

FOREST SECTOR INFORMATION REPORT

Annual Review

2009



GUYANA FORESTRY COMMISSION

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ABBREVIATIONS

ACP	African Caribbean and Pacific (countries)
EU	European Union
FLEGT	(European Union) Forest Law Enforcement, Governance and Trade
GDP	Gross Domestic Product
GFC	Guyana Forestry Commission
ITTO	International Tropical Timber Organisation
NTFP	Non Timber Forest Product
SFP	State Forest Permission
SFEP	State Forest Exploratory Permit
SPWP	Secondary Processed Wood Product
TTRM	Tropical Timber Market Report
TSA	Timber Sales Agreement
VPA	Voluntary Partnership Agreement
WCL	Wood Cutting Lease

GLOSSARY OF TERMS

Dressed Lumber	Wood sawn lengthways from logs, further processed by planing, etc.
Firewood	Includes parts of trees made up into bundles or loads, or cut in a manner in which it is usual to cut wood for burning, and all refuse wood generally, but does not include straight logs or poles of any kind.
Fuelwood	Wood in the rough, from trunks and branches of trees, to be used as fuel for purposes such as cooking, heating and power production. Categories of Fuelwood are converted to charcoal.
Non-timber Forest Products	All biological material, other than timber products, that may be extracted from natural ecosystems, either for commercial purposes, for use within the household or for social, cultural or religious purposes. Also known as Non-wood Forest Products.
Piles	Long straight pieces usually destined to be driven into the ground by impact.
Poles	Straight pieces of 5m or more in length taken from tree trunks. They are used principally to support telephone, telegraph and electrical transmission lines and for scaffolding.
Posts	Round, hewn, squared or split wood, usually less than 3m in length, but possibly up to 5m, used for fencing, guard rails and the like.
Primary Timber	Includes logs, firewood (raw materials), chainsaw lumber, roundwood and splitwood.
Round Logs	A bole or a large branch after felling. Under the ITTO definition it is referred to as Industrial Roundwood.
Roundwood	Wood in its natural state as felled or otherwise harvested, with or without bark, round, split, roughly squared or in other forms. Roundwood includes spars, posts, poles (Wallaba) and piles (Greenheart, Kakaralli and Mora).
Sawnwood	Dressed lumber, undressed lumber, sleepers and pallets.
Shingles	Squares of usually Wallaba (<i>Eperua falcata</i>) wood used to construct roofs and for panelling purposes.
Spars	Saplings 15-25cm in diameter.
Splitwood	Comprises paling and vat staves and shingles.
Timber	Includes a tree or any ligneous part of a tree whether standing, fallen or felled, and all wood, whether or not sawn, split, hewn or otherwise cut up or fashioned.
Undressed Lumber	Wood in the rough sawn lengthways from logs.
Wattles	Saplings less than 8cm in diameter.

METRIC CONVERSION TABLE

To Convert	From	Into m ³ multiply by
Logs	Hoppus cft	0.036
	Cft	0.0283
Mill sawn lumber	Board ft / Board Measure	0.002358
Chainsawn Lumber	Board ft / Board Measure	0.002358
Piles	Linear ft	0.02
Poles	Linear ft	0.0067
Posts	Linear ft	0.0057
Paling Staves	Pieces	0.00236
Vat Staves	Pieces	0.001132
Shingles	Pieces	0.000566
Spars	Linear ft	0.000283
Charcoal	Lbs	0.0034
Firewood	Cords	2.83

EXCHANGE RATE

US\$ 1 = G\$ 200

1 INTRODUCTION

This report focuses on the Forestry Sector in Guyana for the year 2009. Production and export of various forest products based on Guyana Forestry Commission (GFC) data are assessed in comparison with the previous year's performance. Additionally, the report compares summary averages of domestic and export prices and sector employment levels.

Allocation summary of State Forest lands across concession classes (with areas classified according to GFC designated use/size categories) for year 2009 compared to 2008, is included. The Forest Sector's contribution (as traditionally measured in official national statistics) to Guyana's real Gross Domestic Product (GDP) over the past ten (10) years is also featured

Before addressing the Forest Sector in Guyana, a qualitative background summary, covering changes/features and outlook in the local and international economies, is provided. This section includes developments in the International Tropical Timber Market with emphasis on the Latin America/Caribbean region.

In the core report, Production data compares the volumes of various forest products by product and species categories (where applicable), between the two (2) periods, and across the Regions (as designated for GFC purposes, and corresponding to the national counties of Demerara, Berbice and Essequibo), by their respective sub-divisions referred to as Forest Stations.

Export data is analyzed in terms of both volume and value, including by destination markets.

2 EXECUTIVE SUMMARY

Production volumes of 266,198m³ of Logs, 19,414m³ of Roundwood, 73,118m³ of Sawnwood and 18,877m³ of Plywood were recorded in 2009. Other products included, Fuelwood (comprising of Charcoal and Firewood), Splitwood (Shingles and Paling Staves), Wattles, Manicole Palm and Mangrove Bark were also produced in the year.

Log Production for the year recorded a marginal decline as compared to that of the previous year by 3.31%. This was as a result of the decline in the production of Special Category Logs, which dropped by 4.56% while other Category such as Class 2 and Class 3 Logs fell by 5.4% and 11.13% respectively.

In 2009, total Roundwood produced recorded an increase by 3.69% when compared to that of 2008. This increased Roundwood production was primarily the result of larger volumes of Wallaba Poles being harvested. Production of Wallaba Poles recorded an increase of 52.51% over the corresponding period of 2008. While Spars and Kakaralli Pile recorded increased production in 2009 over 2008, by 17.16% and 3.8% respectively, there was reduced production of Wallaba Posts and Greenheart Piles by 11.92% and 1.28% respectively.

Production of Primary Lumber for 2009 recorded an overall increase by 9.2% when compared to the corresponding period of 2008. This increase was mainly due to Special Category Lumber recording 47.68% higher production volume, over 2008's figures. While Class 1 Lumber also recorded an increase in volume for this product category by 4.83%, Classes 2 and 3 lumbers recorded decreases of 5.90% and 3.80% respectively. Production volume of Plywood, recorded 18,877.m³ for 2009, declining by 8.5% as compared with the volume produced in 2008 for the same period.

In the export market, the volume of Logs exported declined, recording a reduction by 32.9% in volume, with value declining by 35.2%. In the case of Sawnwood, volume fell by 11.9% while value declined by 5.9%. Exports of the other main Forest Products, such as Roundwood and Plywood also recorded declines in both volume and value. Roundwood fell by 49.9% in volume and 32.4% in value while the exports of Plywood declined by 32.8% in volume and to 37.5% in value. Total export value of Forest Products was US\$45.5M in 2009, reflecting a reduction by 19.8% as compared to total export value of 2008, which stood at US\$56.75M

3 ECONOMIC ENVIRONMENT

3.1 The International Economy

3.1.1 Economic Growth

Forecast for 2010 expects world output to rise by 4%. However, in most advanced economies recovery is expected to remain sluggish compared to past standards; whereas, in emerging and developing economies, activities are expected to be relatively vigorous, due to buoyant internal demand.

Looking at the global economy, real activity is rebounding, supported by policy stimulus. The second half of 2009 saw global production and trade bouncing back. Timely policy support stimulated strong confidence on both the financial and real fronts. Monetary policy has been highly expansionary, with interest rates down to record lows in most advanced and in many emerging economies. Some fiscal policies have also provided a major stimulus in response to the deep downturn.

With these policies in place, recovery is proceeding at varying pace. In spite of these policies to stimulate growth, recovery in advanced economies is expected to be weak, with signs of improvement until late 2011. This is the case in a few advanced European economies and a number of economies in central and Eastern Europe and the commonwealth of Independent States. Further compounding the problem are issues of high unemployment, not fully healed financial systems, and in some countries, weak household balance sheets present further challenges.

In 2009, growth in emerging and developing economies was a moderate 2%, with growth expected to rise in 2010. With the projected variations in growth performance, key emerging economies in Asia are expected to lead the global recovery.

Financial markets have recovered faster than expected but remain challenging overall. Money markets have stabilized, and the tightening of bank lending standards has moderated. Bank lending is likely to remain sluggish, given the need to rebuild capital, the weakness of private securitization, and the possibility of further credit right-downs (related to commercial real estate).

3.1.2 Flows to Developing Countries¹

According to UNCTAD, the year 2009 marked the end of six years of uninterrupted growth with inflows to developing countries declining by 35%. This decline was widespread across the various regions with none being spared as a result of the global financial crises.

In Africa, inflows fell by approximately 36% due crisis-induced lull in the global demand for commodities, a major driver for FDI in these economies, which affected some 33 least developed countries (LDCs).

In South, East and South-East Asia, the decline in FDI flows, for 2009, across the region was at an estimated 32% over the prevailing 2008 figures. According to UNCTAD, the falling external demand for Chinese and Indian-made goods and services has caused foreign companies to cut back on their investment plans in these two large countries. However, in the latter half of 2009, FDI stopped declining in a number of countries especially in China.

In West Asia, the worsening regional and global economic outlook, together with frozen global credit markets, has negatively impacted the financing of mega development projects in oil-rich countries of the region. This, coupled with the plummeting cross-border mergers and acquisitions (M&A) activities and decreased intra-regional FDI flows, resulted in a 43% decline in FDI flows to the region in 2009, when compared to 2008.

For the Latin America and Caribbean region, it is estimated that FDI flows fell by 41% in 2009 when compared to 2008. This was the result of large number divestments of foreign affiliates to local owners which impacted on the overall level of cross-border M&As.

3.2 International Forestry Environment

3.2.1 International Tropical Timber Market Summary

The global financial crisis continues to affect the international market for tropical timber. However, many producer countries are seeing positive improvements in the demand for tropical timber.

In Gabon, the level of trade has held steady over the past two to three months. Some of the previous

¹ UNCTAD *Global Investment Trends Monitor, January 19, 2010.*

pressures to curtail production have been reduced owing to the stable prices coupled with firm demand from Asian destinations. Reports indicate that the best that can be expected from Europe will be small, regular volumes in selected species of sawn lumber, leaving the main business, as is the case currently, for China, India and other Asian destinations.

Globally, focus is being placed on domestic wood processing. In a bid to increase the domestic wood processing rate in Gabon to 75% in 2012 and only allow 25% of the log harvest to be exported, the Government of Gabon has announced a log export ban. This has left much uncertainty for countries that rely heavily on the importation of logs from Gabon, for their manufacturing industries, in countries such as China and India, and to some extent, North Africa.

Additionally, the current situation has left buyers and suppliers in a challenging situation, attempting to pre-empt the Government's decisions concerning current contracts outstanding, already felled logs and the possible rush of continued feeling until clear decisions are made as to the course of action to be taken to stop log export. With the sources of logs constantly shrinking, buyers are seeking out other opportunities or sources for logs.

West African log and lumber exporters have survived through a very difficult 12 months, owing to continued demand from the Asian market. It is anticipated that if these markets hold, the companies benefiting from this aspect of trade will continue to do so through the third and fourth quarters of 2010. The expectation remains that 2010 will bring some revival in European business.

With the exception of Ghana and Cote d' Ivoire, most efforts in the Central and West African forest sector have aimed to reduce log extraction and to certify forest areas. There is regular harvesting of plantations in Cote d'Ivoire; however, the competition for export from low cost lumber in South America has made the country's plantation resources not financially viable at the present time. Nigeria also has some extensive areas of plantation teak and a very regular log export business, much of it reportedly being regular shipments for Indian buyers at prices that remain very stable over long periods.

Malaysian timber prices remain depressed even as the two economic stimulus packages announced earlier this year have yet to make any impact on the local economy. The spring remodelling and construction season in the northern hemisphere has commenced, but many Malaysian timber products manufacturers are still waiting for orders to come in. Some manufacturers complained they have not had any new orders for more than four months.

Low demand along with the credit crisis and higher costs has had a severe impact on tropical timber imports from the US. US import statistics for 2009 show a steep decline in almost all tropical timber products compared with the same period last year. The value of lumber imports fell by 60-70% for most species.

Beginning January 1, 2010, China and the Asean-6, (Brunei, Indonesia, Malaysia, the Philippines, Singapore and Thailand), will ensure full implementation of the Free Trade Agreement (FTA) by eliminating the duties on up to 90% of products according to the agreement.

Indian exports grew by 18% for the month of December 2009 and industrial activity figures show a continuous improvement over the first three quarters of 2009 with an increase of 11% being noted in October 2009. This positive economic activity is helping enormously to create jobs in the country. After coping with a challenging 2009, progress is now seen on all fronts and as the global economy appears to be recovering GDP growth forecasts are optimistic. In December 2009 GDP stood at 7.5% and for 2010-11 it is expected to be around 9%. India, has announced that the country's action plan, as called for by the Copenhagen Accord, is ready. India has shown preparedness to reduce emission by 20-25 percent of 2005 levels and that a low carbon growth strategy will be developed.

According to forecasts released by the Chinese Academy of Social Sciences, China's economy is expected to be healthy in 2010 with a growth in of GDP 9 percent. It is forecast that, as the global economy recovers, China's imports and exports will exceed 18 percent and 17 percent respectively in 2010.

A survey of 70 large wood processing enterprises by the Bank of China revealed that, starting in August of 2009, export orders have risen significantly. Statistics showed that production in about 60 percent of the enterprises, recovered to the level before the global financial crisis. Compared with the worst period in 2009, current orders in 30 percent of the enterprises rose considerably and in some by 100 percent. A gradual recovery was reported by 20 percent of the enterprises; 30 percent said orders had increased from 30-100 percent while another 40 percent said that orders had recovered or even exceeded previous levels.

Brazil has implemented a tax exemption scheme on furniture that has been in force since November 27, 2009. The tax on such products varies between 5% and 10%. Some furniture companies had suggested that they could pass on to consumers a price reduction greater than the tax break. According to the Association of Furniture Industry of Rio Grande do Sul (Movergs), the main

cluster of the furniture industry in the country, the measure may lead to a fall of about 20% in prices consumer pay. According to furniture entrepreneurs, even though it is too early to analyze the impact, there are signs of a recovery in sales.

According to the ITTO Tropical Timber Report, analysis of the most recent Eurostat trade data indicates that European imports of hardwood-faced plywood from developing countries rebounded in the third quarter of 2009 after suffering four consecutive quarters of decline. The unprecedented fall in EU hardwood imports in 2008 and 2009 reflects the dramatic economic downturn across Europe. EU GDP is expected to have fallen by around 4% in 2009 according to the most recent European Commission forecasts (in November 2009). This compares to a fall of only 1.8% predicted at the start of the year. Signs that the European economy may have reached bottom began to emerge in the third quarter of 2009. The euro-area economy crawled out of recession in the three months to the end of September. GDP across the eurozone rose by 0.4%, the first quarterly increase for more than a year. While the European economy is expected to return to growth in 2010, the indications are that the rebound will be very weak across the continent.

Prospects are dampened by a wide range of factors including: high and rising levels of unemployment; overcapacity in the construction sector following the bursting of property bubbles in several countries (notably Spain, Ireland and the UK); the strength of the euro which is undermining European competitiveness in export markets; and the continuing unwillingness of European banks to provide credit, particularly to smaller businesses and households.²

In other news, the Government of Norway has announced an increase in its contribution to the Amazon Fund to US\$ 150 million in 2010, reportedly after seeing evidence of deforestation reduction in the region. The Fund was created by the Brazilian government in 2008 aimed at reducing deforestation in the region and is managed by the National Development Bank (BNDES). According to recent data, deforestation in the Brazilian Amazon between July 2008 and June 2009 was 65% less than the average recorded between 1996 and 2005 and over 40% below the deforestation rate of the previous year. These results are yet to be verified.

In Myanmar, market conditions remain unchanged from the past months. While most markets are still struggling, it is only the Indian market that remains active. India is one of the largest importers of Pyinkado logs from Myanmar and log buyers operating in Myanmar are concerned about the

² ITTO TTMR, January 15, 2010

reaction of end-users in India to the new prices. As these new prices will take effect only after the old contracts are exhausted, it may take some months to really see the repercussions.

Once again, industrial growth figures have reaffirmed that the Indian economy is rebounding faster than was forecast. GDP growth for August 2009 was 10.4%, the biggest jump during the past 22 months. This economic resurgence stems mainly from strong domestic demand. The good overall figures are also reflected in the timber sector.

US Lacey Act

On May 22, 2008, the U.S. Congress passed a groundbreaking law banning commerce in illegally sourced plants and their products — including timber and wood products. The new law is an amendment to a 100-year-old statute, named the Lacey Act. While the Lacey Act has long been one of the most powerful tools for the U.S. agencies fighting wildlife crime, its potential to combat illegal logging was untapped prior to May 22, 2008. Now the Lacey Act sets a groundbreaking precedent for the global trade in plants and plant products, acknowledging and supporting other countries' efforts to govern their own natural resources and putting in place powerful incentives for companies trading in these commodities, to do the same.

To address illegal logging and other illegal plant trade, the Lacey Act prohibits all trade in plant and plant products (e.g., furniture, paper, or lumber) that are illegally sourced from any U.S. state or any foreign country. It requires importers to declare the country of origin of harvest and species name of all plants contained in their products. The Act establishes penalties for violation of the Act, including forfeiture of goods and vessels, fines and jail time. It is important to note that the Lacey Act does not impose U.S. law on other countries. "Illegally sourced" is defined by the content of sovereign nations' own laws. The Lacey Act requires importers to provide a basic declaration to accompany every shipment of plants or plant products.

While the Lacey Act is rooted in the same concept of reducing demand for illegally sourced wood, it is distinct from the E.U.'s or other countries' national or voluntary schemes. The Lacey Act is a fact-based statute rather than a document-based statute. The Lacey Act provisions are already in effect and the government is creating materials to guide companies to comply with the Act.

