

The Constraints for Small and  
Medium Sized Forest Enterprises  
in Guyana in the Context of  
Sustainable Forest Management.

Andrew Mendes.

Farfan & Mendes ltd.





# Sustainability?

- Environmental sustainability – is the process damaging to the environment – there is an economic element to this!
- Economic – is the type, size and capitalisation sustainable by the owner/operator and by the resource base. Is the enterprise cost effective and competitive.
- Technological – is the technology used supportable by the technical skills and capital available. The concept of “appropriate technology.
- Socially – can the process be supported and sustained by the human resources available and what is the net benefit to the country & SMFE operators.

Table 1.

# Marketing vs production orientation.

## The Marketing Value Chain

PRIMARY ACTIVITIES					
In-bound logistics	Operations	Out-bound logistics	Marketing & sales	Service	MARGIN
	TECHNOLOGY DEVELOPMENT				THROUGH
PROCUREMENT HUMAN RESOURCE DEVELOPMENT FIRM INFRASTRUCTURE					VALUE

### SUPPORT ACTIVITIES

Source: Porter, M. E.(1985) Competitive Advantage. New York Free Press.

# Constraints.

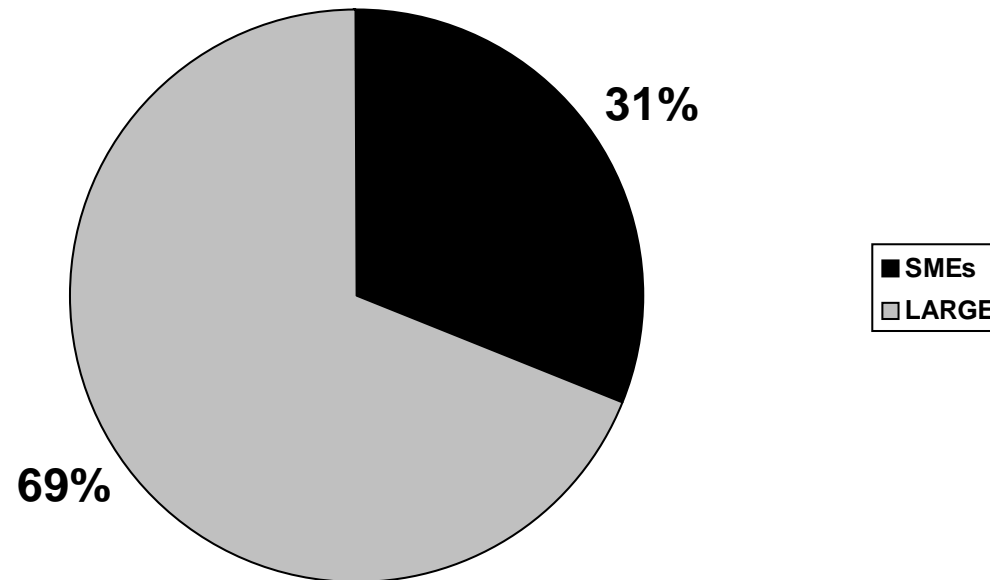
- Government Policy and focus.
- Land allocation and tenure.
- Piecemeal approaches to the sectors development.
- Uneven playing field for SMFE's vs large enterprises.
- No “matching of resources.”
- Illegal harvesting.
- Capital accessibility and cost.
- Poor Marketing.
- Poor equipment and limited Technical support.
- Product quality and grading standards.

# Government Policy and Focus

- The Govt has concentrated the forest into large concessions with heavy capitalization –the belief that bigger is always better.
- 74% of the allocated forested land are vested in concessions for 15 – 50 years and in holdings over 20,000 ha.
- This despite the less than stellar performance of these large, capital intensive operations – the largest and biggest investor recently stated they hadn't made a profit in their 15 years in Guyana, despite massive fiscal and tax incentives.

# Allocation of land to SMFE's

Figure 2. Forest allocation of State Forests by SMFEs and Large concessions (SMFE = State Forest Permissions and Wood Cutting Leases / LARGE = Timber Sales Agreements)

