market for Guyana's wood products suppliers. In particular, more effort should be directed at educating the Caribbean market into accepting more commercial species from Guyana rather than the existing narrow focus on a few species such as Purpleheart and Greenheart.

This can be achieved by FPDMC and the industry adopting a two-prong approach for promoting and marketing Guyanese wood into the Caribbean market.

First, the industry and the FPDMC and the industry should focus on promoting Purpleheart specifically for decorative end-use application.

Second, the industry and the FPMDC should work together to identify additional commercial species which have the stability and low shrinkage characteristics similar to Purpleheart, and promote them specifically as structural timber.

Products intended for decorative application can attract higher prices than those for structural application.

The product differentiation strategy suggested above would, in the medium to long terms, lead to a diversification of wood products offered by Guyana to the Caribbean market based on species, price and also end use application.

Forest Management Certification and Verification of Legal Origin

As described in Chapter 2, the perception in the major markets of the EU and North America of Guyana as a high risk source for illegal timber, as well as the general lack of any forest management certification is a major weakness and a threat to the industry, particularly in markets where verification of legal origin is required.

The main markets for Guyana's log exports are China and India. These countries export their re-processed and manufactured wood products to Europe and North America, which are now requiring certified legal timber.

Pressure from the consuming markets of Europe and North America on Asian suppliers to supply certified legal wood products could result in the loss of the existing Asian markets for

Guyana's logs in the short term, unless log exporters can demonstrate legality through independent third party certifiers.

Pending conclusion of the VPA with the EU, an option for the industry and the government to consider is to negotiate with one of the main certification bodies (Soil Association/Woodmark, Scientific Certification Services, Rainforest Alliance/Smartwood, SGS etc.) to develop a cost-effective VLO certification template for the industry in Guyana.

Alternatively, the industry may wish to only focus in the Caribbean markets where certification or verification of legal origin is not yet a requirement.

Some of the activities that can be undertaken to further enhance access for Guyana's wood products in international markets are described below.

Explore new overseas markets

As indicated above, Guyana will continue to export green sawn lumber in the short to medium terms. This being the case, the government and the industry should consider focussing on supplying sawn lumber rather than logs to markets such as Thailand, Vietnam, Philippines, China, Taiwan which buy raw material for re-processing for the more mature and sophisticated markets of the EU, Japan and North America.

New opportunities also exist in African markets such as Ghana and Nigeria, which now have low forest cover and import wood products. Indeed the Economic Community of West African States (ECOWAS) region has emerged as a major market for Ghana's wood exporters, with Nigeria, Burkina Faso and Senegal also being among the main importing countries.

The Middle East is also a rapidly growing market but Guyana must be prepared to compete with the likes of Malaysia, Indonesia and Thailand in these markets.

Guyana's competitive advantage would lie in supplying green sawn and air dried lumber which would be cheaper than products from the Asian suppliers.

Improve the inspection of the quality of lumber exports

As indicated above, in the short to medium terms, Guyana will continue to export low value sawn green and air dried lumber. To ensure the country derives maximum value from these products, the industry and the GFC should consider establishing a unit to examine and approve the quality of sawn lumber prior to export on a cost recovery basis.

The objective should be to ensure that the products being exported meet minimum international grading standards. It is proposed that such inspections should be carried out for exports to all markets including the Caribbean.

If implemented properly, these inspections would act as a deterrent and encourage producers to improve the quality of lumber exports from Guyana.

Train producers to improve the quality of green sawn lumber

The industry and the FTC should explore further options for providing training to community associations and other chain saw operators in particular, to improve the quality of their products for both the domestic and export markets.

As reported during the industry consultations, the community associations and the small chain saw operators are the source of the majority of the poor quality lumber being sold on the domestic market.

The GFC should also to investigate more novel and innovative options for fully using the ITTO-funded Kilns to assist community associations and individual chainsaw operators to produce KD timber, both for the domestic and export markets.

Industry reports indicate that only the ITTO-funded Kiln on the Essequibo Coast is being used, with the two at Linden and New Amsterdam regions not being used at all since installation. If necessary, the kilns not being used should be relocated to areas that have the capacity to use them.

One option is for the GFC to explore leasing the kilns to private sector operators on commercial basis.

Supply more value added Guyanese wood products to the Caribbean markets

Although many suppliers are successfully exporting to the Caribbean market, there is opportunity to further develop these markets for the industry, by supplying more value added products from Guyana's lesser used species.

As discussed in previous chapters, Guyana's wood exports to the Caribbean markets focus on two attributes – limited range of species (Purpleheart and Greenheart) and limited range of products - green sawn dressed and undressed lumber, and some doors, windows and furniture.