3.2.2 Latin America & Caribbean

Based on international reports, Brazil still faces challenges in the area of illegal logging. Deforestation in the Brazilian Amazon is increasingly caused by industrial development rather than subsistence activities, considering that the region is one of the world's major sources of meat and soybeans. However, due to the global financial crisis, the bank credit lines have not been easily opened and commodity prices dropped, which discouraged forest land conversion to pasture and other uses, leaving an area of approximately 25,000 km² degraded, but not deforested. Forest burning dropped drastically in the 2008 burning season, leaving deforestation for the 2008-2009 year at its lowest level, below 10,000 km². The Brazilian government also agreed to reduce annual forest loss by 70% by 2018 under its national action plan on climate change.

By the end of 2010, over 2.7 million hectares of national forests in Brazil will be offered for auction, according to the estimate of the Brazilian Forest Service (SFB), the agency responsible for the auction process. Thus, the timber supply from legal and sustainable sources is estimated to reach a total of 840,000 m³.

The forestry and timber sector is reportedly the main economic activity in the Peruvian rainforest and this sector has not been immune to the effects of the international financial crisis. However, the effects of the global recession are already being overcome and some are optimistic that for 2010, wood product exports could grow by about 30% from 2009 levels. In Peru, semi-manufactured exports represented the largest product exported, consisting of 41.5% of total timber exports with China being the major market for its products.

3.2.3 Market Outlook for Guyana's Timber Exports

Market outlook for 2010

Guyana's main markets in terms of export value and volume, have been the Asia/Pacific region for Logs and Undressed Lumber; Latin American/Caribbean region for Dressed Lumber and Splitwood; North America for Roundwood specifically Piles, and Plywood.

The Asia/Pacific markets, specifically China and India, showed signs of recovery in the latter part of 2009, after being somewhat affected by the global financial crisis, although to a lesser extent than the developed countries. It is expected that this recovery coupled with the overall 9% growth in GDP in China and a similar percentage projected for India, will lead to a growth in demand for

Guyana's **logs and undressed lumber exports** in 2010. Log prices are expected to recover from the -3% drop in 2009 whilst Undressed Lumber prices are projected to be fairly stable in 2010.

In the Latin American/Caribbean region, **Dressed Lumber** exports are expected to remain stable in 2010. The general export price level for this product category in 2009, which reflected an 11% increase as compared to 2009 level, is expected to be maintained in 2010. The European market for Undressed Lumber is expected to remain fairly stable with no significant increases expected since the market rebound is projected to be slow across the continent and unlikely to reach the levels which obtained in 2008. The US has market reflected the most premium prices in 2009 for this product category although relatively lower volumes than other export destinations. This market offers promising prospects for Guyana's export in this product category as the US economy slowly rebound from the financial difficulties. Based on reports, since demand has been hard to predict, many hardwood lumber customers now wait for orders before sourcing lumber. As a result, distribution centers and concentration yards have had to adjust to demand for just-in-time delivery. Properly managing inventories and cash flow will reportedly remain a priority in 2010.

The **Roundwood market** is expected to also recover from the decline in 2009 when the exports for the main product in this category, Piles, decreased by almost 47%. In 2010, this market is expected to recover with the main market destination for this product being the US, showing signs of recovery.

The Latin American/Caribbean region is projected to continue to show strong demand for Guyana's **Splitwood** for construction purposes and should remain relatively stable in 2010 as has been the case for 2009. Overall, of all product categories, Splitwood proved to be the most stable in the export market in 2009, in volume and value.

Plywood faced challenging times in the export market in 2009. In 2010, there is expected to be some improvements in the European market as well as the US market, the former to a greater extent given the significant drop in 2009. However, in the US, many hardwood companies expect business in 2010 to be similar to that in 2009 in terms of market demand. According to ITTO TTRM report, most companies surveyed for the Import/Export Purchasing News (December/January issue) agreed that the housing and commercial markets may improve in late 2010 or even later. The report also noted that higher ocean freight rates will be a challenge for US importers and trading in general. While some expect a slight improvement in business in 2010, the consensus is that if the market recovers faster than expected, hardwood suppliers would not be able to keep up with demand. Inventories are currently very low, which has helped to keep prices up.

The US hardwood industry went through severe cost cutting measures in 2009, and many mills and businesses folded. The ITTO report also noted that once the US and European economies recover, companies will have to compete with Chinese manufacturers for raw material that is in some instances less available than before the recession. For tropical species in particular, the Lacey Act may reinforce a supply shortage and higher prices in the US market. ITTO TTRM reported that analysis of the most recent Eurostat trade data indicates that European imports of hardwood-faced plywood from developing countries rebounded in the third quarter of 2009 after suffering four consecutive quarters of decline. UK housing market statistics have improved somewhat at the beginning of 2010, for example there was a 45% rise in new house registrations in the 3 months to November 2009.

US tropical timber imports

Recently released trade statistics up to October 2009 show that import volume of tropical hardwood lumber continued to be low. On average, tropical hardwood lumber imports are down 33%. Only Teak imports have held up and are similar to last year's volumes, but most other species from both South America and Africa are at much lower levels.

Tropical veneer imports (including plywood) showed worse results according to the available October data. Compared with 2008, import volumes fell on average by more than 50% in 2009. Imports from China went down by 54%, from Ghana by 76% and from Cote d'Ivoire by 30%. The Hardwood Review Weekly noted in its December 11, 2009 issue that more buyers purchase tropical hardwoods from Africa, while South America producers used to dominate supply. Sawmill closures in many parts of Africa may, however, cause hardwood supply shortages in 2010.

It remains difficult for manufacturers to sell to the US market at current asking prices, given the slow economic recovery and the weak US dollar. Exporters demand higher prices in line with the exchange rate development, but US buyers reportedly show some reluctance to purchase. Inventories are so reduced that shortages are already emerging.³

³ Tropical Timber Market Report: Volume 15 Number 1, 1 – 15th January 2010

3.3 The Guyana Economy

3.3.1 The Forest Sector

Guyana saw a decline in volume of logs exported but there was an increase in production and trade of some finished and value added products. Export prices for Greenheart logs remain unchanged while prices for Purpleheart (Standard Sawmill Quality) recorded a rise in average prices (USD 330/235). On the other hand, there were price declines recorded for Purpleheart Fair and Small sawmill qualities. Sawnwood prices were higher than average levels. This was especially noticeable for Greenheart (Prime and Select).

Purpleheart sawnwood (Select and Merchantable) achieved favourable average prices levels but Mora (Select) sawnwood prices recorded a drop in average prices. Producers of Dressed Greenheart are currently seeing high prices, as are producers of Dressed Purpleheart which are being sold at US\$ 900 and US\$1126 respectively.

As regards plywood, both BB/CC and Utility grade Baromalli were exported in 2009, but BB/CC grade ply experienced a drop in price compared to 2008. Roundwood exports contributed significantly to total export value and achieved stable average prices for the period under review. Splitwood also contributed substantially to the export value during the period. Value added product exports during this period included doors, indoor furniture, mouldings, builders joinery, windows, wooden utensils and ornaments exports of which contribute significantly to the overall export earnings.

National Log Export Policy

Guyana has noted that a tremendous potential exists in the international and regional markets for processed timber and regional markets for processed timber products. This has been supported by attractive prices and indicative growing demand for Guyana's timber and timber products.

Guyana is well positioned to capitalize on large international market for tropical added value products that exist in markets in China, UK, Denmark, Netherlands, and the US among others. Even for basic processed wood products such as sawnwood, a large potential demand exists for Guyana's wood species. For example, in China, many of Guyana's wood species are in high demand for use in flooring and other value added end uses.

In an effort to expand added value forest products production and exports, and to take advantage of these market opportunities, the GoG instituted a National Log Export Policy in January of 2009, which in effect saw an increase in the rate of export commission to 7% in 2009 on certain species of logs, identified to be suitable for added value end uses.

January 2010 will see an increase to 10% export commission, applicable on the same species of logs and a further increase to 12% in 2012. The GFC Forest Sector Information Report shows that Log Export declined by 32.9% in volume in 2009, when compared to the corresponding period of 2008, in spite of the relatively stable production level. This has been an increase in sawn lumber produced and consumed by the domestic market and used for further downstream production.

Improved Monitoring and Control of Logging Activity in Guyana

While the extent of illegal logging in Guyana is generally low, the impacts of illegal activities can have significant impacts on Guyana's relatively small and developing economy as well as having environmental and socio-cultural consequences, if prevention and detection is not appropriately done. Following an assessment of these systems by the GFC, it was identified that there were areas for improvement in detection and prevention of illegal logging and trade of wood products in Guyana. GFC initiated a project to address this, with support from the ITTO: *Project: Improving the detection and prevention of illegal logging and illegality in shipment and trade of wood products in Guyana, PD 440/07 (M,I)*.

One aspect of the Project, involved improving detection of illegal logging, through satellite imagery analysis. The value of satellite systems in monitoring logging activities, especially in the tropics, is widely appreciated. The result of the satellite interpretation was a national base layer comprising harvested areas, road network, areas subject to clearance by mining, agriculture and other activities. In some cases, it was not possible to make a definitive determination using the images only; images had to be used in combination with forest and other land use allocation information.

The second aspect of the system involved the improvement of Guyana's log tracking system. In 2001, the national log tracking system was implemented and was monitored through manual means of verification. Under this system, cut logs and stumps are identified using a plastic barcode tag

that is attached immediately after logging or when logs are converted into pieces at timber collection points. The manual implementation of this system however, did not allow for the full benefits of traceability and verification of origin, to be realized. This aspect of the project aimed at helping prevent illegal logging and trade in illegally harvested timber by utilizing a timber tracking system based on barcode utilization in the harvesting of tropical forests, shipment and exporting stages.

The project design element allowed the development objective to be met via the full integration of all steps in the production to export chain (production, transportation, declaration, processing, export); this was then used in enhancing the level of legality in the forest sector from the production level, through to processing and then to export. The Project built on existing systems, capacities and infrastructure in place at the GFC and in so doing, allowed for smooth implementation and overall effective transition from the systems currently in place, to those designed through the support of the project.

At the completion of the project, the 5 outputs of the project have been fulfilled and the system is now operational to improve the detection and prevention of illegal logging and illegal in shipment and trade of wood products. The log tracking system which was manually operated previously, (the full potential of this system not being realised), is now integrated with bar coding technology to allow for greater ease and effectiveness in operation and implementation. Additionally, the GFC now possess enhanced resource capacity to conduct national level legality assessment of illegality using remote sensing imagery analyses. Further, the centralised database to track illegality activity facilitated by the Wide Area Network has aided the coordination of information and data flow in real time which is important to enhance prevention and detection of illegal activities. Importantly, the Legality Monitoring and Extension Unit has provided the means through which these results have been operationalized in a sustainable manner. The level of illegal activities will continually be monitored to assess the effectiveness of this system in deterring illegal activities on the whole.

The situation that is prevailing after the project completion is generally an environment where illegal logging can be detected and prevented through a more integrated, national level system, in

the one that has been developed. The project has allowed for a variety of technologies to be integrated, coupled with the necessary built in human capacity at the GFC to conduct such work. The situation that prevails now, is therefore one of stronger human and technical capacity to maintain legality in the forest sector. Additionally, local communities, exporters, other forest sector stakeholders as well as the national as a whole will benefit from a higher level of legality in the sector.

Developing Capacities for a national Monitoring, Reporting and Verification System to support REDD+ participation of Guyana

The Government of Guyana has embarked on a national programme that aims to protect and maintain its forests in an effort to reduce global carbon emissions and at the same time attract resources to foster growth and development along a low carbon emissions path. Guyana has over 80% of its land area covered by forests, approximately 16 million hectares. There has been a relatively low deforestation rate in Guyana estimated at 0.1% to 0.3% per annum; that is expected to be maintained or reduced in the future depending on financial incentive provided. Guyana is committed to provide a contribution to address the second most important source of carbon dioxide emissions world-wide coming from deforestation and forest degradation and is estimated at approximately 18% of global emissions.

The Governments of Guyana and Norway, through a cooperation agreement, have expressed a willingness to work together to provide the world with a relevant, replicable model for how REDD-plus can align the development objectives of forest countries with the world's need to combat climate change. The initiative will require the development of capacities for monitoring, reporting and verification (MRV) of forest carbon stocks and changes. Thus, climate change mitigation activities currently under discussion encourage:

- The long-term conservation of forests to maintain its current or natural carbon reservoir,
- To change the impact of human activities (i.e. causing carbon emissions from land use) in forests to stabilize or increase terrestrial carbon stocks in the long-term,
- A change in current human activities towards reforestation of land to increase the terrestrial carbon sink.

It is currently not practical nor efficient to measure and report the stocks and changes for the whole terrestrial carbon reservoir with the level of detail and certainty to address all drivers and processes that have a carbon impact on the land. REDD+ readiness activities in Guyana are encouraged to

start right away and will need to include a priority setting given that:

- Countries, in general, start from a diverse set of backgrounds in terms of historical drivers and changes in forest carbon; expected future land use changes due to their development objectives; and current capabilities for measuring and monitoring forest carbon on the national and local level.
- Current human land use impacts causing carbon emissions are focused in specific areas and regions and should, perhaps, be primarily addressed in the very near-term. However, it is the long-term stabilization or increase of the terrestrial carbon reservoir as a whole that will decide on the effectiveness of the activities initiated today and to eventually implement a low carbon development strategy for Guyana,
- Resources to address REDD+ will be limited and not suitable to address all issues everywhere at the same time. While all requirements and forest change drivers and processes should be addressed from the beginning, their entry points will vary and priority setting and efficient implementation strategies will be needed at the international, national and sub-national level.

As an initial step to the implementation of a MRVS for Guyana, a road map for the development of a MRV system for REDD+ participation for Guyana was designed following a stakeholder participation session. The development of such a road map considered several aspects that have been elaborated in the facilitation process and for preparing Terms of Reference for developing an REDD MRV system:

1. Requirements for the MRV system:

- The accepted principles and procedures of estimation and reporting of carbon emissions and removals at the national level should meet criteria specified by the IPCC Good Practice Guidelines and Guidance for reporting on the international level;
- The particulars of the national REDD implementation strategy that have been selected, since different activities have different MRV implications;

2. Bridging the capacity gap through a detailed plan to establish sustained MRV capacities within the country:

- Capacity gap assessment based on the state of the existing national forest monitoring technical capabilities and the requirements for the MRV system;
- Develop a road map and foster its implementation through a sustained and efficient institutional framework including competence in measuring and monitoring at different levels, support of national policies and REDD+ actions, international reporting and verification, and linking MRV of actions and MRV of transactions.

Housing Boom in 2009

Various policies implemented by the Housing Ministry in 2009 have propelled the housing sector forward, leading to a housing boom and an increase in occupancy rate. For 2009, approximately \$1.6B was allocated to the Ministry to continue to provide accessible housing, increase occupancy and construction rates in existing and new housing areas. In 2010, the Ministry has earmarked 7,000 house lots for development that would afford more Guyanese the opportunity to own a home. The raising of the lending limit to commercial banks, the international market where material price fell this year all aided in this construction and housing boom in Guyana in 2009⁴.

3.3.2 Contribution to GDP

Forestry's contribution to Gross Domestic Product (GDP) is traditionally measured from output of Logs, Roundwood and Sawnwood. The value-added timber product of Plywood is measured under Manufacturing. Additional wood/forest related value-added products, such as furniture, are not captured. The sector's contribution to GDP in real terms over the last ten (10) years is shown in Table 1.

Table 1

Forestry's Contribution to real Gross Domestic Product for the period 1999- 2009 (G\$M at 1988 Prices)

YEAR	GDP AT FACTOR COST*	FORESTRY	FORESTRY as % of GDP
2000	5,352	189	3.53
2001	5,474	195	3.56
2002	5,536	180	3.25
2003	5,500	183	3.33
2004	5,587	184	3.29
2005	5,478	199	3.63
2006	5,759	237	4.12
2007	6,068	211	3.48
2008 Revised	6,253	179	2.86
2009 Revised	6,397	178	2.70

* Measures domestic output exclusive of indirect taxes on goods and services.

Source: Bureau of Statistics

⁴ Good performance in housing sector in 2009-house lot allocation surpasses target: Andre Ally, December 21, 2009. (CH&PA)

FORESTRY SECTOR STRUCTURE

3.4 Land Allocation Breakdown

Table 2 below shows a breakdown of Land Allocation within the Forestry Sector. It does not include Private Property and Amerindian Lands.

Table 2 : Summary of State Forest Allocations

as at December 31, 2009

Classification	Count	Area (Hectares)	% Area Type	% Total Allocation	% State Forest
Production Area Allocations					
State Forest Permissions (SFP)	458	1,671,369	25.0%	21.6%	12.5%
Wood Cutting Lease (WCL)	2	30,535	0.5%	0.4%	0.2%
Timber Sales Agreement (TSA)	29	4,347,939	65.1%	56.2%	32.6%
State Forest Exploratory Permit (SFEP)	4	632,492	9.5%	8.2%	4.7%
Total Production Area Allocations	493	6,682,335	100.0%	86.4%	50.1%
Permanent Research & Reserve Areas					
GFC Forest Reserves	11	17,796	1.7%	0.2%	0.1%
Other Research & Reserve Sites	2	1,032,903	98.3%	13.4%	7.7%
Total Research and Reserve Areas	13	1,050,699	100.0%	13.6%	7.9%
Total Forests Allocated	506	7,733,034		100.0%	58.0%
Unallocated Forests		5,606,980	42.0%		42.0%
Total State Forests		13,340,014			100.0%

Iw okrama Research Site		371,592			
Kaieteur National Park		63,000			

3.5 Other Forest Sector Licences

Sector activity licences are valid for one (1) calendar year only; continued production requires annual renewals. **Table 3** indicates the number of licenses issued for comparative periods.

