

# **STATUS OF TRANSFORMATION IN THE FOREST SECTOR**

A Document Prepared for:

**Forest Sector BBBEE Charter Council**

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## 1. INTRODUCTION

### 1.1 Background

The forest sector BBBEE Charter Council is currently assessing the status of transformation in the forest sector. To enable the Council to compile a scorecard report on the sector, it has requested information via questionnaires (April 2010) from enterprises operating in the various sub-sectors of the forest sector. Only 80 questionnaires were completed and received back by the Council. Dr Themba Simelane, the CEO of the Council has requested LHA Management Consultants (LHA) to evaluate and analyse the information contained in the questionnaires and to draw up a sector scorecard report. A quick assessment of the available data indicated that there are significant gaps with regard to sub-sector coverage and representivity. For instance, of the 80 returned questionnaires 55 were from forestry contractors whilst some of the other sub-sectors were poorly covered or not covered at all. In view of this LHA proposed that further research was required to obtain a more representative sample of responses by sub-sector.

### 1.2 Scope of Research

The research consisted of two phases:

- (i) The establishment of a comprehensive database on forest sector enterprises per sub-sector, including contact person and contact details (specifically e-mail addresses). As part of this research the various industry associations including those for:
  - Plantation forestry
  - Pulp and paper producers
  - Pole treaters
  - Sawmillers
  - Forestry contractors, etc.

were contacted. In addition the yellow pages and trade directories were consulted and more than 100 telephone calls were made to obtain the required information. In this way a comprehensive database has been established containing 85% plus of medium and large forest sector enterprises.

- (ii) The establishments/companies were then contacted either by phone (120 personal calls) or by e-mail. Over 130 e-mails were sent to specific targeted respondents in the various forest sub-sectors. During the interviews with respondents it became clear that the most effective route to obtain scorecard information was from available accredited scorecard reports. Respondents were requested to mail this to LHA. Many respondents indicated that they were in the process of compiling their scorecard information through an accredited agency but that this will take some time for completion. The result of this focussed data collection exercise was that scorecard information has been obtained covering 150 forest sector establishments and on a weighted basis about 70% of activity

(value of output) of the forest sector. The detailed results of the scorecard information per sub-sector and enterprise/group are presented in Appendix 1

Although some gaps still exist regarding sub-sector coverage, e.g. little information could be obtained on charcoal producers and wood chip exporters, we believe that the information is sufficiently representative to provide a good picture of the status of transformation in the forest sector at this time. From the discussions with various respondents in the sector it seems that the current questionnaire used by the Council is difficult to complete and it is unlikely that establishments, not in possession of a verified scorecard, will easily be encouraged to complete the questionnaire.

It should be noted that some companies, e.g. the large pulp and paper companies and sawmilling groups supplied one scorecard covering all their operations. In the case of Sappi and Mondi, for instance, it covers plantation forestry and pulp and paper production, and in the case of large sawmilling groups, e.g. York Timbers and Singisi, both sawmilling and plantation activities. In our assessment we have allocated the scorecard rating to both the two major activities, e.g. in the case of Sappi/Mondi, to plantation forestry and pulp production, as they are major players in both sub-sectors.

### **1.3 Reporting**

Chapter 2 presents an overview of the forest sector in terms of the relative sizes of the various sub-sectors and the composition of each sub-sector in terms of small, medium and large enterprises. In addition, information on the coverage in terms of scorecards received for each sub-sector is indicated. It is thus possible to obtain a weighted average for the total sector but also some detail for the sub-sectors and specific categories within each sub-sector.

In Chapter 3 the transformation status of each of the sub-sectors is given, together with an analysis of the composition of the scorecard in terms of the various elements. Again, some details for different establishments/size categories within sub-sectors are provided. The chapter is concluded with a summary of the current status of transformation in the forest sector.

## 2. FOREST SECTOR STRUCTURE AND COVERAGE

### 2.1 Prioritising Sub-sectors

The forest sector covers plantation forestry, harvesting and transport to primary processors and the primary processing sub-sectors. A meaningful way to categorise the sub-sectors is by roundwood/log intake. Table 2.1 provides our best estimate for the most recent consumption levels by sub-sector and comparing this to peak demand (about 20% higher than current) which has been achieved in 2006/2007.

**Table 2.1: Roundwood Consumption by Primary Forest Sector Processors ('000 m<sup>3</sup> p.a.)**

End-use Sub-Sector	Demand 2008/2009 ('000 m <sup>3</sup> )	Peak Demand 2006/2007 ('000 m <sup>3</sup> )
Pulp Mills	9 500	10 300
Chipping Plants	3 400	6 200
Sawmilling	4 500	5 560
Mining Timber	1 100	1 100
Board Mills	1 000	1 250
Poles	700	840
Charcoal	950	1 100
<b>TOTAL</b>	<b>21 150</b>	<b>26 350</b>

The three most important users of roundwood are the pulp mills, sawmilling and chipping sub-sectors.

The forest sector, however, also covers plantation forestry as well as harvesting and transport operations. Most of the latter activities are done by contractors. Table 2.2 provides our best estimate for the current value of output of the various sub-sectors (including contracting) as well as a ballpark estimate of each sector's value-added/contribution to the RSA economy.

**Table 2.2: Estimated Output and Value-Added by Forest Sub-sectors (2009)**

Sub-Sector	Value of Output (Rm)	Value Added (Rm)	Weighting
Plantation Forestry	5 200	2 340	18
Contracting	3 080	1 080	8
Pulp Mills	11 500	5 100	40
Sawmilling	5 400	1 900	15
Board Mills	2 100	950	7
Chipping	2 100	620	5
Charcoal	900	360	3
Mining Timber	850	310	2
Poles	600	200	2
<b>TOTAL</b>	<b>-</b>	<b>12 860</b>	<b>100</b>

The broader picture is presented here to allow proper interpretation of results in terms of the importance and weighting of the various sub-sectors.

