ANNUAL REPORT

COMMERCIAL TIMBER RESOURCES AND PRIMARY ROUNDWOOD PROCESSING IN SOUTH AFRICA

2019/20

forestry, fisheries
& the environment

Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA

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DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT

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South Africa

REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT

FORESTRY MANAGEMENT BRANCH

REPORT ON COMMERCIAL TIMBER RESOURCES AND PRIMARY ROUNDWOOD PROCESSING IN SOUTH AFRICA 2019/2020

Compiled on behalf of the Directorate: Forestry Scientific and Technical Services by La Terra Earth Sciences (Pty) Ltd

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Pretoria

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South Africa

110 Hamilton Street, Arcadia

Cost:

South Africa: R150.00 (Incl. VAT)

Foreign countries: R325 (or US $45.00) post free

ACKNOWLEDGEMENTS

This report was prepared by La Terra Earth Sciences on behalf of the Department of Forestry, Fisheries, and the Environment (DFFE). We express our sincere gratitude to all those who contributed their valuable insights, data, and support, making this report possible.

We would like to extend our appreciation to the various industry stakeholders, including plantation owners, managers and representatives of sawmills and timber-processing plants, for providing the necessary data and feedback used in compiling this report. Your collaboration was essential in ensuring the accuracy and comprehensiveness of the findings presented here.

We also acknowledge the dedication and hard work of the DFFE team, whose ongoing commitment to sustainable forest management continues to contribute to the resilience and growth of South Africa's forestry sector.

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PREFACE

The 2019/20 Annual Forestry Report provides a comprehensive analysis of South Africa's commercial timber resources and primary roundwood processing sector. Compiled by the Department of Forestry, Fisheries and the Environment (DFFE), this report reflects the Department's ongoing commitment to ensuring the sustainable development and management of the country's forest resources. This mandate is underpinned by key legislative frameworks, including the Constitution of the Republic of South Africa, 1996, the White Paper on Sustainable Forest Development (1996), the National Forests Act, 1998 (Act No. 84 of 1998) (the NFA), and the National Veld and Forest Fire Act, 1998 (Act No. 101 of 1998).

The Minister responsible for forestry is mandated to collect certain information regarding the management of the country's forests and has an obligation to disseminate that information in a way which in his or her opinion will promote sustainable forest management. The collection of the information is done under regulation 19 of the Regulations in terms of section 53 of the NFA (NFA Regulations), and the dissemination of the information is in terms of section 6(2) of the NFA. The Minister therefore collects information on commercial timber statistics in terms of regulation 19 of the NFA Regulations and publishes the Commercial Timber Resources and Primary Roundwood Processing (CTRPRP) Report, annually, in terms of section 6(2) of the NFA. The CTRPRP report must:

- Follow a prescribed format based on statistical returns submitted by plantation owners, managers, and lessees of sawmills and timber-processing plants; and
- Cover the period from 1 July to 30 June of the preceding year.

This report covers the period from 1 July 2019 to 30 June 2020 and is based on both primary surveys and secondary research. The primary data collection was conducted between August 2023 and April 2024. While the time lag between the reporting period and data collection posed challenges, compounded by limited availability of industry data, the DFFE worked closely with key industry stakeholders to improve the accuracy and completeness of the data. This collaboration was crucial in addressing data collection obstacles and ensuring a comprehensive reflection of the sector.

Key findings from the 2019/20 surveys:

The report reveals key trends and challenges affecting the forestry sector during the reporting period:

- A 18.96% decline in the total plantation area compared to the previous year, with small and medium-sized growers most affected. This significant reduction underscores the need for improved data collection and more robust support mechanisms for smaller growers to sustain their participation.
- Progress in transformation efforts, with 37% of plantations reporting some level of Black ownership, including 24% being fully Black-owned. However, gender representation remains a challenge, with 88% of plantations reporting full male ownership and only 12% being fully female-owned, indicating a need for further efforts toward gender inclusivity.
- Ongoing environmental challenges such as wildfires, pest activity, and unpredictable weather patterns caused by climate change, resulting in damage to over 19,000 hectares of plantations. These challenges highlight the need for enhanced risk management strategies and innovations in forest management practices.
- Despite the setbacks, the sector demonstrated resilience, particularly in terms of capital investments and operational improvements, with larger enterprises continuing to invest in infrastructure. However, economic uncertainty related to the COVID-19 pandemic led to cautious approaches regarding plantation acquisitions and expansions.
- The report also highlights the sector's commitment to health and wellness support, with many larger plantations reporting the implementation of HIV/AIDS and COVID-19 policies during the reporting period, reflecting a strong focus on employee well-being.