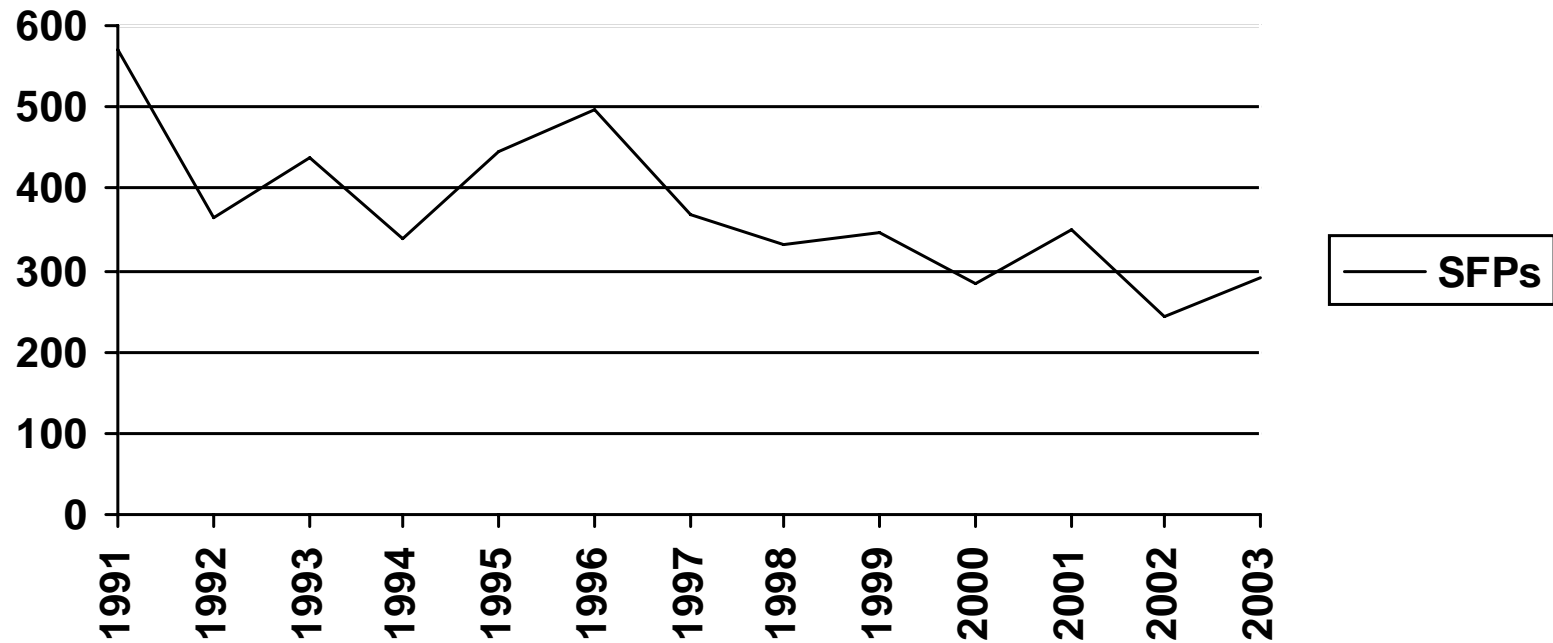




# Allocation of SFP's 1991- 2003.

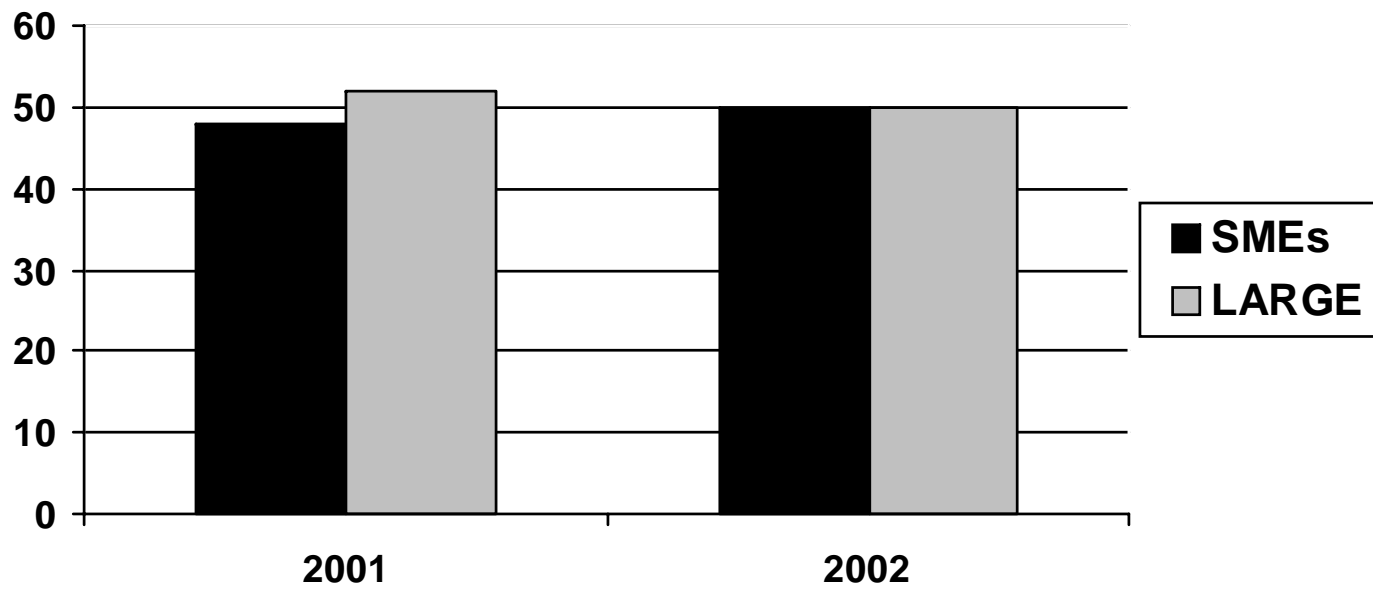
**Figure 4. Evolution of granting annual SFP concessions (1991-2003)**