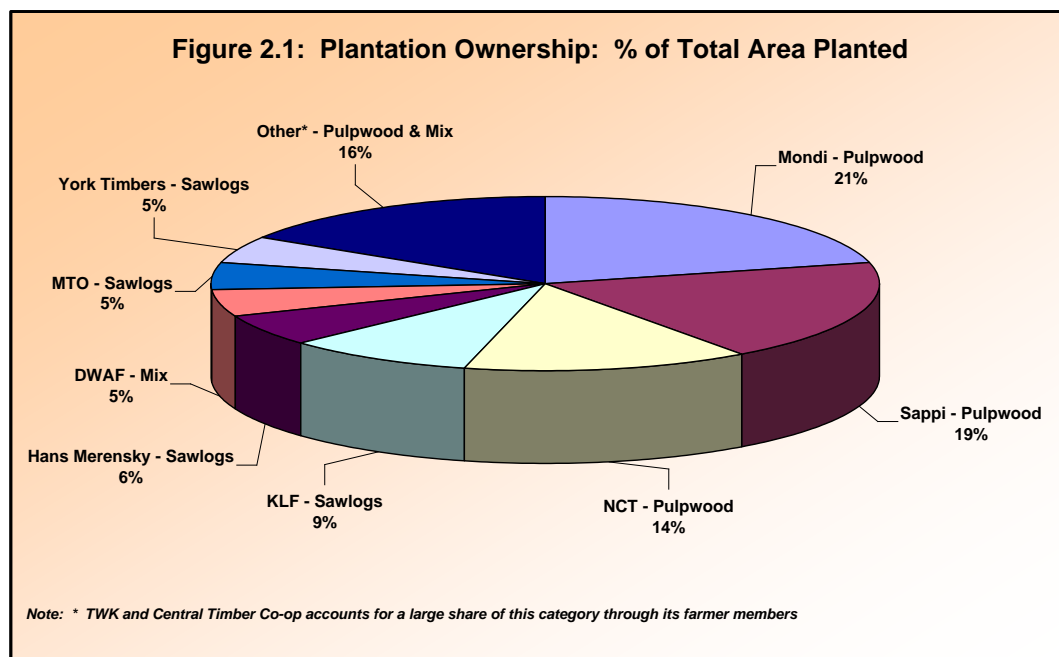
Four sub-sectors namely plantation forestry, contracting, pulp mills and sawmilling account for more than 80% of the total value generated by the forest sector. Board and chip production are also significant sub-sectors, contributing a further 12% to the total value added of the forest sector.

One of the key characteristics of the forest sector is the extent of vertical integration. About 90% of plantation output is consumed by primary processors belonging to the same companies or groups. For instance, a group like Sappi includes in their operations plantation forestry, pulp production as well as sawmilling. B-BBEE scorecards generally cover the total operation and are not split between various sub-sectors, e.g. sawmilling, plantation forestry or pulp and paper production.

In the following sections the structure of and scorecard information received for each of the sub-sectors are discussed.

## 2.2 Plantation Forestry

The South African plantation area is close on 1,4 million hectares. The large pulp companies and chip exporters have control over about 60% of planted hectares in South Africa. A breakdown is presented in Figure 2.1.



Verified scorecard data has been obtained from the following enterprises:

- Mondi
- Sappi
- KLF
- Hans Merensky
- MTO
- York Timbers
- Masonite

These companies together manage 70% of all plantations in South Africa. In addition, an estimated 18% of plantations are owned and managed by small independent farmers. Their output is marketed and distributed through various timber co-operatives. The bulk of these farmers produce timber valued at less than R5 million p.a. and would therefore fall into the category of exempted micro-enterprises.

## 2.3 Contracting

There are an estimated 300 forestry contractors active in the forest sector. Main activities include:

- Silviculture
- Harvesting
- Transport.

Total contracting turnover is estimated at R3 080 million p.a. Silviculture activities account for 30% of total turnover with the balance of 70% equally split between harvesting and transport operators.

The sub-sector employs 25 000 people. A large number of operations are controlled and owned by black people. It is further estimated that 40% of enterprises have a turnover of less than R5 million p.a. thus qualifying as exempted micro-enterprises (Level 3 and 4 contributors). The 25 largest operators probably account for 50% of activity in this sub-sector. The structure of the sub-sector is shown in Table 2.3.

**Table 2.3: Structure of the Contracting Sub-sector**

Category	No	Turnover (Rm)	Number of responses received
Large enterprises	25	1 500	4
Medium enterprises	150	1 080	22
Exempted micro-enterprises	125	500	29
<b>TOTAL</b>	<b>300</b>	<b>3 080</b>	<b>65</b>

## 2.4 Pulp Mills

South African pulp mills consume an estimated 9.5 million m<sup>3</sup> of roundwood to produce pulp for paper and board manufacture and dissolving pulp. In addition to the roundwood intake an estimated 400 000 tons of chips is used annually.

The pulping mills using virgin wood fibre include:

- Sappi
  - Enstra



- Ngodwana
- Mandini
- Saiccor
- Mondi
  - Richards Bay
  - Merebank
  - Piet Retief

The pulp and paper industry is a significant exporter. On a value basis exports account for about 35% of production.

Scorecard information has been received from both Sappi and Mondi, resulting in full coverage of this sub-sector.

## 2.5 Sawmilling

South Africa has an estimated 250 operating sawmills. Seven large companies, which between them operate 19 sawmills, account for 65% of total log intake and production of sawn timber. A further 25 independently owned medium sized mills account for 16% of production and the balance by about 200 small and bush mills. Of the latter category it is estimated that about 80 mills are formal mills and the rest are bush mills/mobile mills. The structure of the sub-sector is presented below.

**Table 2.4: Structure of the Sawmilling Sub-sector**

Company	Number of Mills	% Of Log Intake	Scorecard Data Obtained	% Covered in Scorecard Survey
York Timbers	4	65	✓	58
Hans Merensky	4		✓	
Cape Timber Resources	3		-	
PG Bison	3		✓	
White River Sawmill	1		✓	
Rance Timbers	2		✓	
Sappi (Lomati)	1		✓	
25 Other medium sized mills	25	16	✓	10
Small mills/Bush mills	205	19	-	-
<b>TOTAL</b>	<b>± 250</b>	<b>100</b>		<b>68</b>

Most of the large sawmilling groups provided scorecards as indicated in the table. Responses have been received from 13 medium sized sawmills. We estimate that they account for about 10% of sawmilling activity.

Most of the 125 bush mills and some of the smaller formal mills have a turnover less than R5 million p.a. These would all be classified as exempted micro-enterprises. We estimate that at least 70% of small mills will fall into this category.