As mentioned in Chapter 2, the successful conclusion of the CARICOM-Canada Free Trade Agreement would likely impact negatively on the existing market share for Guyana's wood products in the Caribbean region. This is because, Canadian wood products would be able to enter these markets free of duty, and thus be able to compete more effectively in these markets based on price and quality, unless Guyana was able to exclude wood products from the negotiations, which is very unlikely.

That being the case, the ability of Guyana's wood products to compete with Canadian softwood products would depend on Guyanese exporters being able to differentiate their products based on the unique properties of tropical hardwoods compared with temperate softwoods, quality and price. This is where enhanced value adding to supply a wide range of quality products such as secondary processed wood products and builders' joinery wood products becomes important, and needs greater consideration by the industry and the government.

Use Guyana's diplomatic missions more effectively in market development

In all overseas markets including the Caribbean, there is opportunity for the industry and the government to explore how the trade desks in Guyana's diplomatic missions around the world can be used more effectively to promote the country's wood products.

Competitor countries such as Malaysia and Ghana have offices established in the key markets of Europe, Asia and the Middle East, to promote their products including seeking new customers.

In the short to medium terms, such an approach may not be financially feasible for the industry and the government. A cheaper and cost-effective alternative is to use existing mechanisms such as the diplomatic missions to achieve the same objectives.

As the staff at the trade desk may not have wood industry background and/or experience, the success of this strategy will depend on the industry, GFC and the FPDMC being able to provide the required training and information, as well as regular briefings to the trade desk staff, to be able to effectively represent the industry and its products to potential customers.

Make better use of trade associations in key markets.

Industry associations such as The European Timber Trade Federation (ETTF) and the International Wood Products Association (IWPA) exist to promote the interests of timber trade in their respective jurisdictions. The equivalent bodies in Japan and China are the Japan Lumber Importers Association (JLIA) and National Forest Products Industry Association (CNFPPIA) respectively.

The GFC is an affiliate member of the IWPA. The FPDMC should investigate the possibility of becoming affiliate members of the key industry associations in Guyana's main markets for wood products. The advantage of being a member of these associations is that it provides the opportunity to access information on their members and their wood products supply requirements for the benefit of FPA and GMSA members.

Similarly, the FPDMC would be able to provide information on Guyana's wood products and FPA and GMSA member suppliers for circulation to the members of these overseas industry associations.

Although such activities can be resource intensive, they can be very effective in bringing wood product suppliers and buyers directly together.

Encourage exporters to visit buyers in their home countries

Often, exporters have no idea what their products are being used for. In addition to helping to improve business relationships, visits to the manufacturing facilities of importers are important in informing suppliers about additional value-adding that can be undertaken, both for the benefit of the supplier and the importer.

For example, a visit to a log importer in China would inform the Guyanese exporter of the range of value-added products being manufactured from Guyanese logs, and give the Guyanese exporter ideas of additional processing that can be undertaken in Guyana prior to export. This will not only assist in obtaining better prices for the exports because of the additional value-adding, but will also help in creating value-adding jobs locally in Guyana. Log exports not only export low value products but they also export value-adding jobs that can be created in Guyana, to markets such as China and India.

Harness better the potential of e-commerce and social media

The FPDMC has a good website but this should be further expanded to include additional applications such as Twitter, Facebook, Skype, Facetime etc. Suppliers should also be encouraged to subscribe to these modern communication tools as they make communication and interactions with existing and potential customers easier and timely. Product information including prices can be provided to customers in real time through mediums such as Twitter, Facebook and Skype.

To derive maximum benefit from these modern effective communication tools requires companies to continually provide up-to-date information. Subscribers lose interest in a seller's website if the information is not renewed continually.

Create a virtual online wood products market place for Guyanese suppliers

One of the problems with websites is that they are generally static and not interactive. ICT applications are continually offering efficient, powerful and faster interactive e-commerce tools and options.

The Sales/Wanted section of the FPDMC's website should be re-designed to make it more interactive as an online virtual marketplace for Guyanese suppliers on a subscription basis.

Companies can pay to post information about their products and also advertise themselves. Online marketplaces such as Alibaba, WoodBusinessPortal.com, EBay and PayPal pay for themselves through subscription and advertising mainly from suppliers.

Advertise aggressively Guyanese timbers in international trade magazines and websites

As indicated, the FPDMC has an impressive website with good information on Guyanese commercial timbers and some suppliers. However, unless this information is publicised widely, it may not be available to potential buyers overseas.

The GFC, FPDMC and the industry should consider placing high profile generic advertisements in the trade magazines of the key target markets. For example, countries such as Malaysia and Ghana advertise regularly in the IWPA's trade magazine, "International Wood", and the industry in Guyana should consider a similar approach if this is not being done already.