<i>Table 3: Activity Licences</i>						
Comparison - Years: 2008 & 2009						
Activity/Licence Type	Period	Division				Total
		Berbice	Demerara	Essequibo	North West	
Sawmill	2009	39	51	54	2	146
	2008	29	42	48	3	122
Sawpit	2009	43	127	60	18	248
	2008	27	61	53	16	157
Permit to Erect Sawmill	2009	11	9	9	0	29
	2008	8	16	3	2	29
Timber Dealers	2009	51	163	38	6	258
	2008	40	164	29	6	239
Timber Depot	2009	5	5	3	0	13
	2008	2	4	4	1	11
Timber Path	2009	1	1	3	0	5
	2008	0	1	3	0	4
Charcoal	2009	1	23	1	0	25
	2008	0	17	1	0	18
Firewood	2009	1	3	8	0	12
	2008	1	1	0	0	2

4 PRODUCTION

Table 4 Represents production volumes for various primary Timber and Non-Timber forest products, together with Plywood, for the year 2009 and is compared to that of 2008. Production attributed to individual Forest Stations within the respective Regions (as per GFC designation) of Demerara, Essequibo, and Berbice, are shown in Appendices I – IV, attached.

4.1 Production Volumes

In 2009 total combined production of Logs, Sawnwood, Roundwood, Splitwood, Plywood and Fuelwood recorded an overall increase by 1.21% when compared to the volumes recorded in 2008. A total of 408,284m³ of the various forest products was produced in 2009 as compared to the 403,421m³ produced in 2008. This overall increased production of timber products for 2009 was attributed to the small increases in volume for a number of products which in some way, offset other product categories that declined.

4.2 Log Production

Total Log production for 2009 fell by 3.31% when compared to 2008 production volume. For this product, Special Category Logs fell in production by 4.56%, moving from 99,364m³ to 94,831m³. While Class 1 Logs showed significant increases by 4%, there were declines for Class 2 and Class 3 Logs by 5.4% and 11% respectively.

Over the review period, Production of Class 1 Logs increased from 73,304m³ produced in 2008 to 76,295m³ produced in 2009. This increased production level is owed to the high volumes of Kabukalli, Mora, Wamara and Itikiboroballi being harvested. In the case of Class 2 Logs, which fell by 5.4% moving from 67,203m³ in 2008 to 63,571m³ in 2009, Baromalli, Wallaba and Muniridan were the main species harvested in this category. While Class 3 recorded a drop in production by 11%, the top species harvested in this category were Iteballi, Burada and Darina.

Over the review period, the top species for log production volumes were Greenheart, Baromalli, Purpleheart, Kabukalli, Mora, Wallaba, Wamara, Muniridan and Itikiboroballi.

GUYANA FORESTRY COMMISSION

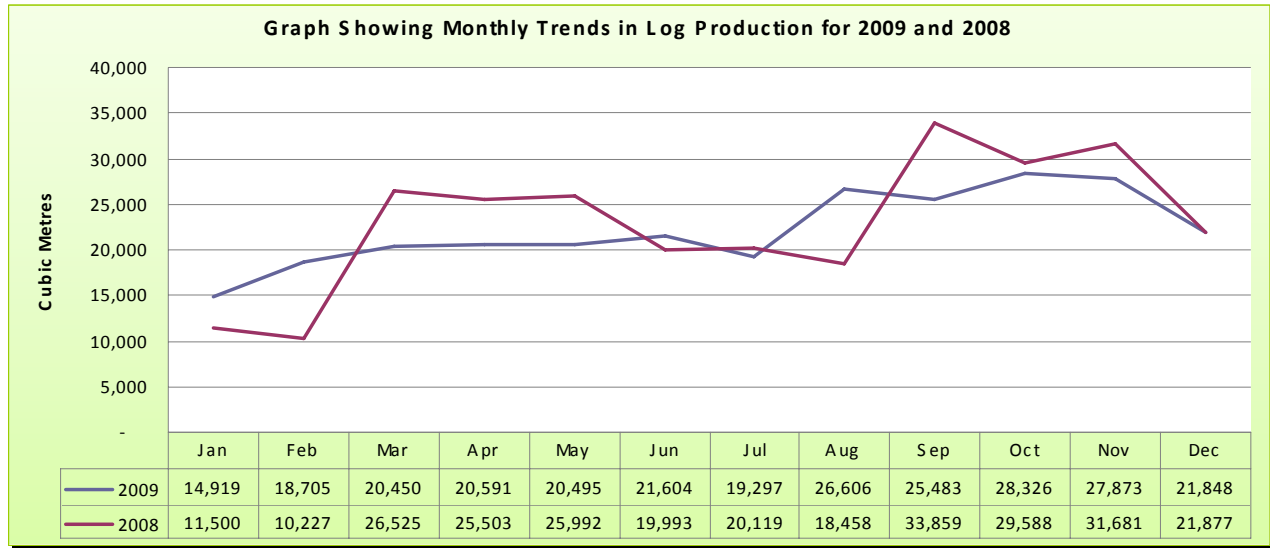
Table 4: Total Production for 2008 & 2009

		2008	2009	% Change over	
PRODUCTS	Unit	Volume	Volume	2008	
TIMBER PRODUCTS					
Logs		m ³			
	Special Category	99,364.45	94,830.50	(4.56)	
	Class 1	73,304.12	76,294.78	4.08	
	Class 2	67,203.25	63,571.83	(5.40)	
	Class 3	35,448.11	31,501.05	(11.13)	
Total Logs		275,319.94	266,198.15	(3.31)	
Roundwood		m ³			
	Greenheart Piles	13,726.53	13,551.07	(1.28)	
	Kakaralli Piles	878.03	911.41	3.80	
	Mora Piles	-	-	-	
	Wallaba Poles	2,031.35	3,098.08	52.51	
	Posts	2,032.82	1,790.60	(11.92)	
	Spars	53.72	62.94	17.16	
Total Roundwood		18,722.44	19,414.09	3.69	
Primary (Chainsaw) Lumber		m ³			
	Special Category	11,170.56	16,496.35	47.68	
	Class 1	36,914.30	38,698.51	4.83	
	Class 2	11,012.45	10,362.28	(5.90)	
	Class 3	7,860.91	7,561.82	(3.80)	
Total Primary Lumber		66,958.21	73,118.96	9.20	
Splitwood		m ³			
	Paling Staves	626.23	868.86	38.74	
	Vat Staves	-	-	-	
	Shingles	104.43	91.12	(12.74)	
Total Splitwood		730.66	959.98	31.39	
Fuelwood		m ³			
	Charcoal*	4,174.02	12,868.64	208.30	
	Firewood	16,884.95	16,846.45	(0.23)	
Total Fuelwood		21,058.97	29,715.10	41.10	
Plywood		m ³			
PLYWOOD					
	Wattles	pcs	200,680.00	243,607.00	21.39
	Manicole Palm	pcs	2,699,109.00	2,831,538.00	4.91
	Other NTFP's (Mangrove Bark)	kg	12,619.00	22,697.35	79.87

Notes:

Charcoal previously reported in Kilograms. Conversion of Kilograms (kg) to cubic metres (m³) ; 1 m³ = 133.447 kg

4.2.1 Monthly Log Production



Log production over the review period reveals a much more stable and consistent production trend when compared to production of 2008. As can be seen in the graph above, the 2009 trend line is indicative of the stability in the production volumes over the various months of 2009, when compared to 2008 where more sporadic patterns can be detected.

4.2.2 Log Production by GFC Regions and Forest Stations

Of the total volume of Logs produced, 156, 973m³ or 59% came from the Essequibo district, of which the most production of logs came from the Buckhall Station. This station accounted for approximately 28% of total logs harvested. For Essequibo, this was followed by production coming from Port Kaituma and Anarika with 6% each of national log production. In the region of Berbice the majority of Logs produced was declared at Springlands and Unamco with 10% and 8 % respectively of national log production. For production coming from the Demerara district, the majority of Logs produced was from the Mabura area and accounted for 9% of total Logs produced in 2009.

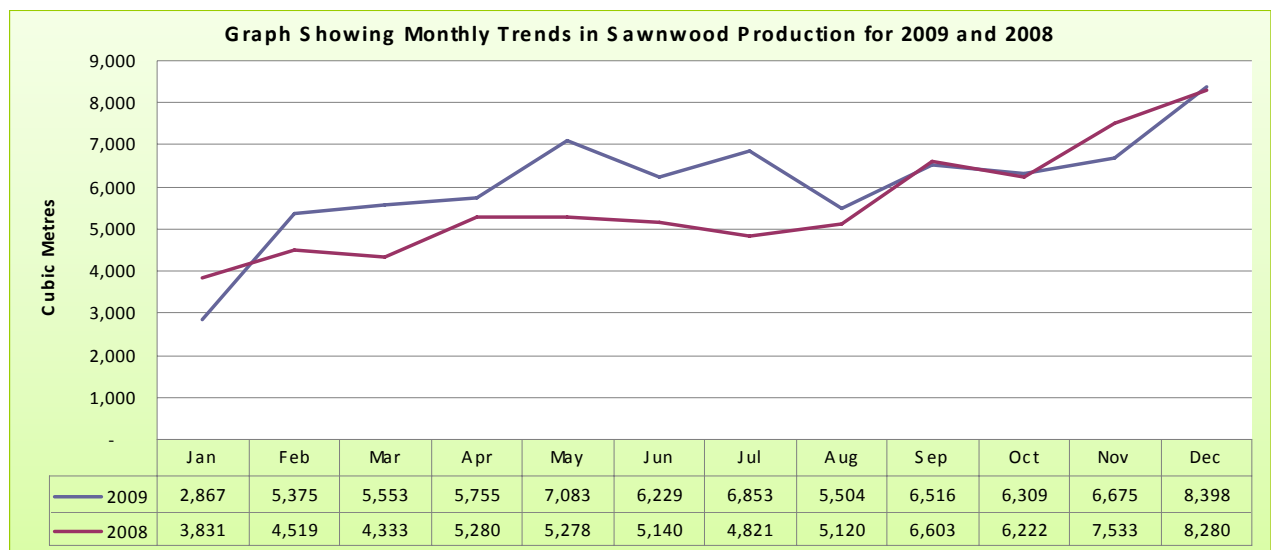
4.3 Primary (Chainsawn) Lumber Production

Production of Primary (Chainsawn) Lumber for 2009 was 73,119m³ or 9.2% above the previous year's (66,958m³).

Total Sawnwood produced over the review period reveals a steady and consistent trend with production being above the 5,000m³ mark in all cases except for the slow start in the month of January. However, the rapid increases and some fluctuations resulted in an overall increased production by 9% at the close of 2009, when compared to 2008 total production volume of primary lumber.

In 2009, the top species of lumber were Tauroniro, Kabukalli, Greenheart, Purpleheart, Wallaba, Mora, Kereti, Simarupa, and Shibadan.

4.3.1 Monthly Production of Primary Lumber



The Graph above gives a visual representation of the monthly trends in Lumber production for the years 2009 and 2008.

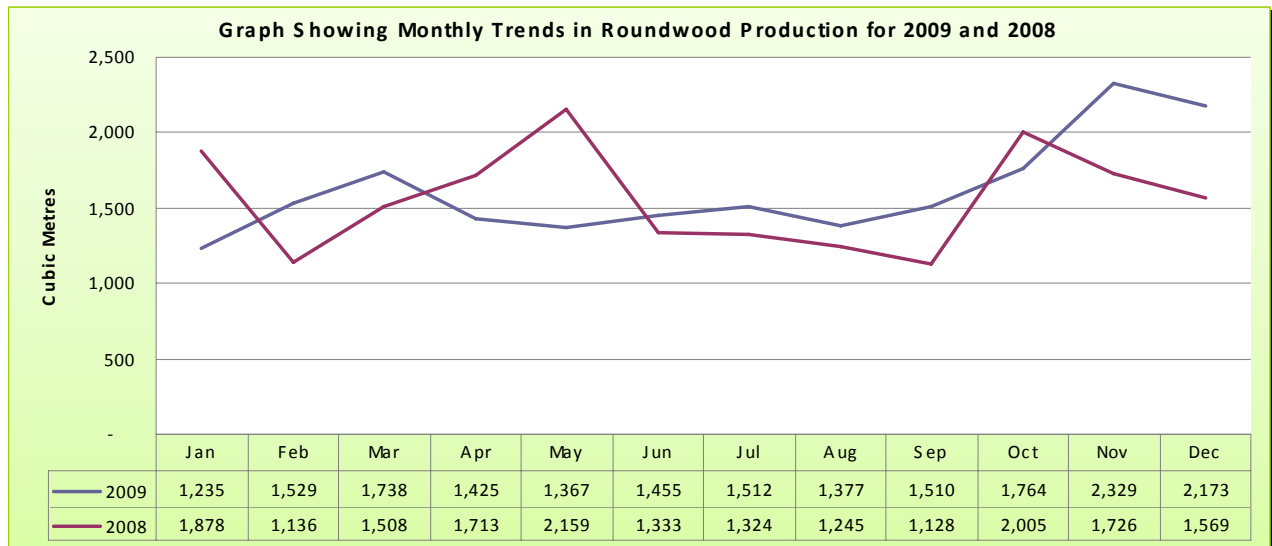
4.3.2 Primary Lumber by GFC Regions and Forest Stations

For the year 2009, most primary lumber extracted was recorded in the Demerara district with 44,717m³ which accounts for 61% of national volume. This was followed by production from the Essequibo region with 19,725m³ and accounting for 27% of national volume. The remaining 8,677m³ of Sawnwood produced came from the Berbice district which accounted for 12% of total

production. Of these regions the most production (28% of total volume) was recorded at the Soesdyke Forest Station. This was followed by production recorded at Georgetown, Linden and Supenaam which accounts for 18%, 15% and 11% respectively. These stations combined accounted for 52,309m³ (71%) of total Sawnwood.

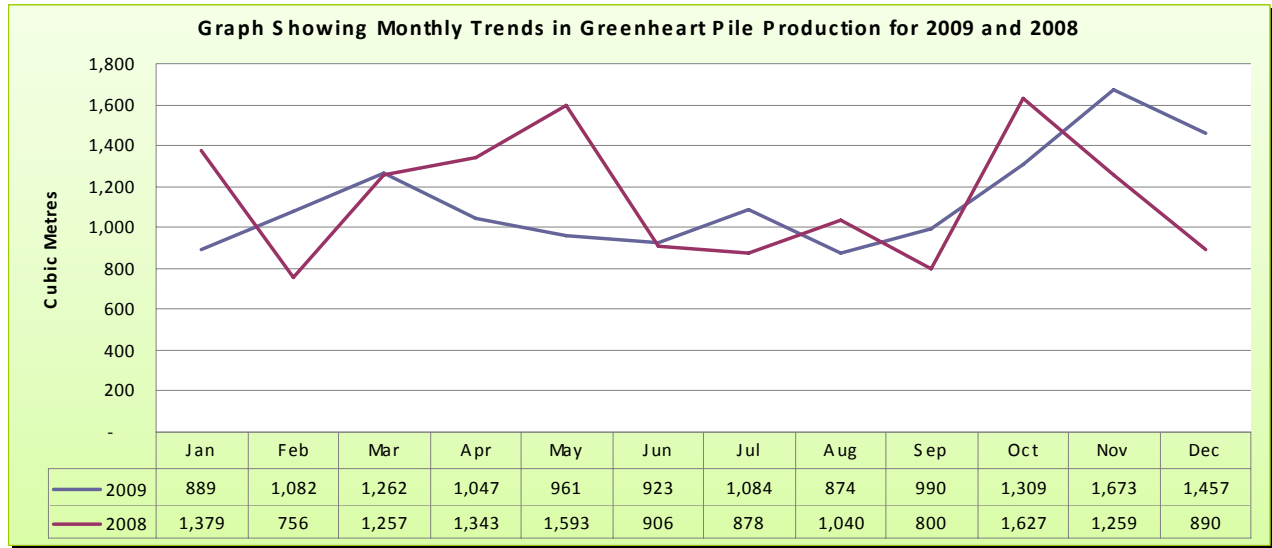
4.4 Roundwood Production

Roundwood production comprises of Piles, Poles, Posts and Spars. Piles produced were primarily of the Greenheart species with few being Kakaralli, while Poles, Posts and Spars were derived from Wallaba.



The above graph represents the total production of Roundwood for 2009 and is compared to the production volume of 2008. It also represents the production trends across the various months of the years compared. As can be seen, 2009 production volume of the various Roundwood reveal a much more stable and consistent trend than that of the previous year, peaking at the close of the year.

For 2009 total Roundwood produced accounted to 19,414m³, this represents an increase of 3.69% as compared to the volume produced in 2008. The increase in volume of Roundwood for 2009 came primarily as a result of the increase demand for Wallaba poles from both the domestic and export markets. The increased domestic demand of Wallaba poles came as a result of the high demands by the Utilities Companies for this product as stated in the Half Year FSIR 2009. In 2009, Wallaba Poles recorded an increase of approximately 53%, when compared to production reported for 2008.