## 2.6 Chipping Plants

Chipping plants, located in Richards Bay and Durban, export Gum and black wattle wood chips to Japanese pulp and paper mills. The operators in this market and their estimated market shares are indicated below.

**Table 2.5: Wood Chipping Plants and Market Shares**

Parent Company	Plant	Market Share (%)	Location
NCT	<ul style="list-style-type: none"> <li>• Bay Fibre</li> <li>• Shincell</li> <li>• NCT Durban Wood Chips</li> </ul>	40	Richards Bay Richards Bay Durban
TWK	CTC	23	Richards Bay
Mondi	Silvacell	37	Richards Bay
<b>TOTAL</b>	-	<b>100</b>	-

The industry reached its peak roundwood intake in 2005/2006 and operated very close to full capacity at an intake level of 6.2 million m<sup>3</sup> per annum. This dropped to an estimated 3.8 million m<sup>3</sup> roundwood intake in 2008/2009 mainly as a result of non-availability of timber in the local market and declining market demand by overseas pulp mills. Investigations are currently underway to convert some of the chip exports to local pulp production.

Scorecard information has been received only from Mondi, resulting in a coverage of 37% of the sub-sector.

## 2.7 Board Products

The producers of wood based board products are PG Bison, producing MDF and chip board, Sonae Novobord (MDF and chip board) and Masonite (fibre board). The estimated market shares of producers are:

- Sonae Novobord 32%
- PG Bison 50%
- Masonite 14%
- Other 4%
- **TOTAL 100%**

PG Bison and Masonite submitted scorecards resulting in a coverage of 64% of this sub-sector.

## 2.8 Poles

This sub-sector consumes an estimated 680 000 m<sup>3</sup> of roundwood per annum, split about 50:50 between Gum and Pine. Of the total intake about 65% is treated whilst the balance is used mainly by the informal sector in untreated form for building and fencing purposes. Treated poles are produced according to SABS specifications as electricity transmission poles, telephone poles and building and fencing poles. About 65% of poles find application in the building sector.

We estimate that there are approximately 120 pole manufacturing establishments in South Africa. Of this about 80% are small (informal) enterprises, probably with a turnover of less than R5 million p.a and accounting for about 25% of production. These are all exempted micro-enterprises. The 40 medium to larger enterprises/groups account for the balance (75%) of output. Larger enterprises/groups include:

- Woodline Timber Industries (part of PG Bison)
- Treated Timber Products
- Tzaneng Treated Timbers
- G-Worx Forest Products
- Vhuka Comondale Treated Timbers
- Harding Treated Timbers
- Vuka Khulani Timber Industries
- Lows Creek Treated Timbers
- Natal Forest Products
- Shefeera Timbers
- Flaxton Timbers.

Scorecard information has been received for 18 enterprises, accounting for an estimated 30% to 40% of pole manufacturing activity.

## 2.9 Mining Timber

The demand for roundwood used by mining timber mills decreased from a level of 3.0 million m<sup>3</sup> in the 1980s to a low level of 670 000 m<sup>3</sup> towards the end of the century. Over the past ten years, however, mining timber demand has picked up strongly mainly due to a large expansion in platinum mining operations. We estimate that mining timber mills currently consume at least 1 million m<sup>3</sup> of hardwood (Gum) p.a.

The sub-sector is dominated by two main players accounting for more than 90% of mining timber output. These are:

- **Reatile Timrite:** They have six mills in the northern Mpumalanga and Tzaneen area, and account for an estimated 40% of mining timber production.
- **Bedrock MS:** Bedrock Mining Systems was recently formed through a merger of Shanyala and SMT (Sappi Mining Timbers). The Shanyala Group operates mostly in the Piet Retief/Paul Pietersburg area and has five mining timber mills. SMT is active mainly in the Nelspruit, Barberton and Graskop area where it operates three mining timber mills. The group's market share is estimated at 50%.

The balance (10%) is produced by small independent mills and TWK which owns sawmills near Piet Retief and in Swaziland. Scorecard information has been obtained for the two main companies listed above, covering 90% of activity in this sub-sector.

## 2.10 Charcoal

About 50% of charcoal is consumed by ferrous industries where natural charcoal is used as a reducing agent. Major companies include Silicon Smelters, Rand Carbide and Siltech. They obtain charcoal from a vast network of small independent producers (about 50% of intake) and the balance from formal charcoal producers.

The household market accounts for 50% of total demand and is mainly supplied by formal charcoal producers. The major producers include:

- Charka Suiderland – Piet Retief
- Braai and Barbeque International - Gauteng
- E&C Charcoal – Pietermaritzburg
- Freidheim Timbers – KZN

These companies also obtain some of their charcoal requirements from small independent producers. In summary we estimate the charcoal supply situation to be as follows:

Producers	Market Share (%)
Braai & Barbeque International	} 60
Charka (Suiderland)	
E&C Charcoal	
Friedheim Timbers	
Small informal enterprises	40
<b>Total</b>	<b>100</b>

The vast majority of small informal producers would have a turnover of less than R5.0 million p.a. and will thus be classified as exempted micro-enterprises. No scorecard information could be obtained from the formal charcoal producers.

## 2.11 Summary

Based on the data supplied in the previous sections it is now possible to establish the coverage of the forestry sector in terms of B-BBEE scorecard information. Small enterprises (exempted micro-enterprises) with a turnover of less than R5 million p.a. need not complete the scorecard and are automatically rated as Level 3 or Level 4 contributors. Estimates of the market shares of these smaller players in each of the sub-sectors have been made and are included in the information shown in Table 2.6.

**Table 2.6: Scorecard Coverage of the Forest Sector**

Sub-Sector	Weighting	Estimated Coverage <sup>1)</sup> of Sub-sector		Total (%)
		Medium – Large companies (%)	Exempted Micro-enterprises (%)	
Plantation Forestry	18	70	18	88
Contracting	8	15	16	31
Pulp and Paper	40	100	-	100
Sawmilling	15	68	13	81
Board Mills	7	64	-	64
Chipping	5	37	-	37
Charcoal	3	-	40	40
Mining Timber	2	90	-	90
Poles	2	30	25	55

**Note:** 1) Coverage indicates the percentage of sub-sector output for which scorecard information has been received, or EME status applies.