*Source: Guyana Forestry Commission*



This despite evidence that more revenues are earned from small concessions and more people are employed in them.

# Revenue percentages from SMFE'S vs Large concessions.



# Benefits of SMFE's.

- SMFE's employ 75% of the people in the forest sector.
- Supply over 70% of the lumber to the local market as the large concessions have reverted to the export of logs.
- It is the SMFE's that supply and support the fledgling value added industry.

# Shift in Purpleheart Production.

- 1999 – 2002 Purpleheart utilisation changed from a domestic consumption of 26,500 m<sup>3</sup> for the local value added industry to less than 5,000 m<sup>3</sup> as log exports grew from under 4,000 m<sup>3</sup> to 21,000 m<sup>3</sup>.
- As a consequence at least 500 jobs were lost in the sector (ref. Vicente Molina's coefficients of employment).

# Consequence of concentration on large concessions.

- Increase in log exports to the number 2 position in Latin America – 2005 volume was 124,000 m<sup>3</sup>.
- Decline in availability of raw material for value added producers to the point where most are at only 50% capacity.
- Decline in the sector's contribution to GDP despite an increase in total forest sector export volume (due to logs).

# Consequences cont'd.

- Contribution to GDP declined from 4.93% in 1997 to 3.25% in 2003 as the volume of forestry exports increased.
- Over –exploitation of specific species – Purpleheart represents less than 1% of the commercial species availability (Fanshawe) but 42% of dressed lumber and 24% of all log exports.
- Increase in illegal chainsaw logging due to focus of land allocation and lack of sawn lumber availability locally .

# Tenure

- Two year tenure makes the accessing of loans from local banks difficult.
- Prevents investment in better forest management and management plans.
- Leads to over –exploitation of the resource.



# Piecemeal approaches to sectoral development.

- Instead of a re-engineering of the value chain from forest to market, supposed “panaceas” are found to try and revitalise the sector – ie. Forestry training Center, Kiln drying and the newly constituted Forest Products Marketing Council whilst ignoring the poor standard of processing, limited value added, poor management, inertia to change and poor marketing.

# Uneven playing field for SMFE.

- Fiscal concessions are granted to the larger enterprises that are not made available to SMFE's.
- SMFE's pay the royalty on lumber production whilst large concessionaires pay on the log volume –eg. Purpleheart log royalty is US\$1.92. SMFE's with portable mills/chainsaws pay US\$11.20 per m<sup>3</sup>.

# Uneven playing field cont'd.

- SMFE's cannot be in arrears to the GFC unlike the large concessions that have been in arrears to the GFC for over US\$1.3 million for several years for royalties and acreage fees. SFP's are revoked immediately for non payment.
- Now minimum royalties are being imposed on SMFE's when they already pay more than large enterprises and because they have short term contracts that can more easily be changed.

# “Matching resources.”

- Failure to take into account the poor nature of the forest resource in development of the sector.
- Guyana has very low coupe rates per ha, high species diversity, small stem sizes and high stem defect rates.
- Concentration on extracting volume rather than value from the forest – Logs instead of high quality dimensional lumber.

## “Matching resources cont’d.

- Guyana’s forest volumes consign it to niche market volumes, but the sector concentrates on commodity, volume products –ie. Railroad sleepers rather than flooring, or green, dressed lumber.

# Illegal harvesting.

- Increased incidence of illegal chainsaw ripping – 2003 –2005 declaration of chainsaw lumber declined from 38 – 36,000 m<sup>3</sup>. Farfan & Mendes Ltd chainsaw sales increased 38 %. (N.b. FML has 98% market share of chainsaws of which 80% are used for ripping).
- Total Purpleheart export grade production of lumber in 2005 was 3,000 m<sup>3</sup>, so how was 10,200 m<sup>3</sup> of sawn and dressed lumber exported – where did the sawn lumber come from to produce this.
- Illegal harvesting has become systemic for it to occur on this scale.