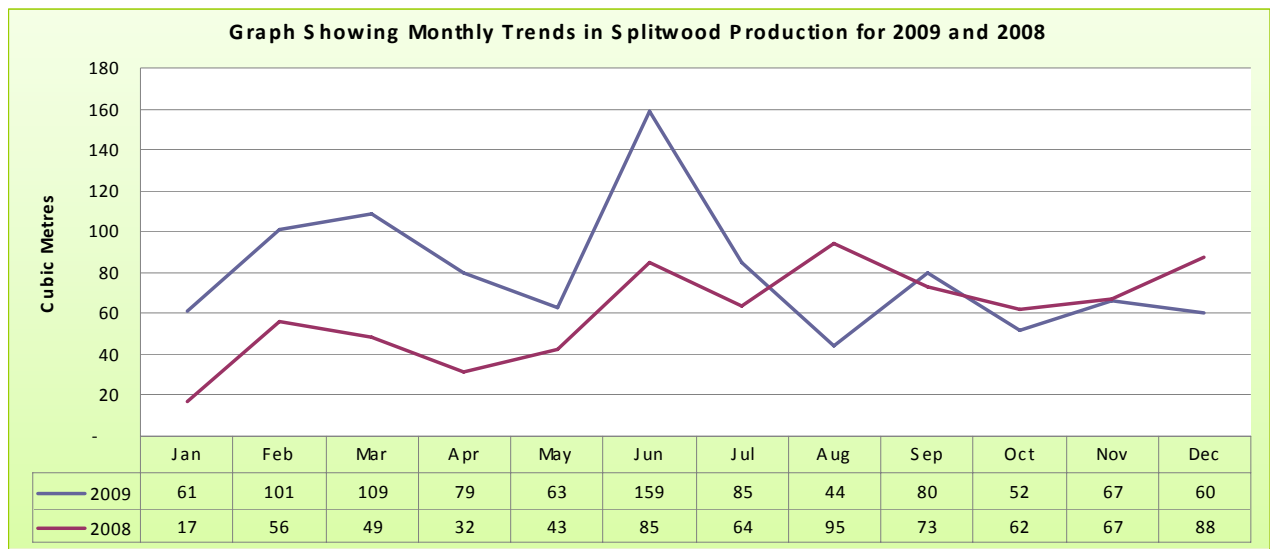


The graph above gives a visual representation of the trends in the production of Greenheart Piles. Over the period 2009, production of Greenheart Piles appears relatively stable as compared to corresponding period of 2008. Greenheart Piles accounts for the largest share of the Roundwood category. In 2009, these Piles accounted for approximately 70% of all Roundwood produced and thus making this product heavily influential on the production trend lines. Over the period, the majority of Greenheart Piles produced came from the Demerara district. This accounted for 51% of all Greenheart Piles and amounted to 6.978m³ while the remaining Piles of this species were recorded in Berbice and Essequibo with 4,566m³ and 2,007m³ respectively.

Total Wallaba Poles produced in 2009 came primarily from the Demerara district which accounted for 78% of all Wallaba Poles produced. The remaining volume came from Essequibo and Berbice with 19% and 3% respectively.

4.5 Splitwood Production

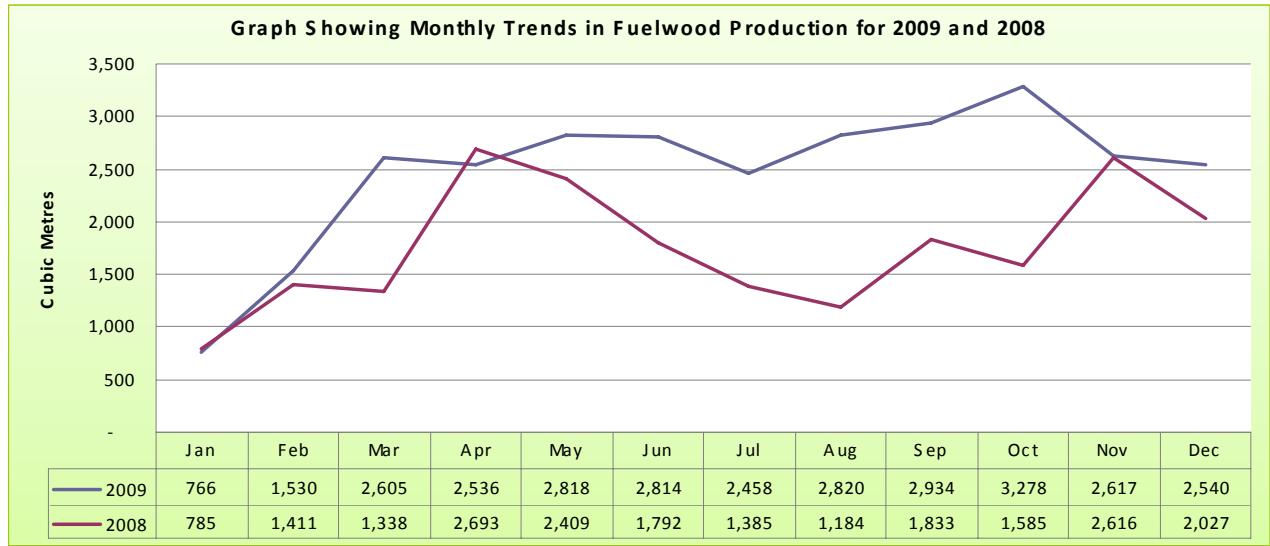
Splitwood refers to Staves (Paling Staves; Vat Staves) and Shingles, all usually produced from Wallaba. For 2009, a total of 959.98m³ of Splitwood were produced. This reflects an increase in production by 31% when compared to the volume reported in 2008. This increase in Splitwood is mainly attributed to the increase in the volume of Paling Staves produced for 2009. The total volume of Paling Staves produced in the year recorded an increase by 38.74%. Shingles being the other product in this category recorded a decline in production by 12.74% when compared to 2008 production volume. Shingle production recorded in this report refers to those that have been hand spilt and not mill produced. Vat staves have not been produced in recent years.



The Graph above illustrates the monthly production level of Splitwood produced in 2009 compared with the 2008 figures. For 2009, total Splitwood produced was consistently higher in the first half of 2009 but dipped in August and remained, on average, lower for the remaining months. In 2009, the majority of Splitwood produced (562m³ or 58%) came from the Essequibo district, while the remaining 398m³ came from the Berbice and Demerara district accounting for 215m³ and 183m³ respectively.

4.6 Fuelwood Production

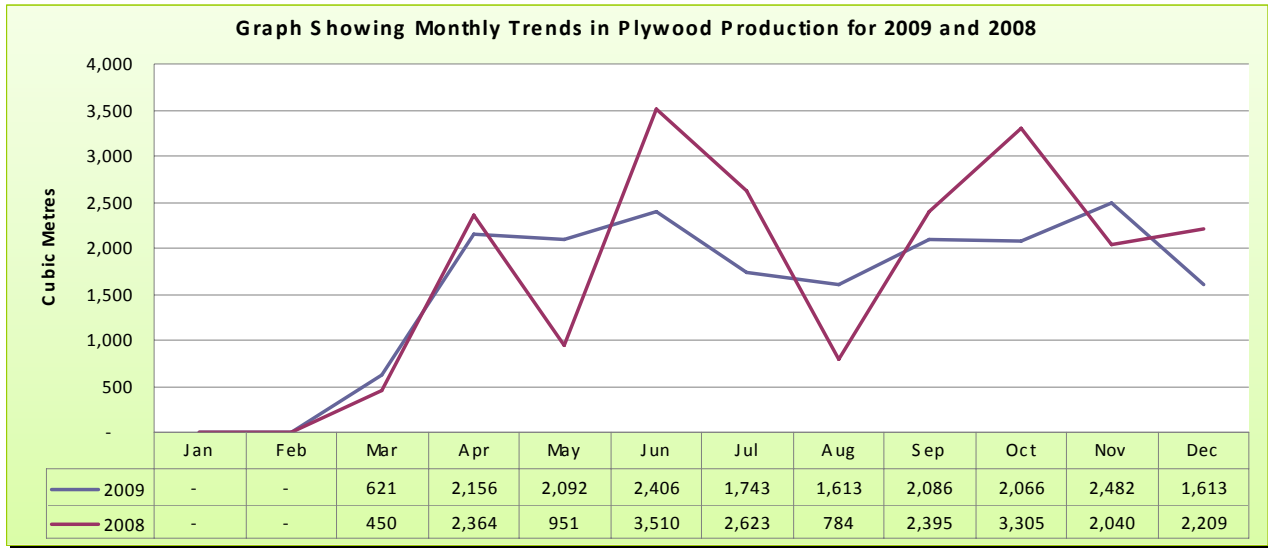
Two products are covered under this category namely, Charcoal and Firewood. The graph below compares the production of Fuelwood volume for 2009 with that of 2008 across the various months.



Over the review period, production of Fuelwood saw an overall increase by 41% as compared to the previous year production volume. This is primarily owing to the robust increase in the production of Charcoal recorded for 2009. As can be seen in the chart above, total Fuelwood production was consistently higher in 2009 as compared to the volume produced in 2008.

The volume of Charcoal produced in 2009 recorded an increase by 208% when compared to the 2008 production figures. For 2009, total Charcoal produced accounted for 43% of total Fuelwood product category of which it is a sub product, as compared to the 19% in 2008. While total Firewood produced maintained an overall consistent volume in production for 2009 as compared to that of 2008, it maintained the higher percentage share of this category and accounted for 57% of total Fuelwood produced.

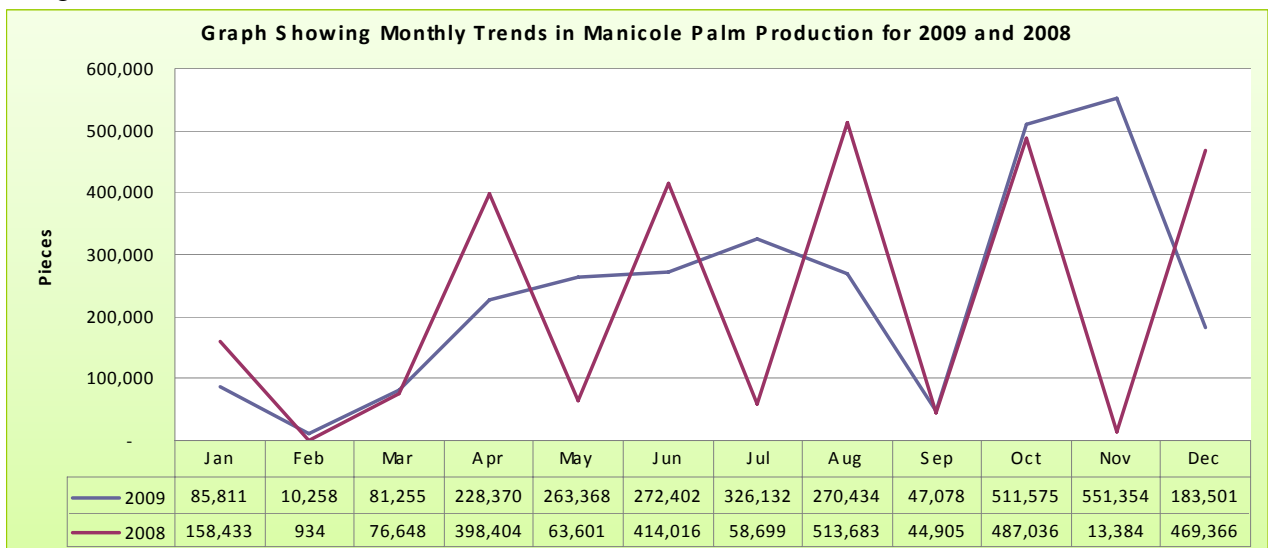
4.7 Plywood Production



Plywood production for 2009 recorded a decline by 8.5% when compared to the corresponding period of 2008. Over the reviewing period, the production trends for Plywood reveal a much more consistent flow than that of the previous year. This was mainly attributed to the constant supply of logs.

4.8 Non-Timber Forest Products

Non-Timber Forest Products (NTFP's) refer to a number of products other than primary and secondary timber products, derived from forest resources. These include Wattles, Manicole Palm, Mangrove Bark, Palms and Latex (Balata).



The data presented above, illustrate the production of Manicole Palm (Heart of Palm) for the years 2009 and 2008. Manicole Palm production for 2009 totalled 2,831,538 pieces, representing an increase by 5% over that of 2008 volume of 2,669,109 pieces.

Output of 243,607 pieces of Wattles recorded in 2009 represents an increase of 21% over the corresponding period of 2008, while the production Mangrove Bark increased significantly from 12,619kg recorded in 2008 to 22,697kg produced in 2009.

4.9 Employment

4.9.1 Employment

Employment data for the Forestry Sector over the years 2008 to 2009 is shown in Table 5 below.

Table 5: Forest Sector Employment: Years 2008 to 2009

Activity	Number of Employees 2008	Number of Employees 2009	% Change 2008-2009
Logs	15,033	13,454	-11
Sawmilling	3,819	4,341	14
Timber Dealership (Lumber Yards)	1,907	1,602	-16
Plywood	500	415	-17
Manicole Palm	698	939	35
Other*	4,500	3,375	-25
Total	26,457	24,126	-9

* Other: includes activities in Furniture, Building Components, Craft, Utensils/Ornaments, Firewood, Charcoal and Conservation.

Employment within the forest sector for 2009 showed a decline of 9%. This could be attributed to the migration of persons for the forest sector to the other sectors, including the mining sector. The major areas of employment that saw an increase was Manicole production, with 35%. The largest area of decline was the area involving activities in Furniture, building components, firewood, charcoal and conservation, followed by employment in the plywood mills and timber dealers (lumber yards). On the upside, there was a marked increase in employment in sawmills, indicating increased capacity at the down stream processing level of production.

4.9.2 Domestic Prices

Table 6a: Average Domestic Prices for Timber & Plywood – 2007 - 2009

YEAR PRODUCT	2007	2007	2008	2008	2009	2009	2008
	G\$	US\$ equiv**	Domestic G\$	Domestic US\$ equiv**	Domestic G\$	Domestic US\$ equiv**	Price Change Percentage
Logs	23,873.04	119.37	28,129.53	140.65	32,067.00	160.34	14%
Sawnwood *	64,985.66	324.93	64,014.82	320.07	44,412.00	222.06	-31%
Dressed	71,501.72	357.51	70,077.92	350.39	51,676.00	258.38	-26%
Undressed	55,295.45	276.48	54,920.17	274.60	35,787.00	178.94	-35%
Roundwood	36,761.20	183.81	39,747.97	198.74	22,667.00	113.34	-43%
Splitwood	23,847.95	119.24	38,488.70	192.44	41,342.90	206.71	7%
Fuelwood	3,355.56	16.78	4,338.24	21.69	4,760.00	23.80	10%
Plywood	73,142.65	365.71	116,679.86	583.40	118,234.00	591.17	1%

* Row indicates combined average for Dressed and Undressed Sawnwood

Table 6a above give a representation of the average prices paid for the various products based on two sample surveys carried out in the year 2009. These prices reflect the average prices paid for a number of species sold mostly for local consumption. The table also gives a representation of the price change over a two year comparison. As can be seen while some areas have recorded increases others have recorded declines owing to greater volume of lesser valued species being sold on the local market.

Table 6b: Plywood Prices

Size (metric)	Size (imperial)	Grade	Local Price m3/G\$	Local Price m3/US\$	Local Price/sheet	Local Price/sheet
4mm	1/6"	BB/CC	117,600	588	G\$ 1,400	US\$7
5.2mm	1/4"	BB/CC	101,075	505	G\$ 1,555	US\$8
9mm	3/8"	BB/CC	101,380	507	G\$ 2,740	US\$14
12mm	1/2"	BB/CC	100,800	504	G\$ 3,600	US\$18
15mm	5/8"	BB/CC	99,220	496	G\$ 4,510	US\$23
18mm	3/4"	BB/CC	106,400	532	G\$ 5,600	US\$28

Table 6b above reflects prices for plywood from Barama Company Limited and are based on the various sizes and grades at prices that reflect direct company costs.

5 EXPORTS

5.1 Exports summary

This section identifies the various types of forest products exported and presents a detailed analysis of their contributions to the forest sector. Table 7 compares export performances for 2009 and 2008, categorised by product and category as applicable. Appendix VI lists volumes and values for individual products.

Total Timber and Plywood exported over the review period have recorded declines in both volume and value by 27.67% and 19.49 % respectively. Other Value Added Products and Other Products have also recorded declines by 26.48% and 3.22% respectively. These altogether contributed to the overall drop in the value of exports by 19.85% when compared to that of 2008 figures. While the major timber products recorded declines in exports for 2009, there were a few exceptions in terms of specific products recording increases. These include: Wallaba Poles, Windows, Spindles and Fuelwood.

For 2009, total logs exported fell by 32.9% in volume and 35.2% in value, mainly due to the effectiveness of the National Log Export Policy implemented in 2009. Sawnwood also recorded declines over the period both in volume and to a lesser extent, value owing to the higher average prices recorded. Sawnwood recorded a drop in volume exported by 11.89% and in value by 5.9%. This drop in Sawnwood exported was both from the Dressed and the Undressed variety. Dressed lumber fell by 15.34% while the Undressed variety fell by 10% in volume when compared to 2008 figures. Declines were also seen in terms of value coming from this products, with value decreasing by 6.39% and 5.57% for the Dressed and the Undressed variety respectively.

The export markets for Roundwood have shown a considerable drop in the volume exported in 2009 when compared to that of 2008 volume. Total Roundwood exported for 2009 fell by 50% in volume and to a lesser extent, in value, by 32%. This reduction was primarily influenced by the fallout in demand for Greenheart Piles by the 63%, reducing from 7,796m³ in 2008 to a much lower 2,915m³ in 2009. Total value recorded from Greenheart Piles fell by 51% when compared to what was recorded for 2008.

Plywood export over the review period recorded overall drop in volume by 33% and in value by 37%. This decline in volume exported is due primarily to the reduced demand coming from the export markets. The higher percentage of lower value recorded was in part due to the reduced volume and the lower average prices per cubic metre of this product. Other value Added Product,

and Windows gained an increase in both volume and value exported, by 27% and 21% respectively. In this category, volume (pieces) of Spindles exported saw a significant increase by 75% and an even greater percentage increase, in value.