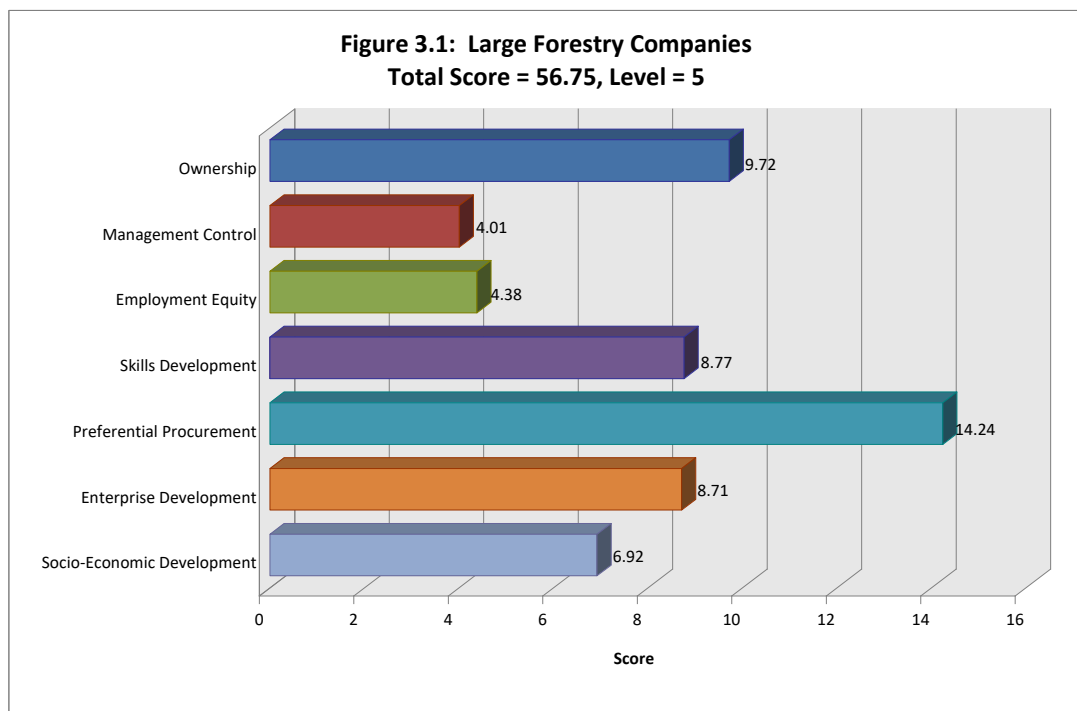
Although there are still some gaps, the information currently available covers 70% of the total forest sector on a weighted basis. It is believed that the findings and conclusions drawn from this information are relevant and form a sound basis to establish a benchmark for 2009/2010 and to plan for further improvement in transformation.

### 3. STATUS OF TRANSFORMATION IN THE FOREST SECTOR

In the following sections the scorecard information obtained is presented to reflect the current (2010) status of transformation in the various sub-sectors.

#### 3.1 Plantation Forestry

An estimated 18% of the total forestry output is accounted for by farmers who produce timber as part of other agricultural crops. Timber output is generally less than R5 m p.a. We estimate that there are over 200 such timber farmers which could fall in the category of exempted micro-enterprises. The balance is accounted for by large forestry companies which are mostly vertically integrated into secondary processing. On an output basis 90% of the large companies provided scorecard information. On average these companies achieved an average score of 57 (Level 5 contribution). More details are provided in Figure 3.1 below.



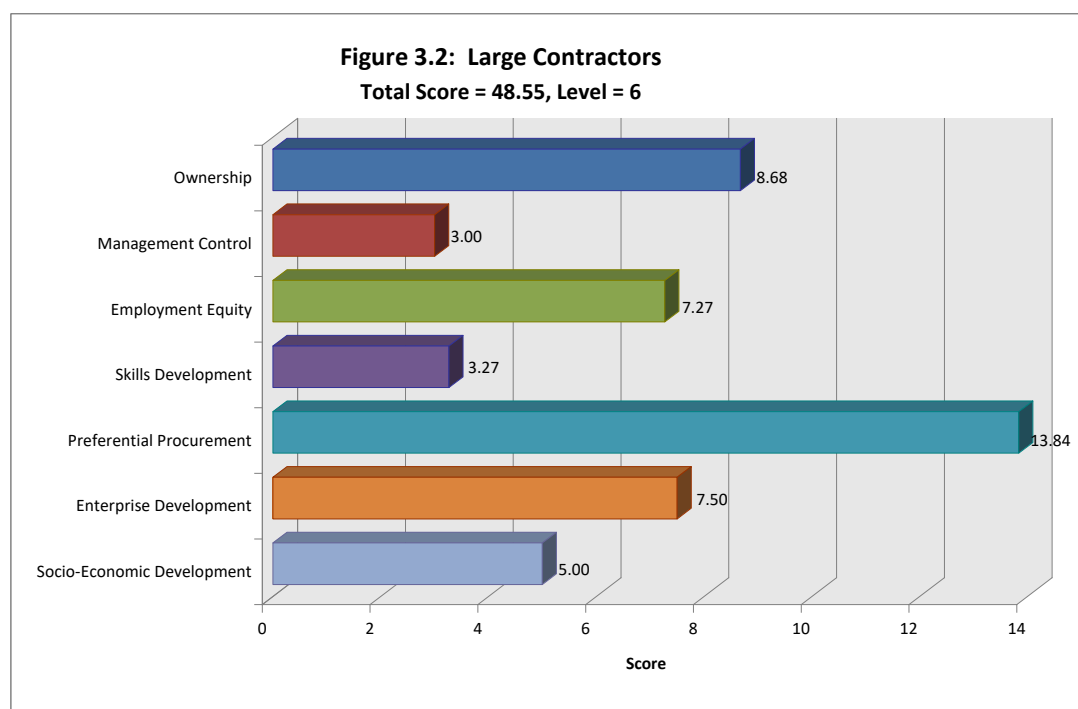
Forestry companies generally score well on preferential procurement, mainly as a result of using contractors to do silviculture and harvesting and transport. Areas where further improvement is required are management control and employment equity.