This report serves as a critical baseline for the continued monitoring and evaluation of the forestry sector's progress towards transformation, environmental sustainability, and economic resilience. While the sector faces considerable challenges, such as the decline in plantation areas and environmental risks, there are positive steps forward in terms of transformation and investment in employee health and welfare.

The DFFE remains committed to supporting the sector's efforts in achieving its transformation objectives and enhancing its sustainability. The data provided in this report will guide industry stakeholders, policymakers, and the government in their continued collaboration to secure the long-term resilience and growth of South Africa's forestry sector.

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TERMS, DEFINITIONS AND SYMBOLS

Term	Definition
Afforestation	The process of planting trees in an area that was not previously forested, aimed at creating a new forest.
Commercial Timber Resources	Forest plantations managed for the production of timber for sale or use in industry.
Desktop Research	Research conducted using secondary sources, such as reports and studies, rather than original data collection.
Hardwood	Wood from broadleaved trees, typically used for pulpwood, paper production, and other industries.
Pulpwood	Wood used to manufacture paper products, typically derived from smaller-diameter trees.
Roundwood	Timber that is cut into logs or poles, used in its raw form or for further processing in sawmills or pulp mills.
Softwood	Wood from coniferous trees, commonly used for construction, sawlogs, and pulpwood.
Sustainable Forest Management	A forestry management approach balancing environmental, social, and economic factors for sustainability.
Sawmill	A facility where logs are cut into timber products such as planks, boards, or beams for construction.
Survey Methodology	The process and methods used to gather primary data from stakeholders through questionnaires or interviews.
Timber Theft	The illegal harvesting or removal of trees or timber from commercial forests or plantations.
Underplanting	The practice of planting new trees under the canopy of an existing forest for regeneration efforts.
Veld	Open, uncultivated grassland in South Africa, typically used for grazing or left in a natural state.
m^3	Cubic meters, the unit of measurement for timber volume.
T	Metric tons, the unit of measurement for timber weight.
Ha	Hectares, the unit of measurement for land area (1 hectare = 10,000 square meters).
MtCO2	Metric tons of carbon dioxide, used to measure emissions or carbon sequestration.
Softwood Sawlogs Conversion	1 ton = 0.94 m^3
Eucalyptus Pulpwood Conversion	1 ton = 1.47 m^3
Wattle Conversion	1 ton = 1.138 m^3
Poplar Conversion	1 ton = 1.03 m^3

ACRONYMS

Acronym	Definition
Commercial Timber Resources and Primary Roundwood Processing (CTRPRP)	Refers to key activities within the forestry sector related to timber production and initial processing.
Department of Forestry, Fisheries and the Environment (DFFE)	The government department responsible for overseeing forestry, fisheries, and environmental conservation in SA.
Department of Trade, Industry and Competition (DTIC)	The DTIC leads South Africa's trade policy to promote trade, investment, and enterprise development.
Forestry South Africa (FSA)	An industry association representing the interests of commercial timber growers in South Africa.
Mean Annual Increments (MAI)	Refers to the average timber growth per year. For this Report, MAI is calculated by taking the total volume of timber, dividing it by the actual age at which the trees were felled, and dividing that total by the actual felled area from which the volumes were derived.
Paper Manufacturers Association of South Africa (PAMSA)	An industry association representing the interests of paper manufacturers in South Africa.
South African Utility Pole Association (SAUPA)	Represents companies involved in the production and preservation of utility poles used in infrastructure.
South African Wood Preservers Association (SAWPA)	An industry association focused on wood preservation practices, ensuring treated timber meets standards.
Sawmilling South Africa (SSA)	Represents sawmilling companies in South Africa, advocating for their interests in timber processing.
Statistics South Africa (StatsSA)	The national statistical service providing key data and statistics on the South African economy and sectors.

1. INTRODUCTION

The 2019/20 Commercial Timber Resources and Primary Roundwood Processing Report provides comprehensive insights into two critical aspects of South Africa's forestry sector: Commercial Timber Resources and Primary Roundwood Processing. Data for this report was gathered through both primary and secondary research efforts.