Table 7: Export Products Volumes, Values and Percentage Changes and Relative Changes

PRODUCT	2008				2009					
	Volume (m3)	Value (US\$)	% Val ¹	% Val ²	Volume (m3)	% Vol change	Value (US\$)	% Val change	% Val ¹	% Val ²
Logs										
Special Category Total	58,091	11,240,877	72.2%	19.8%	29,172	-49.8%	5,647,367	-49.8%	56.0%	12.4%
Class 1	23,704	3,073,142	19.7%	5.4%	23,570	-0.6%	3,265,341	6.3%	32.4%	7.2%
Class 2	2,251	239,079	1.5%	0.4%	1,961	-12.9%	204,393	-14.5%	2.0%	0.4%
Class 3	8,359	1,022,132	6.6%	1.8%	7,336	-12.2%	974,676	-4.6%	9.7%	2.1%
Total Logs	92,404	15,575,230	100.0%	27.4%	62,039	-32.9%	10,091,777	-35.2%	100.0%	22.2%
Sawnwood										
Total Special Dressed Category Undressed	13,490	8,776,614	83.1%	15.5%	11,413	-15.4%	8,150,956	-7.1%	82.4%	17.9%
Class 1 Dressed	2,944	1,621,597	15.3%	2.9%	2,570	-12.7%	1,607,619	-0.9%	16.3%	3.5%
Class 1 Undressed	15,811	7,266,992	46.9%	12.8%	11,108	-29.7%	5,444,549	-25.1%	37.2%	12.0%
Class 2 Dressed	100	49,597	0.5%	0.1%	38	-62.1%	21,690	-56.3%	0.2%	0.0%
Class 2 Undressed	1,643	732,272	4.7%	1.3%	360	-78.1%	176,187	-75.9%	1.2%	0.4%
Class 3 Dressed	226	117,334	1.1%	0.2%	168	-25.5%	110,211	-6.1%	1.1%	0.2%
Class 3 Undressed	2,753	1,120,771	7.2%	2.0%	7,263	163.8%	3,340,756	198.1%	22.9%	7.3%
Total Sawnwood	24,125	15,137,418	58.1%	26.7%	20,433	-15.3%	13,808,119	-8.8%	56.3%	30.3%
Total Dressed	16,760	10,565,141	100.0%	18.6%	14,189	-15.3%	9,890,476	-6.4%	100.0%	21.7%
Total Undressed	30,842	15,480,840	100.0%	27.3%	27,752	-10.0%	14,618,656	-5.6%	100.0%	32.1%
Total Sawnwood	47,602	26,045,981	100.0%	45.9%	41,941	-11.9%	24,509,132	-5.9%	100.0%	53.9%
Roundwood	10,323	2,504,290	100.0%	4.4%	5,171	-49.9%	1,692,595	-32.4%	100.0%	3.7%
Splitwood	3,415	2,613,663	100.0%	4.6%	2,872	-15.9%	2,520,433	-3.6%	100.0%	5.5%
Plywood	15,756	6,582,135	100.0%	11.6%	10,581	-32.8%	4,114,866	-37.5%	100.0%	9.0%
Total Timber and Plywood	169,500	53,321,300		94.0%	122,604	-27.7%	42,928,803	-19.5%		94.3%
Other Value Added Products ³		3,173,681		5.6%			2,333,211	-26.5%		5.1%
Other Products ⁴		256,358		0.5%			248,107	-3.2%		0.5%
Total Export Value		56,751,338		100.0%			45,510,121	-19.8%		100.0%

¹ percent of Product/Group Total Value

² Percent of Total Export Value for the Year

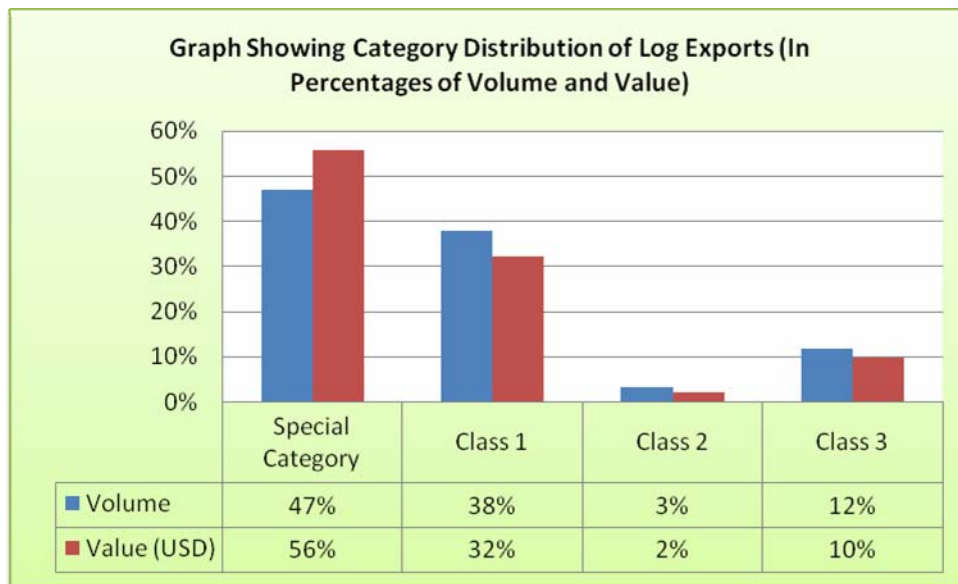
³ Other Value-Added Products include Furniture, Building Componentry, etc

⁴ Other Products include Fuelwood, Non-Timber Forest Products, Craft & Ornaments/Utensils

In this section, the report examines the volume and value of the various Forest Products being exported with much emphasis being placed on the percentage share of the export market, taken up by various Categories.

5.1.1 Log Exports

Total volume of log exported in 2009 recorded a drop by 33% while value recorded was reduced by 35%. Volume of logs exported totalled 62,039m³ as compared to the 92,404m³ exported in 2008. This reduced volume of logs exports was primarily the result of the drop in Special Category Logs being exported. Over the year 2009, almost 50% less logs in this category was exported when



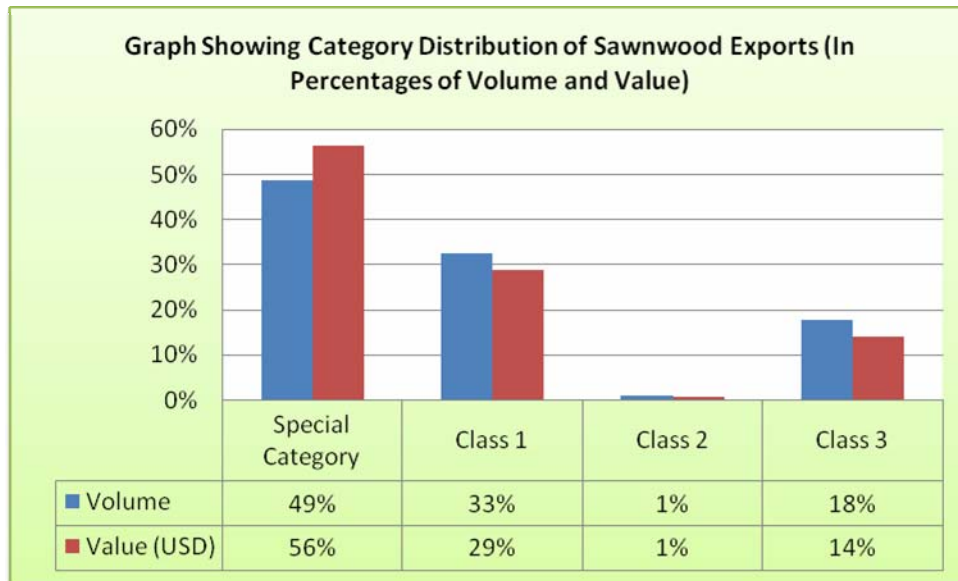
compared to the export volume of 2008, which indicates a direct positive impact of the National Logs Export Policy. In terms of percentage share, Special category logs still account for the largest share of logs being exported. In 2009, Special category logs

accounted for 47% of total log export volume and 56% of total value recorded, which amounted to 29,172m³ in volume and almost USD5.65M in value. Other volume of logs exported was from the Class 1 category, where the volume accounted for 38% of total log exports and 32% of value. Total volume of Class 1 Logs exported in 2009 amounted to 23,570m³ and recorded approximately USD3.27M. Other Classes of Logs exported were in smaller volumes but were significant contributors to export value. A total of 1,961m³ of Class 2 Logs were exported while the remaining 7,336m³ of logs were from the Class 3 category.

5.1.2 Sawnwood Exports

Total Sawnwood exported for the year 2009 amounted to 41,947m³ and recorded value of USD24.51M. Over the period, Special Category Lumber continues to be the mostly utilised class, which accounted for 49% of all Sawnwood exported while 33% was from Class 1 category and the remaining from Class 2 and 3, with the bulk of this component, being from Class 3. A total of

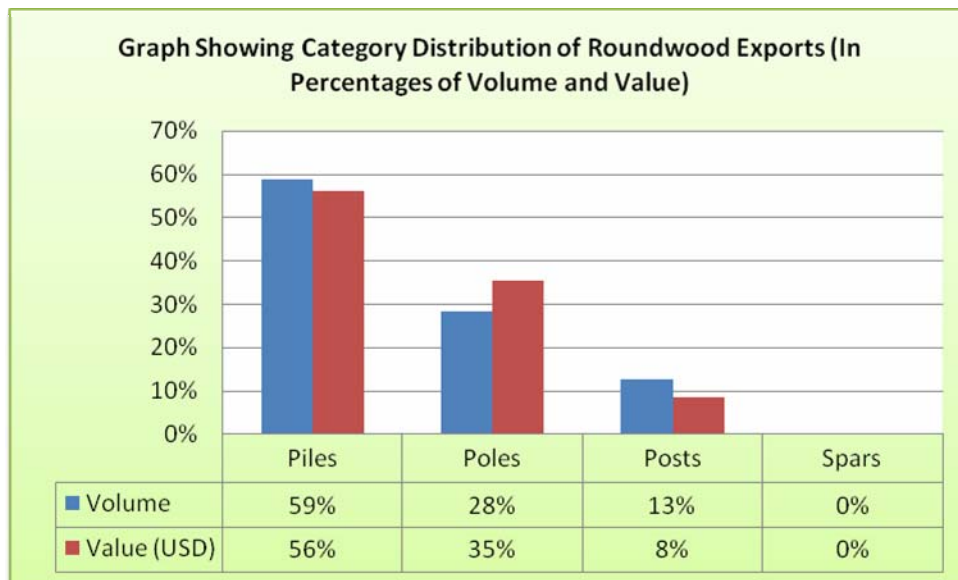
20,433m³ of Special Category Lumber was exported for 2009 and recorded a value of USD13.81M. Special Category Lumber contributed 30.3% of total export value. Of the total export value, Dressed lumber of the special category class recorded the highest amount of USD8.15M or 17.9% of total value. This was followed by contributions from Class 1 Sawnwood with USD7.05M. Most of this was of the Undressed variety, which accounted for 12% of total value. Other significant contributions were made by Class 3 Lumber, particularly of the Undressed variety, with USD3.4M.



The Graph left illustrates the percentage share by the various categories and their contributions to the total volume and value of Sawnwood exported. It can be noted that Special Category Sawnwood contributed the largest

percent share of Sawn lumber exports, accounting for 49% of volume and 56% in value.

5.1.3 Roundwood Exports



The Graph left gives a visual representation of the percentage share of the various products, found in the Roundwood category, contribution to the overall volume and value of Roundwood exported.

Roundwood exports for the year 2009 recorded a drop in volume exported. Over the period, total Roundwood exports

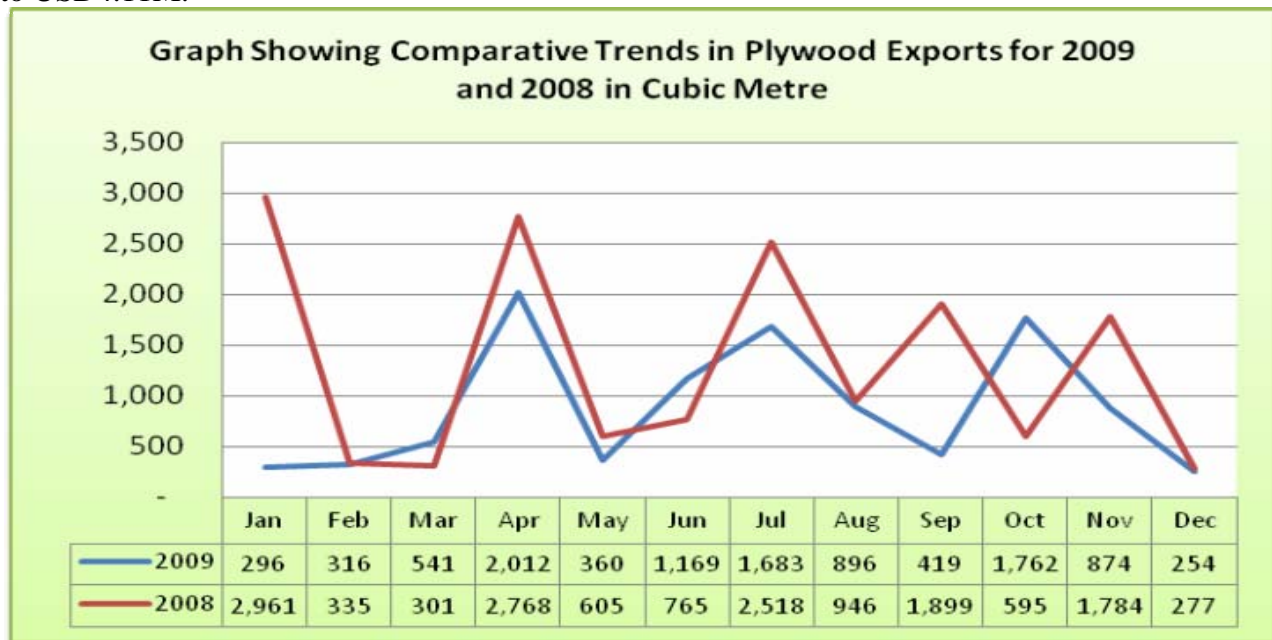
dropped by almost 50% when compared to exports of 2008. Total exports of Roundwood for 2009 were 5,171m³ and accounted for USD1.69M. However, there was a robust increase in the exports of Wallaba Poles by 54% in volume and 77% in value. Total Wallaba Poles exported amounted to 1,465m³ and accounted for USD0.6M.

5.1.4 Splitwood Exports

Total Splitwood exported in 2009 recorded a value of USD2.52M, despite the decline in export volume by 15.9%. Over the period, Splitwood value declined by a mere 3.57% in 2009 when compared to the value recorded in 2008. Splitwood exports accounts for 5.5% of total export value and were exported in the form of Shingles.

5.1.5 Plywood Exports

Plywood exports for the year 2009 recorded lower volume than that of 2008 by 33% in volume and 37% in value. For 2009, Plywood exports accounted for 9% of total value recorded, which amounts to USD4.11M.



The graph above gives a visual representation of the trends in Plywood exports for 2009 and 2008. Plywood continues to reflect fluctuations in the markets with few signs of stability.

5.1.6 Other Value-Added Exports

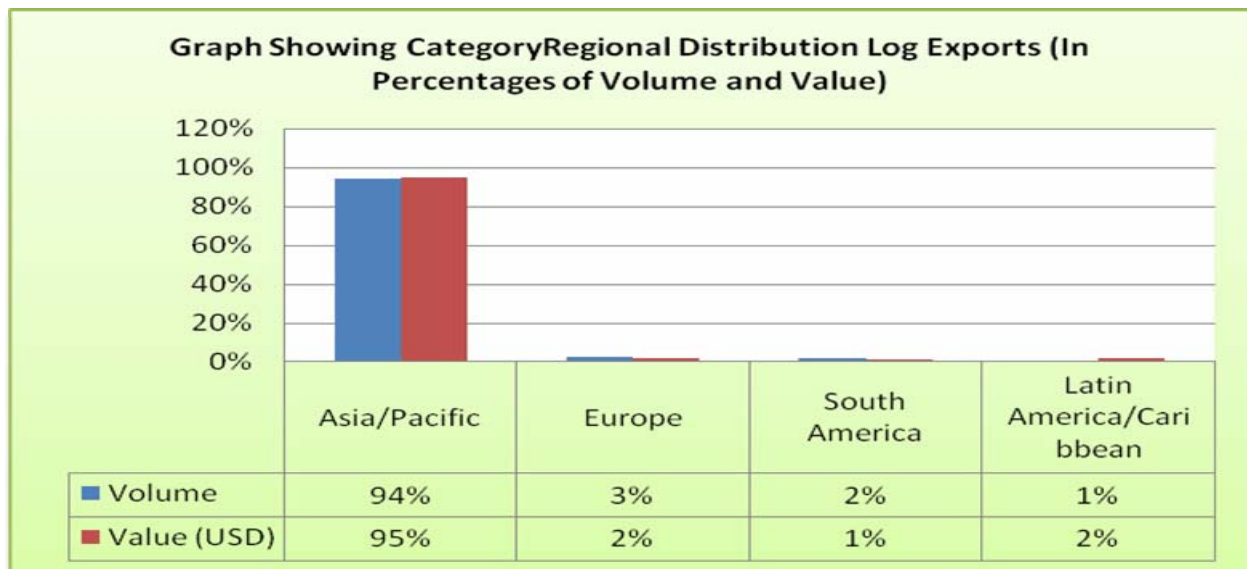
Export value from Other Value-Added Products⁵ (value-added items other than Plywood) for 2009 decreased by 26.48% (from US\$3.17M to US\$2.33M) when compared to that of 2008. However, individual positive signs were recorded in the case for Windows, which increased in volume by 27% and 21% in value, and Spindles which increased from 5,976m³ recorded in 2008 to 10,454m³ exported in 2009.