## 3.2 Contractors

Of the 300 contractors about 40% (125 entities) fall in the category of exempted micro-enterprises. These smaller operators account for approximately 16% of activity in this sub-sector. The balance of contractors are divided into two groups:

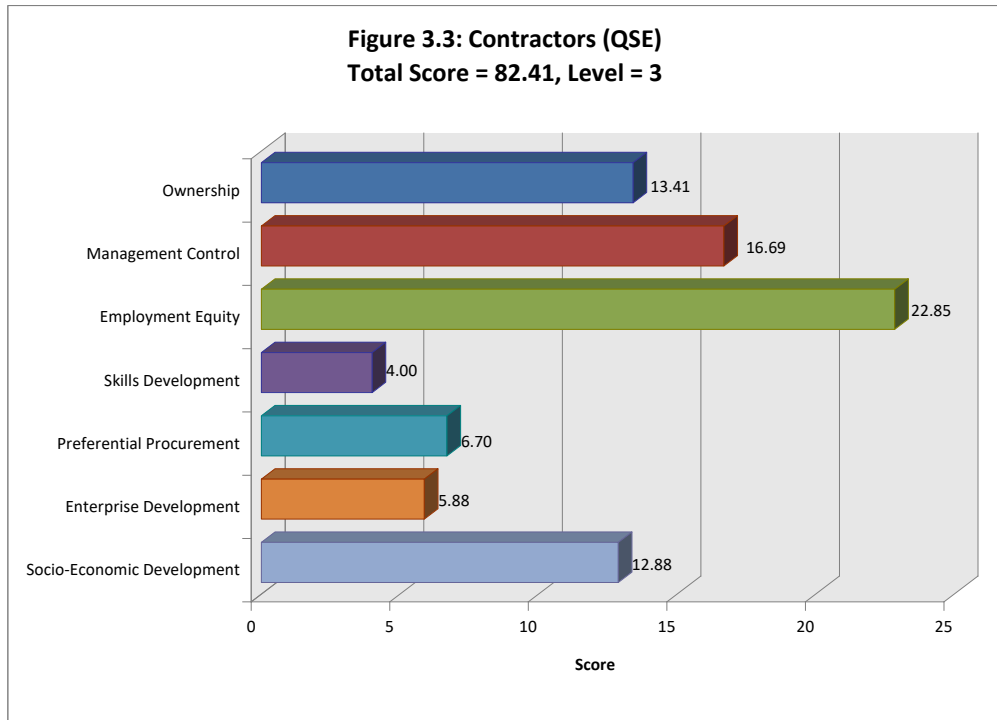
- Those with a turnover of less than R35 million p.a., classified as qualifying small enterprises (QSEs), and
- Larger contractors with a turnover in excess of R35 million p.a.

A summary of scorecard information for large contractors is presented in Figure 3.2.



Little progress has been made in areas of management control and skills development.

The qualifying small contractors achieved the highest overall score (82.4) of all sub-sectors. Considerable progress has been made in employment equity, management control and ownership. Skills development, however, could receive more focus and attention. The results are presented in Figure 3.3.

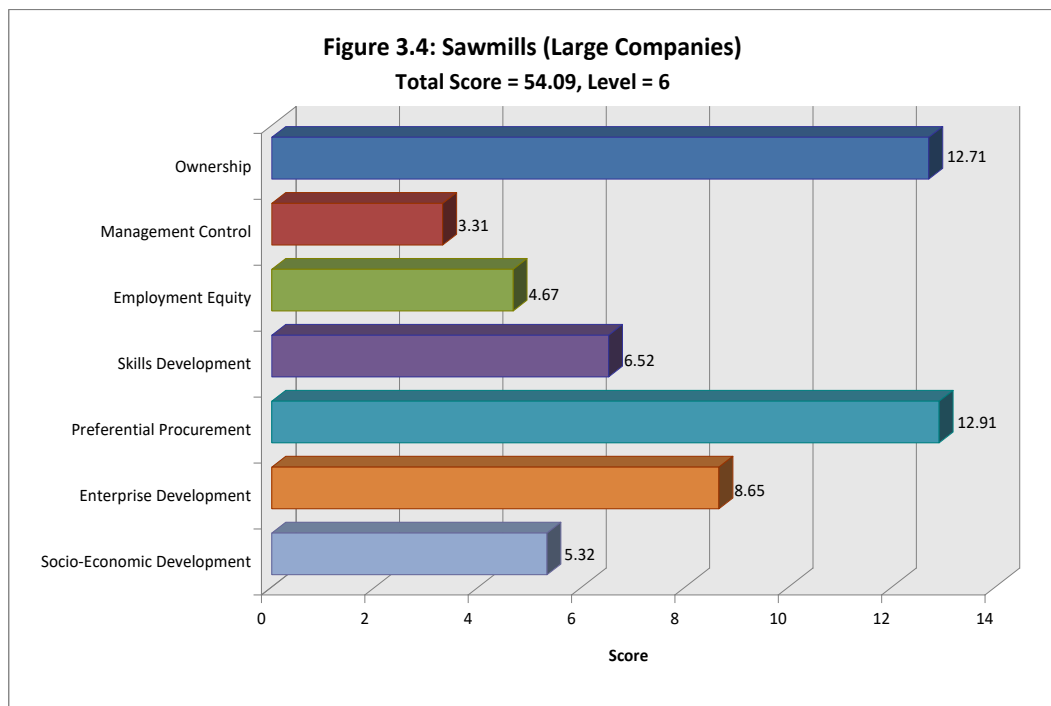


### 3.3 Sawmills

Sawmills can be divided into three categories, as follows:

- Large sawmilling groups with turnovers well in excess of R35 million p.a. (18 mills)
- Qualifying small mills (25 mills)
- Exempted micro mills (± 150 mills).