If the FPDMC does not already subscribe to these magazines, serious consideration should be given to addressing this omission. These trade magazines usually contain a wealth of information on buyers and the products they deal in. Information about the commonly traded wood products is also published regularly in these trade magazines.

The European Timber Trade Federation's website: www.ettf.info, as well as the websites of other trade associations such as the Timber Trade Federation of the UK: www.ttf.co.uk, Japan Lumber Journal: www.jlj.gr.jp/database/glossary.html and China Timber & Wood Products Distribution Association, should also be explored for advertising.

Advertising can take a simple form such as requesting the industry association to create a hotlink on their website to the website of the FPDMC, to assist their members find out about wood product suppliers in Guyana.

Appoint a dedicated market information officer at FPDMC

A new person can be recruited or the jobs of the existing officers can be restructured to enable one officer to devote all their time trawling the internet for market intelligence information, which can then be provided directly to the industry. This officer can also be made responsible for the pricing information hotline proposed in this strategy.

The Internet's wealth of information on wood products market opportunities should be better harnessed for the benefit of the industry. As already indicated, because of the generally low level of ICT literacy in the industry, the GFC and the FPDMC should assist by doing this research and information trawling for them.

Trawling the Internet can be a tedious and laborious task but if done properly, it can provide considerable benefit to the industry going forward.

CHAPTER SEVEN

FUNDING OPTIONS

Many of the ideas and suggestions in this strategy would only be successful if they can be funded adequately and sustainably. In this Chapter, a few funding options are proposed for consideration by the government and the industry.

Some of these funding options may be able to be implemented administratively, whereas others may require new legislation or amendments to existing legislation.

Increase the FOB tax on logs exported

As suggested in Chapter 4, an increase in the FOB tax of log exports could act as an incentive to encourage domestic value adding. But it can also generate additional funds for the industry's marketing and promotion activities.

However, as already discussed, such a tax should not be too prohibitive to destroy the log export trade because of the lack of existing domestic processing capacity.

The ITTO publishes FOB log export prices for all three ITTO regions – Asia-Pacific, Africa and Latin and South America, and the GFC should consider using this information as a guide in pricing logs so as not to price Guyana's logs out of competition in comparison with other log exporters.

Put an export tax on green sawn lumber

Similar to the increasing the FOB tax on export logs described above, the GFC and the government should also consider imposing a tax on exported green sawn lumber to both encourage domestic drying and dressing, as well as raise additional funds for marketing and promotion activities.

Impose a duty on all imported wood products

If there is no duty on imported wood products (pine lumber, MDF, Particleboard, pine plywood, OSB etc.) the government should consider introducing such a duty to assist the local wood products to compete with the imported products.

The government and the industry should work together to ensure that any new import duty introduced for imported wood products complies with WTO rules.

If imported wood products already attract a duty, consideration should be given to reviewing the duty with the view to increasing it sufficiently to remove any competitive advantage these imported products may have over local wood products.

Some of the revenue from import duty on imported wood products should be directed to supporting the implementation of the marketing and promotion strategy.

A joint GFC/FPA/GMA/FPMDC committee should be established to oversee the disbursement of the funds to ensure funds are directed to agreed marketing and promotion activities. Such a mechanism will ensure transparency, and also give the industry confidence that the funds are being expended for its benefit.

CONCLUSIONS

Some of the main conclusions are as follows:

- Although the industry is now focussed on producing low value primary products including logs for export, there is significant potential for the industry to enhance

domestic value adding to include secondary processing and tertiary manufacturing in the medium to long terms.

- Over the long term, the industry's objective is to move towards "zero log exports" and increased domestic value adding. This objective can only be achieved by the industry and the government working together to address some of the major constraints to value adding identified in this strategy.
- A combination of government incentives, policy changes and new industry taxes and charges should be used to assist in moving the industry forward towards enhanced domestic value adding.
- In the short to medium terms, the focus should be on improving the quality of sawn timber, the main product currently produced by the industry for both the domestic and export markets, to meet international grading requirements. Improvements to the quality of sawn lumber should include moving to kiln drying.
- An immediate priority is to assist the existing exporters to meet the requirements for certified legal timber in the key consuming markets of Europe and North America.
- The government and the industry should work together to explore new and emerging markets of Asia and Africa for saw lumber rather than log export.
- There is an opportunity for the FPDMC to further enhance its activities to better support the industry, both domestically and internationally.
- There is need to embark on extensive public education to improve the understanding and knowledge of domestic consumers in selecting wood for a range of building and construction activities. Such public education should also focus on the durability of timber as well as the environmental benefits of using wood in comparison with non-wood substitutes.
- Greater work is required to diversify the range of commercial species currently being sold in the domestic and international markets, and this should include an aggressive development and promotion of Guyana's lesser used species.