The primary research involved detailed surveys with Commercial Timber Plantations and Primary Roundwood Processors, including sawmills and other forestry-related timber processing plants. This process was further enhanced by active engagement with the DFFE and key industry stakeholders such as Forestry South Africa (FSA), Sawmilling South Africa (SSA), the South African Wood Preservers Association (SAWPA), the South African Utility Pole Association (SAUPA), and the Paper Manufacturing Association of South Africa (PAMSA). These stakeholders played a critical role in updating questionnaires, refining the industry database, and addressing key challenges within the forestry sector.

The report compiles all data collected through the surveys. While significant efforts were made to reach all relevant entities and gather complete data on each survey question, there are some limitations due to the time lag between the reporting period and the survey execution. These challenges have been acknowledged and mitigated through close engagement with stakeholders to improve data completeness.

The secondary (desktop) research phase was designed to strengthen the baseline of forestry data and provide information that could not be reasonably collected through surveys alone. This data was sourced from various industry reports, the DFFE State of the Forests Report (2018), international forestry studies, the Master Plan for the Commercial Forestry Sector in South Africa (2020-2025), as well as data from Statistics South Africa (Stats SA), the South African Revenue Service (SARS), and Quantec. All information sources are appropriately cited throughout the report.

It is important to note that the desktop data does not perfectly align with the reporting period, as data from Stats SA, SARS, and Quantec is reported on either a calendar year (1 January to 31 December) or a financial year (1 March to 28 February) basis. Reasonable assumptions were made to estimate data for the reporting period of 1 July 2019 to 30 June 2020. Additionally, qualitative information, such as climate change impacts, is not bound by specific timeframes and is deemed relevant to the reporting period.

The desktop information is presented in Section 2 of this report, followed by the survey methodology in Section 3 and the research findings in Sections 4-5. The report also includes a glossary of terms, symbols, and conversion factors; a summary of South Africa's Forestry Economic Zones.

1.1 Forestry Economic Zones

The timber plantation surveys encompassed plantations and processors across South Africa's twelve designated forestry economic zones, as outlined in Table 1. These zones are defined based on a combination of political, physical, silvicultural, economic, and historical factors, ensuring comprehensive coverage and accurate representation of the country's forestry landscape.

Table 1: Forestry Economic Zones

Zone	Areas
Zone 1: Limpopo Province	Dzanani, Soutpansberg, Letaba, Mutale, Polokwane, Sibasa, Vuwani, Bela Bela, Waterberg
Zone 2: Mpumalanga North	Barberton, Mashishing, Bushbuckridge, Mbombela, Pilgrim's Rest, White River
Zone 3: Central Districts	Alberton, eMakhazeni, Bloemfontein, Boksburg, Brits, Klerksdorp, Lichtenburg, Middelburg, Pretoria, Springs, Westonaria
Zone 4: Mpumalanga South	Carolina, Eerstehoek, Ermelo, Mkhondo, Wakkerstroom, Emgwenya
Zone 5: Maputaland	Ingwavuma
Zone 6: Zululand	Babanango, Lower Umfolozi, Eshowe, Hlabisa, Mtonjaneni, Mtunzini, Nkandla
Zone 7: KwaZulu-Natal Midlands	Bergville, Camperdown, Estcourt, Impendle, Inanda, Kranskop, Lions River, Mooi River, New Hanover, Pietermaritzburg, Pinetown, Richmond, Umvoti, Lower Tugela
Zone 8: KwaZulu-Natal North	Dundee, Newcastle, Ngotshe, Paulpietersburg, Utrecht, Vryheid
Zone 9: KwaZulu-Natal South	Alfred, Durban, Ixopo, Mount Currie, Polela, Port Shepstone, Umlazi, Umzinto, Underberg
Zone 10: Eastern Cape	Bizana, Mqanduli, Cathcart, Ngqeleni, Khowa, Gqeberha, Engcobo, Qumbu, Hankey, Keiskammahoek, Qonce, Komga, Stutterheim, Tabankulu, Libode, Tsolo, Lusikisiki, Umtata, Nqanqarhu, Umzimkulu
Zone 11: Southern Cape	George, Humansdorp, Knysna, Mossel Bay
Zone 12: Western Cape	Bellville, Riversdale, Bredasdorp, Somerset West, Caledon, Stellenbosch, Cape Town, Swellendam, Ceres, Tulbagh, Heidelberg, Wellington, Montagu, Wynberg, Paarl

2. DESKTOP REVIEW

A desktop review was conducted to strengthen the report and provide a comprehensive overview of the Commercial Timber Resource and Primary Roundwood Processing Industry. Various sources were leveraged, including:

- Stats SA Forestry, Logging and Related Services Industry 2020 Report
- Quantec Easy Data
- National and International Reports and Papers
- Forestry Master Plan 2020

An overview of the findings on various key metrics is included in this chapter.