# Capital accessibility and cost.

- Due to consistent defaults on repayment of loans by the local private sector, Banking Institutions are very conservative in their lending policies.
- Due to the short concession tenure and portable nature (portable mills or chainsaws) of the equipment used by SMFE's, banks require other security for their loans. Because of this the change to portable mills from the much cheaper chainsaws is slow.
- Loan rates range between 17 –19 %. There are no concessionary rates available, especially for SMFE's – only for larger enterprises.

# Poor Marketing

- SMFE's concentrate on selling in the local market – they don't have the exposure, infrastructure or logistics to access the better paying export markets.
- Quality and reliability is affected by supplying an arbitrary grading system utilised in the local market.



# Poor Marketing

- Enterprises operate on a “produce to sell” system with no contractual arrangements, commitments or at least networking to ensure the best prices and more reliable supplies to the local lumber market – they just load up a truck with saleable sizes of lumber and go to their preferred lumberyard.

# Marketing cont'd.

- New Forest Products Marketing Council is focusing on exports for the larger enterprises rather than trying to understand and help with the flow of lumber in the local market.

# Competitiveness

- SMFE's typically produce lumber at  $\frac{1}{2}$  to  $\frac{1}{3}$  rd the cost of traditional large operations.
- Due to the portability of the technologies used and minimal capitalisation relative to the resource base.
- Costs of production – large operations with stationary mills produce lumber at between US\$260 – 400 m<sup>3</sup>. SMFE's with portable technology – US\$ 80 –140 m<sup>3</sup>.
- Lower production costs of SMFE's help other value added SMFE'S remain competitive.

# Competitiveness

- The high production costs of large enterprises for sawn lumber, and lack of consistent supply has threatened the viability and sustainability of SMFE's that concentrate on value added products.

# Cerification

- Concentration of certification bodies on certifying the “big guys” to get the largest acreage of Tropical forest certified. Only talk so far on smaller bodies.
- Being used as a tool to try and insist on granting larger areas of forest to larger companies – the excuse is these are “easier to regulate” and manage.

# Concentration on larger volume lower value markets.

- Profit seen earned on volume rather than value addition to the product – sales concentrated on at most green, dressed lumber of poor finish quality rather than properly finished kiln dried products. Classic example is the use of Mora Excelsa for sleepers with a 12 –15% recovery rate and a price of US\$234 m<sup>3</sup>, as opposed to KD decking/flooring >US\$850 m<sup>3</sup> and a 40% recovery rate from the round log. Focus is on volume, commodity items rather than high quality niche market products.

# Technical Support.

- Concentration on the use of circular/sash gangsaws show preference for so called “simple technology” despite the obvious advantages of bandsaws to recovery – recovery rates throughout the sector average less than 40%, though those with thin kerf portable mills (ie. Woodmizer) average over 65%. Coupled with almost no mill maintenance.

# Equipment and technical support cont'd.

- Less than 1000 m<sup>3</sup> of total kiln capacity in the country.
- 95 % of the moulders are bought used and are long discontinued models without the capacity for a quality finish – tolerances of 0.4 – 1.6 mm considered adequate on moulded products for the local and Caribbean markets.
- Extremely poor saw and tool maintenance – many times tooling is ground with angle grinders. Use of solid tooling on moulders.



# Log grading.

- No grading of logs before sawing to try to optimise value recovery.
- Generally sawing techniques suited to recovery of volume rather than grade.

# Product Quality and Grading standards

- Because SMFE's supply the arbitrary grading requirements for the local market, they are conditioned to cut for recovery rather than grade.
- Because of no building code, a lot of custom cutting, especially long lengths with corresponding detrimental effects on recovery rates.

# Lack of a building code.

- No standardised housing dimensions leading to non-standard lumber dimensions.

# Conclusions.

- Governments need to try to understand the enterprises in the sector more – it was only when FML started our advocacy program for SMFE's that there was a realisation of their role.
- A holistic approach to sectoral development needs to be done to ensure the success of any intervention – a chain is only as strong as the weakest link.
- The resource base needs to be assessed to ensure the sustainability of any enterprise relative to its size. Bigger is not always better – we need to stop trying to plow kitchen gardens with bulldozers.

# Conclusions cont'd.

- Marketing needs to be seen as an all inclusive concept of a value chain from the forest to the final end-user/purchaser not simply as existing product promotion.
- We need to look at the recovery of value rather than volume as the prescript for harvesting what is a very limited resource, so we make sound decisions for its future. We need to see the unregulated exploitation as also an opportunity “loss” if we are not optimising the value created from it.