5.2 Exports by Destination

This section examines exports of the timber products: Logs, Sawnwood, Roundwood, Splitwood and Plywood, by their export destinations in terms of the international regions of Asia/Pacific, Europe, Latin America/Caribbean, North America and Africa. Summaries, by volume and values, respectively, are presented in Appendix VII and Appendix VIII.

5.2.1 Log Exports by Destination

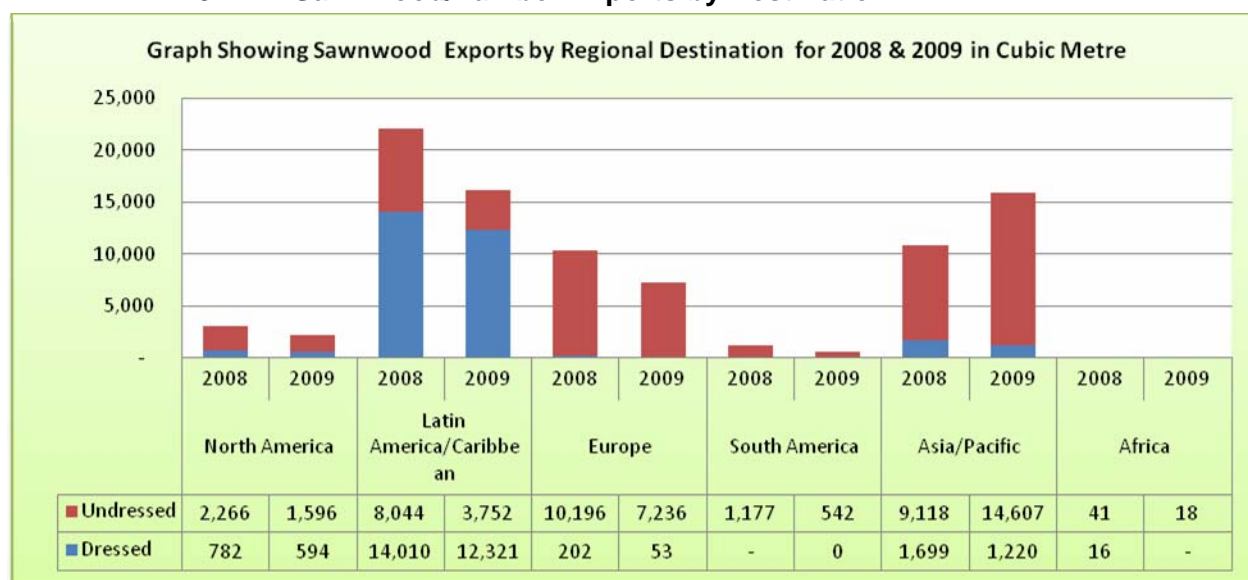
The graph below shows the percentage breakdown of Guyana’s Log exports by region. As can be seen, volume amounting to 94% of all Log exports went to Asia/Pacific region and accounted for 95% of Log export value, while the remainder was scattered among the other regions.



⁵ Secondary Processed Wood Products (SPWP's)

In 2009, total volume of Logs exported to the Asia/Pacific region amounted to 58,604m³ and accounted for USD9.6M of total value. In this region the single largest market for Guyana's logs is India consuming 31,019m³ of all logs. However, this was followed by significant consumption in China with 24,569m³. Other smaller but equally significant markets exist in Suriname and Trinidad & Tobago where consumption levels were around 1,708m³ and 1,145m³ respectively. In Europe, total consumption of logs amounted to 571m³, of which 550m³ were utilized in the United Kingdom.

5.2.2 Sawnwood/Lumber Exports by Destination



Sawnwood exports saw a sharp fall in 2009 by 11.9% when compared to the previous year export volume. This was the result of both Dressed and Undressed lumber declining. Over the period, Dressed Lumber fell by 15% while the Undressed variety fell by 10% in volume exported.

The main market for Guyana's Sawnwood continues to be in the Latin America/ Caribbean region for 2009, consuming mostly Dressed Lumber. However, the Asia/Pacific markets absorbed just as much Sawn Lumber, but more of the Undressed variety. This was followed by moderate quantities being exported to Europe while smaller amounts were sold to the North American markets.

In the Latin America/Caribbean region, 16,073 m³ of Sawnwood were consumed and accounted for USD10.55M. Of the total Sawnwood consumed in this region, 12,321m³ were of the Dressed variety while the remaining 3,752m³ were of the Undressed variety. Total Dressed lumber exported to this market fell by 12% when compared to 2008 export volume and by 2% in value. For the

Undressed variety going to this market, exports dropped by 53% in volume and 46% in value. Total Undressed lumber exported to this market decreased from 8,044m³ in 2008 to a 3.572m³ in 2009. The overall drop in Sawnwood exported to this market was 27% when compared to 2008 figures. The main market for Guyana's Sawnwood exists in Barbados, whose consumption of Sawnwood totalled 8,457m³ and accounted for 20% of total Sawnwood exported. This was followed by Trinidad and Tobago with 1,911m³ or 4.56%. Other markets were scattered throughout the region.

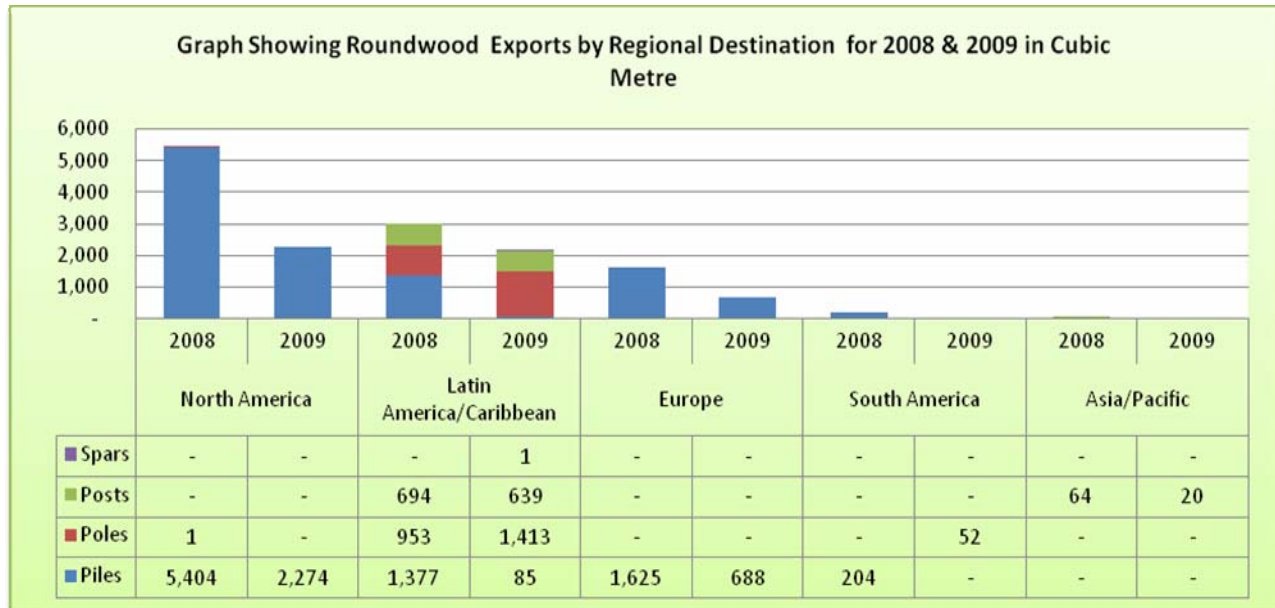
When comparing export volume of Sawnwood going to the Asia/Pacific markets, figures reveal that there was an overall increase in the volume of Sawnwood exported by 46%, moving from 10,817m³ in 2008 to 15,827m³ in 2009. Exports to these markets earned USD8.13M in 2009 as compared to the USD6.35M earned in 2008. The primary market for Sawnwood in this region exists in China with a consumption volume of 13,168m³ of Sawnwood. China consumed 31% of all Sawnwood exported and is also the single largest consumer of Guyana's Sawnwood, most of which being of the Undressed variety. This country recorded an increase in consumption by 69% when compared to 2008 export volume. This was followed by consumption by the United Arab Emirates where the volume recorded was 106m³.

In Europe, Sawnwood exported went to two destinations, namely: Netherlands and United Kingdom. Of these two destinations, the majority of Sawn lumber was consumed in the Netherlands with 4,217m³ while the remainder was utilised in the United Kingdom, consuming 3,073m³ of sawn lumber. These two countries currently account for 17% of total Sawnwood exported in terms of volume and approximately USD4.2M in value.

In the North American market, export volumes have fallen by 28% when compared to the figures reported for 2008. This decline is primarily due to the reduced volume of undressed lumber being consumed in these markets. Volumes fell by 30% for the Undressed variety and 24% for the Dressed lumber. Despite these drops in volume, value for the Dressed lumber only declined by 9.67% while the Undressed fell by a mere 0.7%. The primary market for Guyana's Sawnwood in this region is United States with small amounts going to Canada.

Other small markets for Sawnwood exists in Venezuela and Mauritius with volumes totalling 542m³ and 18m³ respectively.

5.2.3 Roundwood Exports by Destination



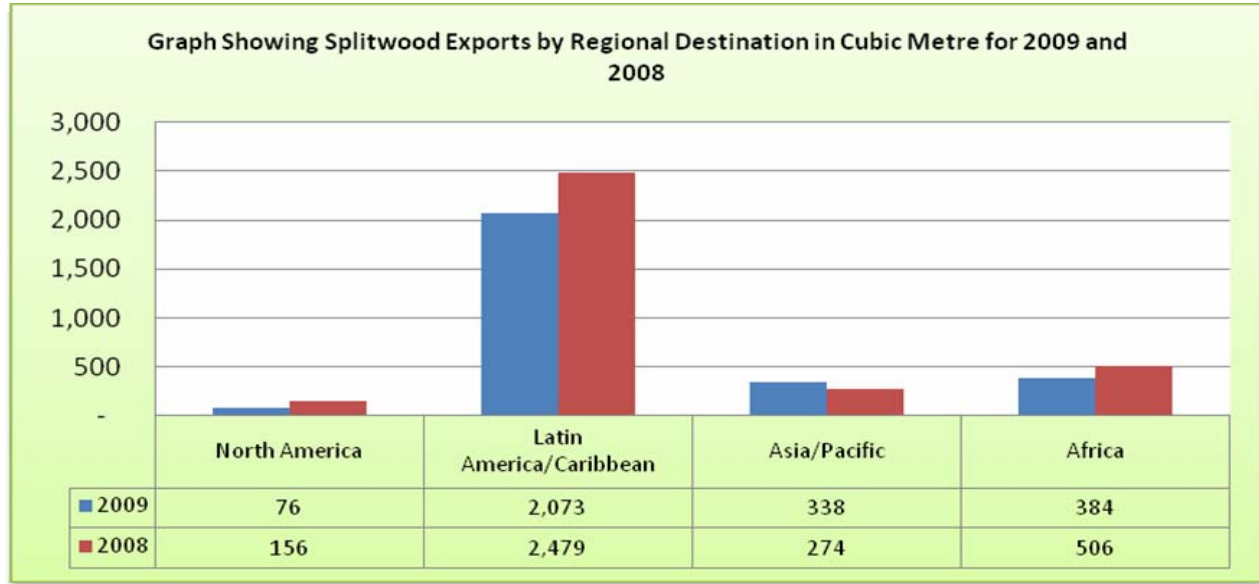
The graph above provides a visual comparison between the years 2009 and 2008 for Roundwood exports across the various regions.

The majority of Roundwood exported went mostly to the United States where the largest market was for round timber piles. The United States consumed 2,274m³ of Roundwood and accounted for approximately 44% of all Roundwood exported. Other Lucrative markets were found in the Latin American/ Caribbean markets where the main product exported was Wallaba Poles. Over the reviewing period, Wallaba Poles accounted for 27% of all Roundwood exported, most of which went to Dominica and Trinidad & Tobago and amounted to 760m³ and 624m³ respectively. Markets in Europe consumed a total of 687m³ of Piles, of which the majority (411m³) went to the Netherlands and the remaining was split between the United Kingdom and Italy consuming approximately 140m³ and 137m³ respectively.

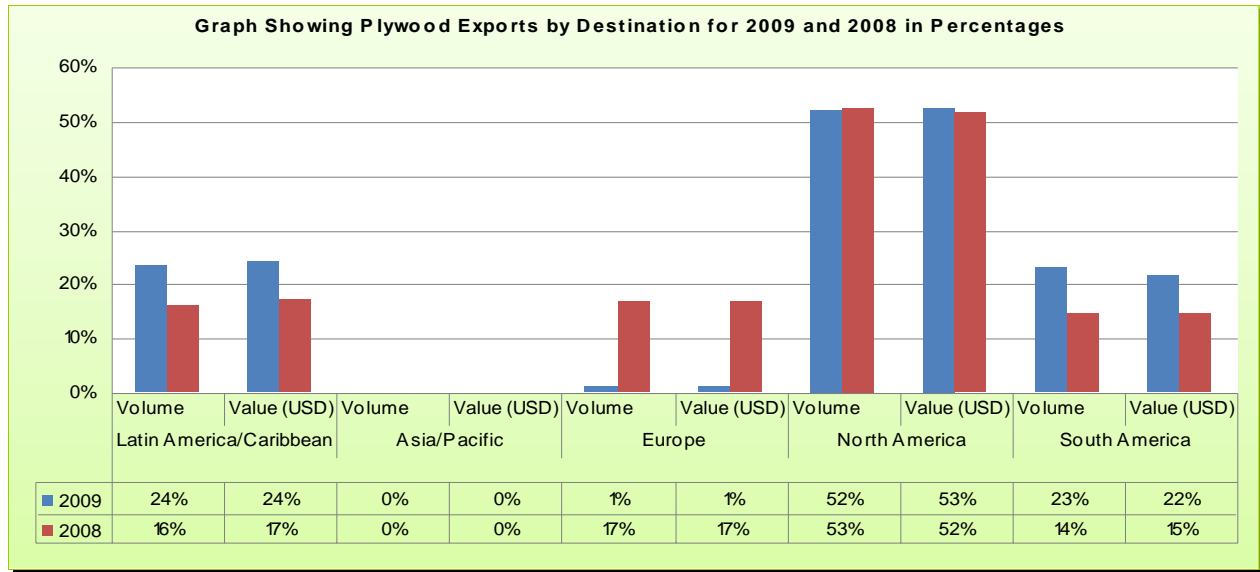
5.2.4 Splitwood Exports by Destination

In 2009, total volume of Splitwood exported amounted to 2,872m³, all of which being Shingles. Of the total Shingles exported, 2,073m³ went to the Latin American/Caribbean region and accounted for 72% of total shingle exports. The remaining few were split across the various regions with Africa consuming 13% or 384m³ while Asia/Pacific region consumed 338m³ and the balance going to the United States in North America. The Single largest consuming nation of Wallaba Shingles for 2009 was St. Lucia with 437m³; this was closely followed by French West Indies with 396m³ and Bahamas with 374m³. Other lucrative markets were found in Mauritius and the United Arab

Emirates with consumption of 344m³ and 308m³ respectively.



5.2.5 Plywood Exports by Destination



The Graph above compares exports of Plywood to the various regions for 2009 and 2008 in volume and value as a percentage share.

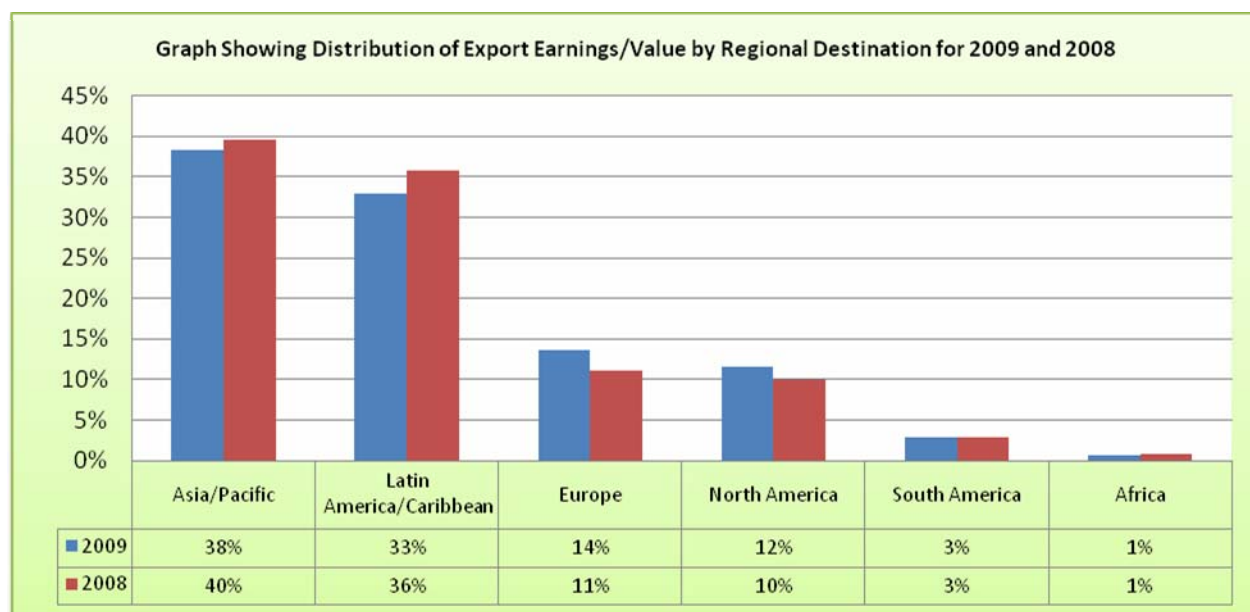
As expected, the North American market (United States) continues to consume the largest volume of Guyana’s Plywood. In this market not much has changed in terms of percentage share. For 2009, the United States consumed 52% of all Plywood exported and contributed 53% of total value

recorded from this product. This was followed by consumption in the Latin America/Caribbean region with 24% and the South American markets with 23% while other smaller volumes were scattered.