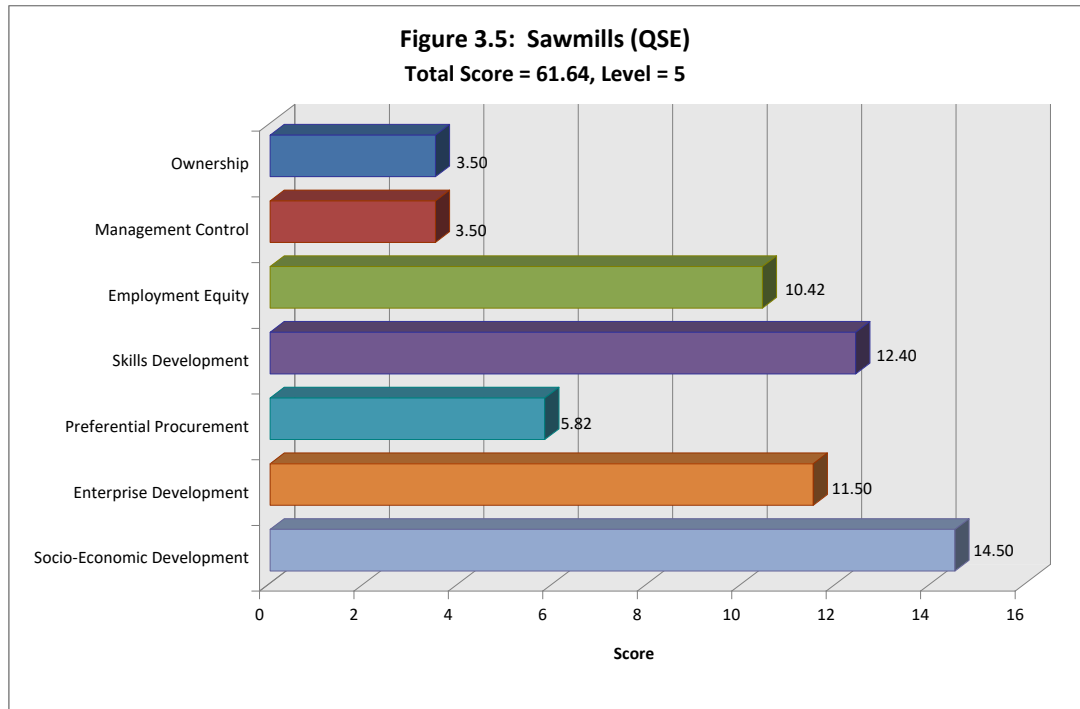
Scorecard information for the largest sawmilling groups is presented in Figure 3.4.





This grouping does well on ownership, probably as a result of the restructuring of state-owned plantations which were transferred (mainly sawlog plantations) to large sawmilling groups, e.g. Rance Timber and Cape Timber Resources, Singisi and Hans Merensky Forest. The restructuring required certain levels of Black ownership. Areas of concern remain management control and employment equity.

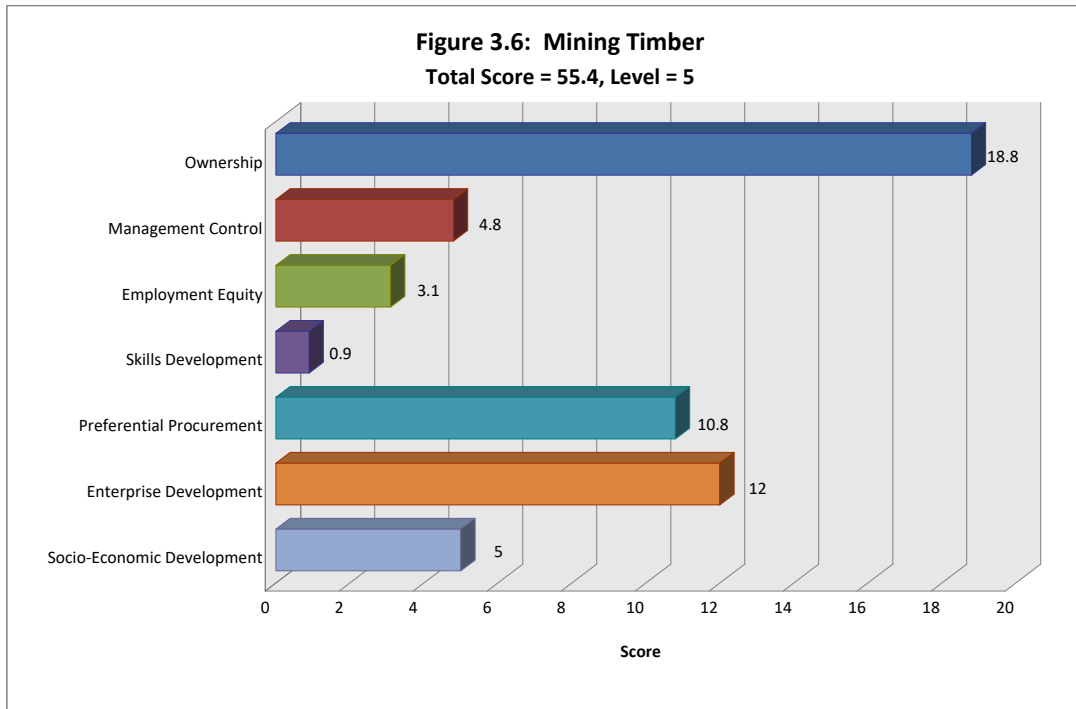
The scorecard data for the smaller mills are presented in Figure 3.5.



For this category high scores are achieved for socio-economic, skills and enterprise development. Little progress has been made with ownership and management control.

### 3.4 Mining Timber

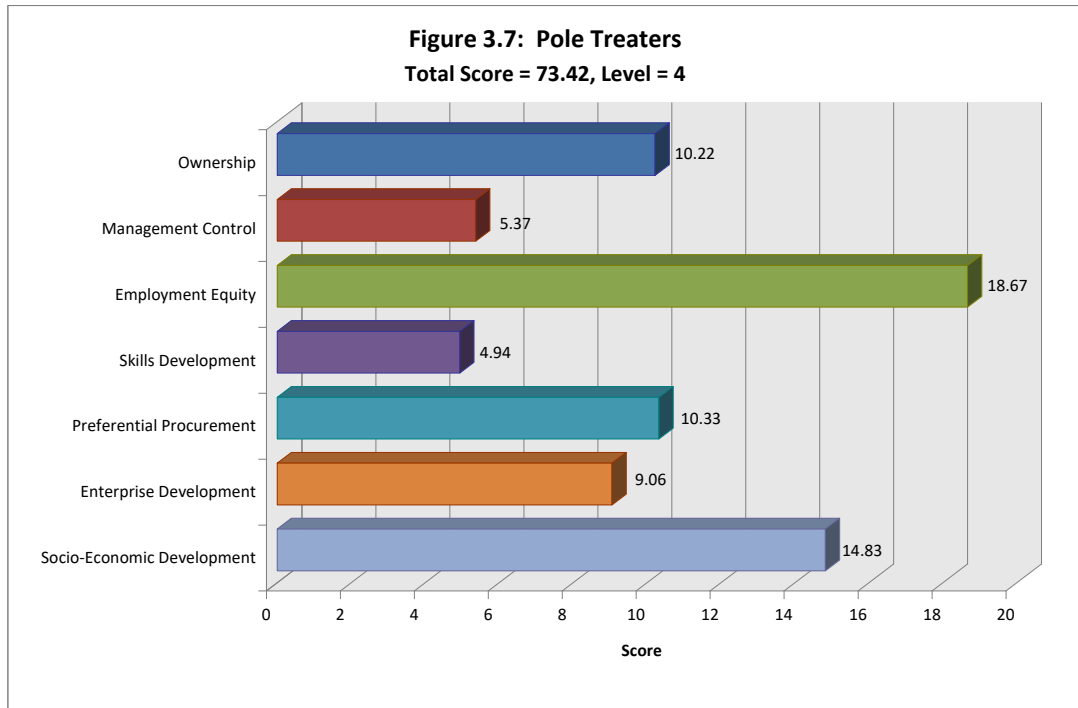
This section contains the scorecard information for the two large dominant mining timber suppliers which together account for over 90% of mining timber activity in South Africa.



Good progress has been made with ownership and enterprise development. Skills development, however, is almost non-existent and probably needs considerable effort and investment.

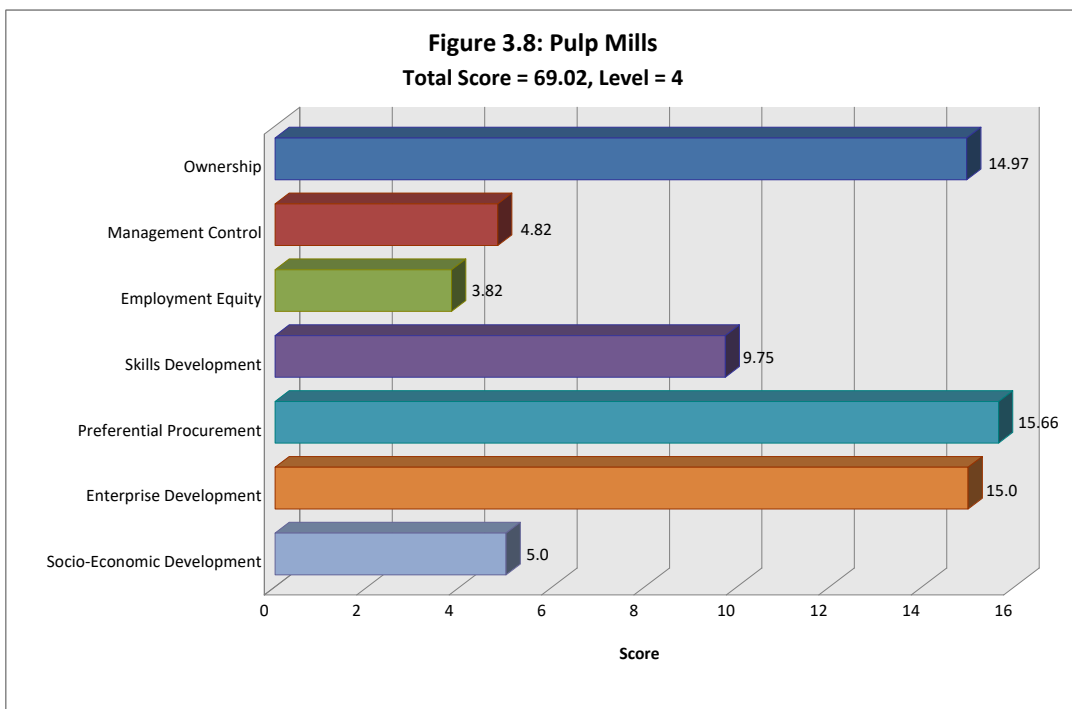
### 3.5 Poles

The majority of pole treaters (90) fall into the category of exempted micro-enterprises. The scorecard results for the sub-sector are summarised in Figure 3.7. The sector does well in employment equity, socio-economic development and ownership. Further development and progress can be achieved in management control and skills development.



### 3.6 Pulp Mills

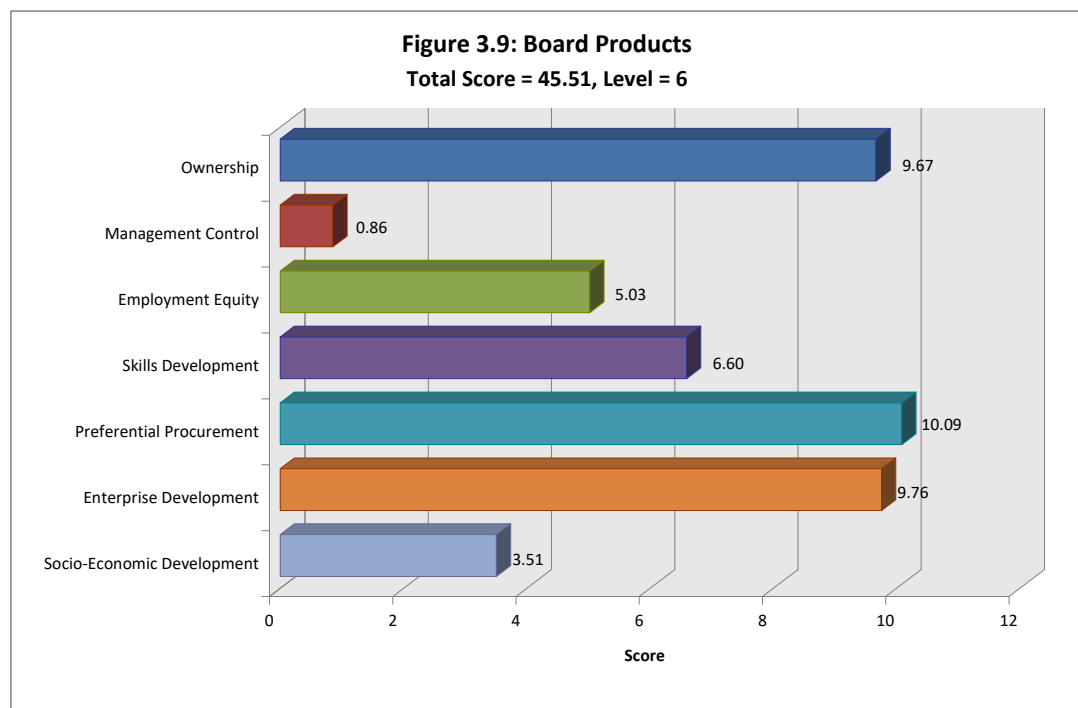
Both pulp and paper companies (Sappi and Mondi) completed the scorecard questionnaire for their total operations, including plantation forestry and pulp and paper activities. The scorecard information presented in Figure 3.8 therefore covers all activities within these groups.