5.3 Forestry Sector Export Earnings by Destination

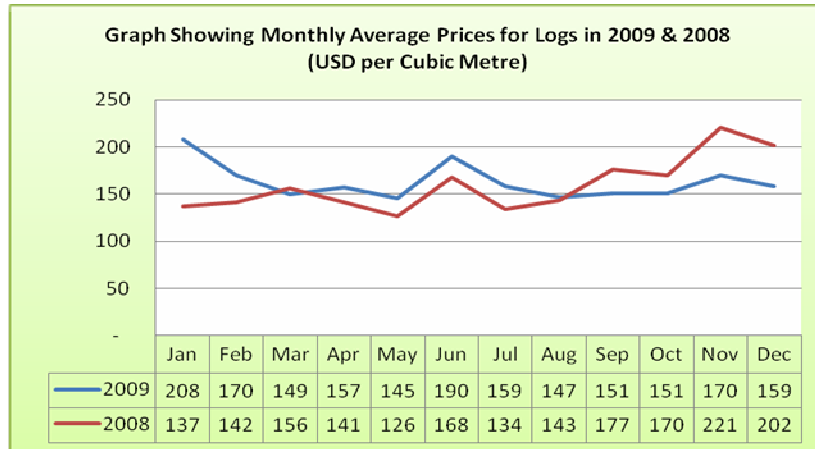
In 2009, the two main regions for exports of Guyana’s timber and timber products were Asia/Pacific and Latin America/Caribbean region. For the reviewing year, 40% of total export earnings came from the Asia/Pacific while 36% was from the markets found in the Latin America/Caribbean region. Other meaningful contributors were found in the European (11%) and North American (10%) region while smaller but significant amounts came from the markets in South America and Africa with 3% and 1% respectively.

Total Export earnings fell in 2009 when compared to that of 2008 by 19.81%; this represents a decline from USD56.7M earned in 2008 to USD45.5M recorded in 2009. Total earnings coming from the main contributors in the Asia/Pacific region amounted to USD18.04M while USD16.25M came from the markets in the Latin/American region.



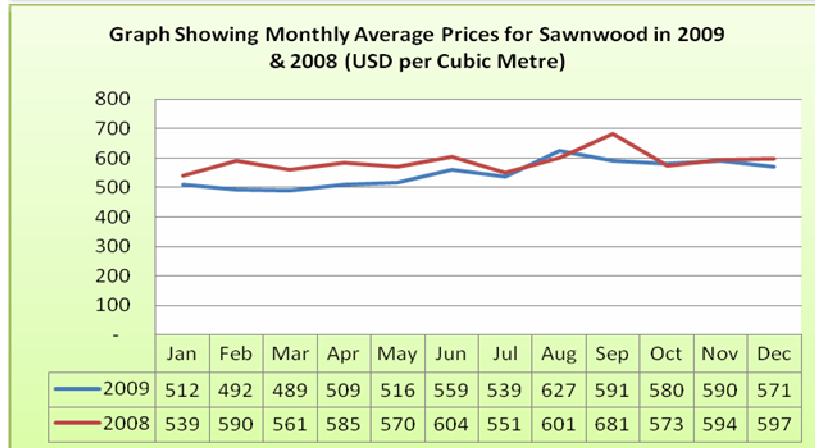
Total value recorded from the other regions summed up to USD11.2M, of which most came from the European and North American markets. Appendix VIII gives a detailed breakdown of earnings by region and product.

5.4 Export Prices



Prices paid for Timber Products exported vary based on products, species, product quality, destinations etc.

The graphs at left show the movement of the monthly average price for Logs, Lumber and Plywood for 2009 and 2008.



The trend lines are indicative of the higher average prices received for logs in the first half of 2009 but declined in the second half while maintaining some consistency throughout the period.



Over the review period, the average prices paid for this product generally remain higher throughout with some exceptions. The highest average price received for Sawnwood was seen in September of 2009 peaking at USD 681 per m³.

In 2009 the overall average price paid for plywood was consistently lower than that of 2008 with few cases of higher prices as can be seen in the graph above.

Table 8 below summarizes weighted average export prices for the years 2007, 2008 and 2009. It also gives the percentage change of 2009 prices over 2008 prices.

Table 8: Weighted Average Prices for Timber & Plywood - Export Markets –Year 2007 to 2009

YEAR / MARKET	Year 2007 Export	Year 2008 Export	Year 2009 Export	Change over 2008
PRODUCT	US\$ (FOB)	US\$ (FOB)	US\$ (FOB)	%
Logs	132.70	168.56	162.67	-3
Sawnwood**	498.86	547.15	584.38	7
Dressed	562.73	630.36	697.05	11
Undressed	475.94	501.94	526.77	5
Roundwood	209.86	242.60	327.30	35
Splitwood***	557.85	765.30	877.72	15
Fuelwood	22.08	22.04	24.64	12
Plywood	365.05	417.77	388.90	-7

N.B. * Exchange Rate: G\$200 = US\$1

** Row indicates combined average for Dressed and Undressed Sawnwood

*** Splitwood Export prices refer to mill-produced Splitwood, mainly Shingles

For 2009 most of the various Forest Products recorded higher average prices in the export market when compared to prices received in 2008 with the exception of Plywood and Logs. The drop in average prices by 3% for Logs was mainly attributed to the decline in volumes of Special Category Logs being exported, while the increase in exports of lower quality plywood, (as compared to previous years exports), contributing to the reduced average price by 7%. Over the period, Sawnwood recorded an overall increase by 7% which was mostly due to the higher prices recorded for Dressed lumber while smaller, but significant, increases were also recorded for the Undressed variety. While higher average prices were recorded for Splitwood by 15% and Fuelwood by 12%, a robust increase was recorded for the case of Roundwood by 35%.

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5. ITTO MIS Reports – 2009, 2010
6. UNCTAD Global Investment Trend Monitor, No. 2, Global and Regional FDI Trends in 2009, January 19, 2010.

Other Resources:

1. GFC Export Database
2. GFC Production Database

APPENDIX

Appendix I: Total Primary Production Volume by Region for 2009

Product	Category	Berbice	Demerara	Essequibo	Grand Total
Logs	Special Category Log	8,624	26,208	60,000	94,833
	Class 1 Log	36,284	8,166	31,845	76,295
	Class 2 Log	9,727	8,547	45,298	63,572
	Class 3 Log	10,231	1,438	19,830	31,499
Logs Total (m³)		64,866	44,359	156,973	266,198
Roundwood	Greenheart Piles	4,566	6,978	2,007	13,551
	Kakaralli Piles	166	121	624	911
	Wallaba Poles	104	2,421	573	3,098
	Wallaba Post	557	626	608	1,791
	Spars		32	31	63
Roundwood Total (m³)		5,393	10,178	3,843	19,414
Sawn Lumber	Special Category Lumber	676	9,633	6,187	16,496
	Class 1 Lumber	5,802	25,204	7,692	38,697
	Class 2 Lumber	1,934	5,170	3,270	10,374
	Class 3 Lumber	265	4,710	2,576	7,552
Sawn Lumber Total (m³)		8,677	44,717	19,725	73,119
Splitwood	Paling Staves	215	103	551	869
	Shingles		80	11	91
Splitwood Total (m³)		215	183	562	960
Fuelwood	Charcoal	71	12,587	211	12,869
	Firewood	415	9,178	7,254	16,846
Fuelwood Total (m³)		485	21,765	7,464	29,715
Wattles	Wattles		241,010	2,598	243,608
Wattles Total (pieces)			241,010	2,598	243,608
Manicole Palm Heart	Manicole Palm	576,488	15,000	2,240,050	2,831,538
Manicole Palm Heart Total (pieces)		576,488	15,000	2,240,050	2,831,538
Mangrove Bark	Mangrove Bark			22,697	22,697
Mangrove Bark Total (kg)				22,697	22,697

Appendix II: Total Production by Station in Demerara

Product2_3	Category2	Soesdyke	Georgetown	Linden	Mabura	Grand Total
Logs	Special Category Log	1,227	2,848	586	21,547	26,208
	Class 1 Log	814	3,441	1,431	2,481	8,166
	Class 2 Log	1,326	1,553	5,085	582	8,547
	Class 3 Log	73	262	446	657	1,438
Logs Total (m³)		3,441	8,104	7,548	25,267	44,359
Roundwood	Greenheart Piles	2,985	715	1,708	1,569	6,978
	Kakaralli Piles	121				121
	Wallaba Poles	2,021	190	210		2,421
	Wallaba Post	188	406	0	32	626
	Spars	23	9			32
Roundwood Total (m³)		5,339	1,321	1,918	1,601	10,178
Sawn Lumber	Special Category Lumber	4,031	4,337	1,160	105	9,633
	Class 1 Lumber	11,183	6,260	7,749	11	25,204
	Class 2 Lumber	3,145	704	1,322		5,170
	Class 3 Lumber	1,950	2,081	679		4,710
Sawn Lumber Total (m³)		20,308	13,382	10,911	116	44,717
Splitwood	Paling Staves	58	33	12		103
	Shingles	58	23			80
Splitwood Total (m³)		116	56	12		183
Fuelwood	Charcoal	11,094	876	617		12,587
	Firewood	8,953	214	11		9,178
Fuelwood Total (m³)		20,047	1,090	628		21,765
Wattles	Wattles	216,280	23,530	1,200		241,010
Wattles Total (pieces)		216,280	23,530	1,200		241,010
Manicole Palm Heart	Manicole Palm			15,000		15,000
Manicole Palm Heart Total (pieces)				15,000		15,000

Appendix III: Total Production by Station in Berbice

Product	Category	Unamco	New Amsterdam	Springlands	Orealla	Bamboo Landing	Grand Total
Logs	Special Category Log	2,074	117	1,508		4,926	8,624
	Class 1 Log	14,057	7,142	12,033	154	2,897	36,284
	Class 2 Log	691	869	7,026	220	920	9,727
	Class 3 Log	3,153	833	5,331	57	858	10,231
Logs Total (m³)		19,975	8,961	25,899	432	9,600	64,866
Roundwood	Greenheart Piles	3,074	117			1,375	4,566
	Kakaralli Piles	88	45	33			166
	Wallaba Poles	86	17	0			104
	Wallaba Post	7	60	490			557
Roundwood Total (m³)		3,254	240	523		1,375	5,393
Sawn Lumber	Special Category Lumber	596	35	46			676
	Class 1 Lumber	3,177	2,210	410	5		5,802
	Class 2 Lumber	459	568	905	2		1,934
	Class 3 Lumber	84	141	39			265
Sawn Lumber Total (m³)		4,316	2,954	1,400	7		8,677
Splitwood	Paling Staves	28	54	132	1		215
Splitwood Total (m³)		28	54	132	1		215
Fuelwood	Charcoal		71				71
	Firewood		160	255			415
Fuelwood Total (m³)			230	255			485
Manicole Palm Heart	Manicole Palm		576,488				576,488
Manicole Palm Heart Total (pieces)			576,488				576,488

Appendix IV: Total Production by Station in Essequibo

Product	Category	Anarika	Arapiaco	Bartica	Buckhall	Iteballi	Lethem	Mabaruma	Manaka	Parika	Port Kaituma	Springlands	Winiperu	Grand Total
Logs	Special Category Log	11,506	38	1,471	31,731	3,677		139	5,628	597	764	1,861	2,589	60,000
	Class 1 Log	1,178	587	5,737	16,070	192		451	687	2,237	1,427	3,138	141	31,845
	Class 2 Log	3,248	2,772	2,124	17,487			193	1,828	1,417	11,910	4,310	11	45,298
	Class 3 Log	592	134	2,365	8,476	557		48	329	1,952	2,653	2,725		19,830
Logs Total (m³)		16,522	3,531	11,696	73,764	4,426		831	8,471	6,202	16,754	12,035	2,742	156,973
Roundwood	Greenheart Piles	25			794				223	285		681		2,007
	Kakaralli Piles		289							115		220		624
	Wallaba Poles		536	1				16		6		14		573
	Wallaba Post		15	2			5			253		333		608
	Spars			0								30		31
Roundwood Total (m³)		25	840	3	794		5	16	223	659		1,279		3,843
Sawn Lumber	Special Category Lumber	6	1,250	323			126	502		1,570	218	2,193		6,187
	Class 1 Lumber	21	2,554	448			62	688		1,336	231	2,351		7,692
	Class 2 Lumber	15	399	240			5	44		894	14	1,659		3,270
	Class 3 Lumber	9	279	76			85	103		492	27	1,504		2,576
Sawn Lumber Total (m³)		51	4,482	1,087			278	1,337		4,292	490	7,708		19,725
Splitwood	Paling Staves		3	7						505		36		551
	Shingles		10							1				11
Splitwood Total (m³)			12	7						506		36		562
Fuelwood	Charcoal											211		211
	Firewood	11								112		7,131		7,254
Fuelwood Total (m³)		11								112		7,341		7,464
Wattles	Wattles			1,600						249		749		2,598
Wattles Total (pieces)				1,600						249		749		2,598
Manicole Palm Heart	Manicole Palm							2,240,050						2,240,050
Manicole Palm Heart Total (pieces)								2,240,050						2,240,050
Mangrove Bark	Mangrove Bark	1,512						21,185						22,697
Mangrove Bark Total (kg)		1,512						21,185						22,697

Domestic Prices Summary in Cubic Meters

Appendix V: Domestic Prices for Selected Species of Sawnwood

Product	Species	Berbice			Demerara			Essequibo			Country Average		
		Min of Unit Price	Max of Unit Price	Average of Unit Price	Min of Unit Price	Max of Unit Price	Average of Unit Price	Min of Unit Price	Max of Unit Price	Average of Unit Price	Min of Unit Price	Max of Unit Price	Average of Unit Price
Dressed Lumber	Purpleheart	-	-	-	93,299	127,226	110,869	106,022	127,226	120,158	99,661	127,226	115,514
	Greenheart	101,781	127,226	110,263	76,336	127,226	102,841	84,818	127,226	101,781	87,645	127,226	104,962
	Wamara	63,613	76,336	69,975	74,215	93,299	83,757	-	-	-	68,914	84,818	76,866
	Shibadan	59,372	78,456	71,202	72,095	72,095	72,095	53,011	59,372	56,545	61,493	69,975	66,614
	Simarupa	42,409	74,215	60,786	67,854	76,336	72,095	63,613	67,854	65,734	57,959	72,802	66,205
	Crabwood	63,613	63,613	63,613	63,613	67,854	65,734	-	-	-	63,613	65,734	64,673
	Kabukalli	59,372	80,577	71,447	63,613	101,781	78,810	55,131	91,179	68,490	59,372	91,179	72,916
	Darina	48,770	50,891	49,830	63,613	63,613	63,613	53,011	63,613	57,959	55,131	59,372	57,134
	Kereti	46,650	76,336	67,147	63,613	76,336	69,975	53,011	59,372	57,252	54,425	70,681	64,791
	Itaballi	40,288	40,288	40,288	61,493	61,493	61,493	-	-	-	50,891	50,891	50,891
	Muniridan	40,288	74,215	55,784	61,493	63,613	62,553	-	-	-	50,891	68,914	59,168
	Other	38,168	63,613	48,240	55,131	63,613	59,372	55,131	63,613	59,372	49,477	63,613	55,662
	Burada	-	-	-	40,288	40,288	40,288	53,011	57,252	55,131	46,650	48,770	47,710
	Mora	42,409	76,336	59,372	38,168	76,336	62,765	55,131	59,372	57,252	45,236	70,681	59,796
	Tauroniro	59,372	78,456	69,203	36,047	72,095	55,737	53,011	63,613	57,252	49,477	71,388	60,731
	Hubaballi	63,613	63,613	63,613	-	-	-	-	-	-	63,613	63,613	63,613
	Snakewood	59,372	61,493	60,433	-	-	-	-	-	-	59,372	61,493	60,433
Tatabu	59,372	78,456	72,095	-	-	-	-	-	-	59,372	78,456	72,095	
Locust	-	-	-	-	-	-	93,299	93,299	93,299	93,299	93,299	93,299	
Undressed	Purpleheart	-	-	-	114,504	114,504	114,504	84,818	84,818	84,818	99,661	99,661	99,661
	Greenheart	93,299	93,299	93,299	78,456	106,022	96,833	76,336	84,818	81,990	82,697	94,713	90,708
	Wamara	-	-	-	76,336	76,336	76,336	-	-	-	76,336	76,336	76,336
	Shibadan	55,131	55,131	55,131	-	-	-	42,409	42,409	42,409	48,770	48,770	48,770
	Simarupa	-	-	-	67,854	67,854	67,854	-	-	-	67,854	67,854	67,854
	Crabwood	-	-	-	76,336	76,336	76,336	-	-	-	76,336	76,336	76,336
	Kabukalli	55,131	74,215	64,673	65,734	78,456	72,095	55,131	65,734	58,666	58,666	72,802	65,145
	Darina	42,409	46,650	44,529	-	-	-	42,409	42,409	42,409	42,409	44,529	43,469
	Kereti	-	-	-	-	-	-	38,168	55,131	44,529	38,168	55,131	44,529
	Itaballi	36,047	36,047	36,047	-	-	-	-	-	-	36,047	36,047	36,047
	Muniridan	36,047	59,372	47,922	-	-	-	-	-	-	36,047	59,372	47,922
	Other	-	-	-	-	-	-	33,927	40,288	37,108	33,927	40,288	37,108
	Burada	59,372	59,372	59,372	38,168	40,288	39,228	42,409	42,409	42,409	46,650	47,357	47,003
	Mora	74,215	74,215	74,215	72,095	72,095	72,095	40,288	40,288	40,288	62,200	62,200	62,200
	Tauroniro	55,131	74,215	64,673	-	-	-	42,409	42,409	42,409	48,770	58,312	53,541
	Tatabu	36,047	55,131	45,589	-	-	-	-	-	-	36,047	55,131	45,589

GUYANA FORESTRY COMMISSION

Appendix VI: Export Volumes and Values by Product for the period Jan - Dec 2009

PRODUCT	Jan - Dec 2008		Jan - Dec 2009		% Change Over	
	Volume	Value	Volume	Value	Jan - Dec 2008	
	m ³	US\$	m ³	US\$	% Vol	% Val
Logs	92,404.00	15,575,230.36	62,039.38	10,091,777.07	(32.86)	(35.21)
Sawnwood	47,602.66	26,045,981.70	41,940.68	24,509,131.76	(11.89)	(5.90)
<i>Dressed</i>	16,760.42	10,565,142.08	14,188.96	9,890,475.62	(15.34)	(6.39)
<i>Undressed</i>	30,842.24	15,480,839.62	27,751.72	14,618,656.14	(10.02)	(5.57)
Roundwood	10,322.68	2,504,290.44	5,171.36	1,692,595.23	(49.90)	(32.41)
Greenheart Piles	7,795.64	1,859,044.55	2,915.49	919,730.66	(62.60)	(50.53)
Kakaralli Piles	815.47	146,437.80	130.51	31,880.00	(84.00)	(78.23)
Other Piles	-	-	-	-	-	-
Poles	954.12	337,625.30	1,465.21	597,802.60	53.57	77.06
Posts	757.44	161,182.79	659.30	143,031.97	(12.96)	(11.26)
Spars	-	-	0.85	150.00	-	-
Splitwood	3,415.23	2,613,662.59	2,871.57	2,520,432.94	(15.92)	(3.57)
Paling Staves	0.13	55.00	-	-	(100.00)	(100.00)
Shingles	3,415.10	2,613,607.59	2,871.57	2,520,432.94	(15.92)	(3.56)
Plywood	15,755.51	6,582,134.90	10,580.76	4,114,865.80	(32.84)	(37.48)
TOTAL TIMBER & PLYWOOD	169,500.08	53,321,299.99	122,603.74	42,928,802.80	(27.67)	(19.49)
Furniture (pcs)	20,621.00	1,617,123.42	10,262.00	823,409.10	(50.24)	(49.08)
Indoor Furniture	3,446.00	271,629.92	702.00	54,968.90	(79.63)	(79.76)
Outdoor/Garden Furniture	17,175.00	1,345,493.50	9,560.00	768,440.20	(44.34)	(42.89)
Building Componentry (pcs)		1,096,968.70	-	1,247,386.04	-	13.71
Doors	11,210.00	947,538.07	8,611.00	831,611.38	(23.18)	(12.23)
Door Components	515.00	10,413.48	98.00	3,376.41	(80.97)	(67.58)
Windows	1,736.00	79,864.23	2,197.00	96,986.79	26.56	21.44
Other Builder's Joinery (pcs)	355.00	16,440.16	253.00	10,189.65	(28.73)	(38.02)
(m ³)	87.00	15,460.00	18.00	352.94	(79.31)	(97.72)
Rails (pcs)	1.53	860.50	34.00	255.00	2,122.22	(70.37)
(m ³)	-	-	0.70	2,028.97	-	-
Spindles (pcs)	5,976.00	26,392.26	10,454.00	302,584.90	74.93	1,046.49
Mouldings (m)	206,118.26	389,272.83	135,955.12	242,183.65	(34.04)	(37.79)
Pre-Fabricated Houses (pcs)	10.00	70,315.61	2.00	20,232.37	(80.00)	(71.23)
OTHER (than Plywood) VALUE ADDED		3,173,680.56	-	2,333,211.16		(26.48)
Fuelwood (m³)	6,858.25	151,171.69	8,308.45	204,709.91	21.15	35.42
Charcoal*	6,858.25	151,171.69	8,285.80	204,429.91	20.82	35.23
Firewood	-	-	22.65	280.00	-	-
Other (pcs)	2,445.00	9,159.22	5,134.00	11,830.07	109.98	29.16
Wooden Ornaments & Utensils	1,736.00	7,369.62	2,644.00	7,712.66	52.30	4.65
Craft	709.00	1,789.60	2,490.00	4,117.41	251.20	130.07
Non - Timber Forest Products (pcs)	7,599.00	96,026.88	4,248.20	31,566.82	(44.10)	(67.13)
OTHER PRODUCTS		256,357.79	-	248,106.80		(3.22)
TOTAL EXPORT VALUE		56,751,338.34	-	45,510,120.76		(19.81)

Appendix VII: Export Volumes in Cubic Metre by Region - Timber and Plywood

Product		Region	2009	2008	% Change	
Logs	Logs	Latin America/Caribbean	1,156	2,975	(61.12)	
		Europe	571	82	596.47	
		South America	1,708	1,636	4.44	
		Asia/Pacific	58,604	87,712	(33.19)	
		Logs Total		62,039.38	92,404.00	(32.86)
Sawnwood	Dressed Lumber	North America	594	782	(24.01)	
		Latin America/Caribbean	12,306	14,061	(12.48)	
		Europe	68	202	(66.34)	
		South America	0		100.00	
		Asia/Pacific	1,220	1,699	(28.22)	
		Africa		16	(100.00)	
	Undressed Lumber	North America	1,596	2,266	(29.57)	
		Latin America/Caribbean	3,676	8,044	(54.30)	
		Europe	7,312	10,196	(28.29)	
		South America	542	1,177	(53.97)	
		Asia/Pacific	14,607	9,118	60.21	
		Africa	18	41	(56.26)	
		Sawnwood Total		41,940.68	47,602.66	(11.89)
		Roundwood	Piles	North America	2,274	5,404
Latin America/Caribbean	62			1,377	(95.50)	
Europe	711			1,625	(56.25)	
South America				204	(100.00)	
Poles	North America			1	(100.00)	
	Latin America/Caribbean		1,413	953	48.25	
	South America		52		100.00	
Posts	Latin America/Caribbean		639	694	(7.84)	
	Asia/Pacific		20	64	(68.52)	
Spars	Latin America/Caribbean		1		100.00	
Roundwood Total			5,171.36	10,322.68	(49.90)	
Splitwood	Shingles	North America	76	156	(51.34)	
		Latin America/Caribbean	2,073	2,479	(16.37)	
		Asia/Pacific	338	274	23.50	
		Africa	384	506	(24.11)	
Splitwood Total		2,871.57	3,415.10	(15.92)		
Plywood	Plywood	North America	5,504	8,305	(33.73)	
		Latin America/Caribbean	2,490	2,518	(1.11)	
		Europe	121	2,661	(95.47)	
		South America	2,459	2,272	8.24	
		Asia/Pacific	8		100.00	
Plywood Total		10,580.76	15,755.51	(32.84)		
Total Timber and Plywood			122,603.74	169,499.95	(27.67)	

Appendix VIII: Export Value (US\$) by Region -Timber and Plywood

Product		Region	2009	2008	% Change		
Logs	Logs	Latin America/Caribbean	128,726	300,169	(57.12)		
		Europe	185,331	11,064	1,575.09		
		South America	165,894	153,403	8.14		
		Asia/Pacific	9,611,825	15,110,594	(36.39)		
Logs Total			10,091,777	15,575,230	(35.21)		
Sawnwood	Dressed Lumber	North America	526,057	582,348	(9.67)		
		Latin America/Caribbean	8,437,431	8,600,601	(1.90)		
		Europe	47,647	134,772	(64.65)		
		South America	138		100.00		
		Asia/Pacific	879,202	1,230,193	(28.53)		
		Africa		17,229	(100.00)		
	Undressed Lumber	North America	1,010,410	1,017,494	(0.70)		
		Latin America/Caribbean	2,058,083	3,924,975	(47.56)		
		Europe	4,057,787	4,894,764	(17.10)		
		South America	228,291	501,741	(54.50)		
		Asia/Pacific	7,253,528	5,117,926	41.73		
		Africa	10,557	23,939	(55.90)		
		Sawnwood Total			24,509,132	26,045,982	(5.90)
		Roundwood	Piles	North America	730,594	1,387,065	(47.33)
Latin America/Caribbean	8,581			235,434	(96.36)		
Europe	212,436			343,434	(38.14)		
South America				39,550	(100.00)		
Poles	North America			800	(100.00)		
	Latin America/Caribbean		590,681	336,825	75.37		
	South America		7,122		100.00		
Posts	Latin America/Caribbean		135,832	138,783	(2.13)		
	Asia/Pacific		7,200	22,400	(67.86)		
Spars	Latin America/Caribbean		150		100.00		
Roundwood Total			1,692,595	2,504,290	(32.41)		
Splitwood	Splitwood		North America	76,325	98,594	(22.59)	
		Latin America/Caribbean	1,830,718	1,921,119	(4.71)		
		Asia/Pacific	288,390	232,900	23.83		
		Africa	325,000	361,050	(9.98)		
Splitwood Total			2,520,433	2,613,663	(3.57)		
Plywood	Plywood	North America	2,168,846	3,402,902	(36.26)		
		Latin America/Caribbean	1,004,160	1,121,463	(10.46)		
		Europe	45,813	1,101,793	(95.84)		
		South America	892,057	955,977	(6.69)		
		Asia/Pacific	3,990		100.00		
Plywood Total			4,114,866	6,582,135	(37.48)		
Total Export Value For Timber and Plywood			42,928,803	53,321,245	(19.49)		

Major timber species and Uses

Classification	Species (Local Names)	Species (Scientific Names)	Major Uses
Special Category	Greenheart	<i>Chlorocardium rodiei</i>	Boat building, marine work, piling, general heavy construction, flooring, heavy furniture, turnery and finishing rods.
	Purpleheart	<i>Peltogyne venosa</i>	Building construction, flooring, bridging, boat building – keels, transoms, canoes, coach building, furniture, turnery, inlay, tool handles, sticks, bows, and veneer.
	Brown Silverballi	<i>Licaria cannella</i>	Boat building, canoes, furniture, interior work, and general carpentry.
	Red Cedar	<i>Cedrela odorata</i>	Furniture, cabinet work, panelling, boats, coffins and cigar boxes.
	Letterwood	<i>Brosimum guianense</i>	Inlay, turnery, sticks, tool handles and bows for archery.
	Bulletwood	<i>Manilkara bidentata</i>	General heavy construction, house framing, sleepers, mill rollers, wheel spokes, fencing, axe and tool handles, turnery.
Class 1	Crabwood	<i>Carapa guianensis</i>	General construction, interior work, carpentry, furniture, and turnery, plywood and veneer.
	Yellow Silverballi	<i>Aniba hypoglauca</i>	Boat planking, canoes, furniture, cabinet work, and interior construction.
	Itikiboraballi	<i>Swartzia xanthopetala</i>	Inlay turnery, cabinet work, walking sticks, bag-pipes and tool handles.
	Locust	<i>Hymenaea courbaril</i>	Ship-building, general construction, carriage buildings, tool handles, furniture and croquet mallets.
	Tatabu	<i>Diploptropis purpurea</i>	Boat-building, house framing, and flooring, furniture and turnery, interior work, carriage-building, tool handles, and sleepers.
	Determa	<i>Ocotea rubra</i>	Boat and carriage building, masts, furniture, carving, interior work, and general carpentry.
	Wamara	<i>Eperua grandiflora</i>	Furniture, cabinet work, parquet flooring, turnery, inlay, tool handles, walking sticks, and bows for archery.
	Kabukalli	<i>Goupia glabra</i>	Heavy construction, house framing, flooring, decking, punt bottoms, canoes, railway sleepers, paving blocks, furniture and decorative plywood.
	Shibadan	<i>Aspidosperma album</i>	Fuel and Plywood.
	Tauroniro	<i>Humiria balsamifera</i>	Heavy construction, piling, bridges, house framing, flooring, wheelwright work, furniture, sleepers, counters, work bench tops.
	Manniballi	<i>Moronobea coccinea</i>	Heavy construction house sills, machinery frames, flooring, furniture and sheet piling.
	Washiba	<i>Tabebuia sp.</i>	Bridges, house framing, sleepers, tool handles, rollers' walking sticks, and fishing rods.
	Hakia	<i>Tabebuia serratifolia</i>	Bridges, house framing, sleepers, tool handles, rollers' walking sticks, and fishing rods.
	Dalli	<i>Virola spp.</i>	Match boxes, coffins, inside boarding, carpentry, packing cases, plywood, slack cooperage chip board and concrete shuttering.
	Suya	<i>Pouteria speciosa</i>	Interior boarding, carpentry, and plywood.
	Ulu	<i>Trattinickia demerarae</i>	Inside boarding, cupboard linings, canoes and plywood.
	Simarupa	<i>Quassia simarouba</i>	Interior construction, furniture, shelves, drawer linings, shoe heels, plywood, paper pulp, toys, box shooks.
	Aromata	<i>Clathrotropis branchypetala</i>	Furniture, house framing, boat building, flooring and sleepers.
	Mora	<i>Mora excelsa</i>	Building construction especially flooring, framing and siding, boat building especially ribs, stems, knees, transoms, and decking, sleepers, furniture, turnery, wagon building; wheelwright-work, naves and felloes, croquet mallets.
	Morabukea	<i>Mora gonggrijpii</i>	Heavy construction, sleepers, flooring and siding, heavy furniture, boat timbers, truck bodies.
	Hububalli	<i>Loxopterygium sagotii</i>	Panelling, furniture and cabinet work.
Class 2	Baromalli	<i>Catostemma commune</i>	Dry cooperage, interior work, box shooks, paper pulp, and plywood.
	Dukalli	<i>Parahancornia fasciculata</i>	Carpentry, interior work, furniture, door and window stock, concrete shuttering, match boxes and plywood.
	Kereti Silverballi	<i>Lauraceae spp</i>	Shuttering, temporary buildings, box making, and plywood.
	Kurahara	<i>Calophyllum lucidum</i>	Boat planking, canoes, punt mast and furniture.
	Wabaima	<i>Licaria cannella</i>	Heavy construction, flooring, furniture, boat building (planking), bridge decking, musical instruments.
	Karohoro	<i>Schefflera decaphylla</i>	Match splints, drums, canoes, interior construction and plywood.
	Baradan	<i>Ocotea tomentella</i>	Canoes, box shooks, concrete shuttering and plywood.
	Ubudi	<i>Anarcadium giganteum</i>	Interior work and plywood.
	Kirikua	<i>Iryanthera macrophylla</i>	Oars, interior construction, box shooks, utility plywood, slack cooperage and concrete shuttering.

	Kurokai	<i>Protium decandrum</i>	Masts, spars, house framing and plywood.
	Maporokan	<i>Inga alba</i>	Interior work, fuel and cheap plywood.
	Monkey Pot	<i>Lecythis zabucajo</i>	General construction, furniture, turnery and wheel spokes.
	Manni	<i>Symphonia globulifera</i>	Utility wood, paper, pulp, plywood, cooperage, railway sleepers, sheet piling, packing cases, general carpentry, flooring, furniture and fuel.
	Pakuri	<i>Platonia insignis</i>	Piling, boat building, furniture, turnery, house framing, flooring, panelling, tight cooperage and general carpentry.
	Yaruru (Yarula)	<i>Aspidosperma excelsum</i>	Paddles, axe and tool handles, walking sticks, fishing rods and fuel.
	Muneridian	<i>Siparuna spp.</i>	
	Wallaba	<i>Eperua falcata</i> <i>Eperua grandiflora</i>	Pillar trees, roundwood framing, fence posts, transmission poles, sleepers, piling and vat staves, shingles, charcoal, particle board and firewood.
Class 3	Burada	<i>Parinari campestris</i>	Heavy construction, flooring.
	Duka	<i>Tapirira marchandi</i>	Interior construction, furniture, box shooks and plywood.
	Dukuria	<i>Sacoglottis cydonioides</i>	Heavy construction.
	Fukadi	<i>Terminalia amazonia</i>	House framing, framing, constructional work, railway sleepers and plywood.
	Inyak	<i>Antonia ovata</i>	Interior work, furniture and boxes.
	Limonaballi	<i>Chrysophyllum pomiferum</i>	Heavy construction and fuel.
	Suradan	<i>Hyeronima alchorneoides</i>	Boat-framing, railway sleepers, heavy construction, truck building, wheel spokes, furniture, plywood and gun stocks.
	White Cedar	<i>Tabebuia insignis</i>	Paddles, shovel handles, and interior work, packing cases and cheap furniture.
	Futui	<i>Jacaranda copaia</i>	Coffins, box shooks, matches, concrete shuttering and interior construction.
	Halchiballi	<i>Pera schomburgkiana</i>	Fuel and utility plywood.
	Haiariballi	<i>Alexa imperatricis</i>	Interior construction, packing cases and plywood.
	Huruasa	<i>Abarema jupunba</i>	Fuel and plywood.
	Iteballi	<i>Vochysia schomburgkii</i>	Carpentry and furniture.
	Kakaralli	<i>Eschweilera alata</i>	Piling, house framing, mine lagging, posts and sleepers.
	Kauta	<i>Licania laxiflora</i>	Light gauge railway sleepers, roof shingles, mine timbering, fuel and charcoal.