Good progress has been made in preferential procurement, enterprise development and ownership. Future attention could probably be directed towards employment equity, and management control.

### 3.7 Board Products

Scorecard data for the two enterprises that submitted information is presented in Figure 3.9. This sub-sector achieved the lowest score of the forest sector.



Areas of particular concern include management control, employment equity and skills development.

### 3.8 Charcoal

No scorecard information could be obtained from the large producers. Respondents from these enterprises indicated that they are currently in the process of completing the scorecards and will be in a position to provide input at a later stage.

### 3.9 Chipping Plants

Scorecard data for only one chipping plant is available (indirectly as part of the Mondi scorecard). NCT indicated that they have appointed an accredited verification agency to compile its scorecard – it will be available in a few months. TWK indicated that its forest operation is part of a much larger business portfolio and scorecard information is not available separately.

### 3.10 Summary

A summary of the scores and levels achieved by the various sub-sectors and size categories within sub-sectors are presented in Table 3.1. It could be argued that scorecard information is more likely to be available (and obtainable during the research) for those enterprises that have made some progress with transformation. The sample (although it covers a large percentage of activity in the forest sector) could therefore be skewed to present a more optimistic picture. This may be the case but we nevertheless believe that the data presented reflects the status of transformation in the forest sector reasonably accurately.

**Table 3.1: Transformation Status of Forest Sub-sectors**

Sub-Sector	Category by Size of Enterprise	Share of Value of Output of Sub-sector (%)	Score	Level <sup>3)</sup>
Plantation Forestry	Large	70	56.8	5
	QSE <sup>1)</sup>	12	-	-
	EME <sup>2)</sup>	18	-	4
Forestry Contractors	Large	49	48.6	6
	QSE	35	82.4	3
	EME	16	-	-
Sawmills	Large	65	54.1	6
	QSE	16	61.6	5
	EME	19	-	4
Mining Timber	Large	90	55.4	5
Board Mills	Large	100	45.5	6
Pole Producers	Large/QSE	75	73.4	4
	EME	25	-	4
Pulp mills	Large	100	69.2	4
Charcoal	Large	60	-	-
	EME	40	-	4
Wood Chips	-	-	-	-

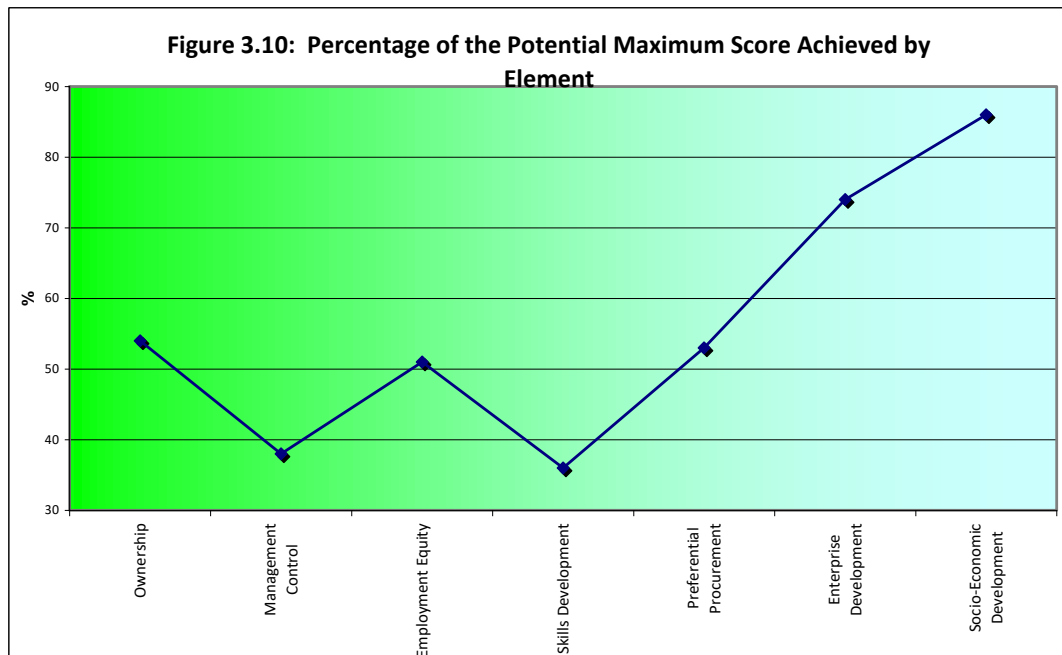
- Notes:**
- 1) QSE = Qualifying small enterprises
  - 2) EME = Exempted micro-enterprises
  - 3) Level = Contribution Level

The average score for the forest sector, non-weighted and excluding exempted micro-enterprises, is 61, making the industry a Level 5 contributor. There are hundreds of small enterprises falling in the category of exempted micro-enterprises, especially in plantation forestry, sawmilling, pole treating, charcoal production and forestry contractors. These are all at least Level 4 contributors.

Most progress with transformation has been achieved by:

- Qualifying small contractors (score 82.4)
- Pole treaters (score 73.4)
- Integrated plantation forestry and pulp and paper producers (score 69.0)
- Qualifying small sawmillers (score 61.6)

Generally the forest sector is doing well in terms of socio-economic and enterprise development. Much room for improvement, however, exists in the areas of management control and skills development. Figure 3.10 below illustrates this and expresses the scores achieved as a percentage of the total potential score.



Overall, the sector is roughly at the halfway mark of where it should be.

## **Appendix 1**

### **Scorecard Information per Sub-sector**