2.1 The Forestry Sector Master Plan

The Forestry Sector Master Plan was launched by the Department of Trade, Industry and Competition (DTIC) in 2020 as part of South Africa's Reimagined Industrial Strategy (RIS). The Master Plan was developed based on comprehensive research and extensive consultations with industry stakeholders, forestry experts, and relevant government departments and agencies. It focuses on five key sub-sectors within the forestry value chain:

- Primary sector,
- Pulp and paper,
- Sawn timber,
- Board products, and
- Utility poles and treated products.

The overarching goal of the Forestry Master Plan is to increase investment, create jobs, and enhance competitiveness, with an emphasis on greater inclusivity within the forestry sector. In alignment with the Forestry Master Plan, the 2019/20 surveys were updated to include questions designed to better measure progress against the targets and indicators outlined in the Master Plan. For each of these focus areas, the Master Plan establishes key targets and indicators:

- Investment Target: R24.9 billion to be invested in the sector, with R8.4 billion already invested at the time of finalizing the Master Plan (2020).
- Jobs Target: 100,549 additional jobs, with the majority (60,265) expected to be created through new afforestation initiatives.
- Competitiveness Indicators: Improvements in the cost of production, the ratio of logistics costs to total production costs, timber yields across different genera, and enhanced investment recovery rates.

- Inclusivity Indicators: A focus on increasing the share of procurement by SMEs within the forestry value chain, tracking the participation and performance of black-owned companies and SMEs, majority black ownership in commercial forestry plantations, and the percentage of commercially planted forestry areas owned by black timber growers.

The survey findings provide a critical baseline for tracking improvements in investment, job creation, competitiveness, and inclusivity in the forestry sector as per the Master Plan's Key Performance Indicators (KPIs).

2.2 Employment and Income

2.2.1 Total Employment

In 2019, the timber industry employed a total of **117,885** people, which decreased to **110,330** in 2020, representing a **6.4% decline year-on-year**. The table below shows the average number of employees over the reporting period (2019/20), which stands at **114,108**. Of these employees, **77%** were employed in formal positions, while **23%** were employed as temporary, casual, or seasonal workers.

Table 2: Forestry employment by type (2019/20 average)

Type of Employment	Number of Employees	% of Employees
Formal	87,626	76.8%
Informal	26,482	23.2%
Total	**114,108**	**100%**

Source: Quantec Standardised Regional Data, 2019/20

The table below presents the skill levels among formal employees in the forestry sector. Of the estimated **87,626** formal workers in the sector during 2019/20, **6.9%** were classified as skilled, **49.9%** as semi-skilled, and **43.2%** as low-skilled. While data on the skill levels of informal employees is not available, it is assumed that the majority of informal workers are low-skilled.

Table 3: Formal employment by skill level (2019/20 average)

Employment by Skill Level	Number of Employees	% of Formal Employees
Formal – *Skilled*	6,029	6.9%
Formal – *Semi-skilled*	43,754	49.9%
Formal – *Low-skilled*	37,844	43.2%
Total	**87,626**	**100%**

Source: Quantec Standsardised Regional Data, 2019/20

2.2.2 Employment By Gender

The data highlights that the forestry sector in South Africa remains male-dominated, with men accounting for 65.7% of all jobs in forestry and related services, and an even higher 75.9% of jobs in logging and related services.

In recent years, forestry employment has undergone several changes, driven by economic shifts, environmental challenges, and industry-specific developments. Some key trends in forestry employment include:

1. Decline in Overall Employment: The 2019/20 period saw a continued decline in overall employment in the forestry sector, a trend that has persisted for several years. This decline is primarily due to:

- The conversion of forestry plantations to agricultural purposes.
- The impact of the COVID-19 pandemic, which disrupted production and led to the temporary closure of some operations.

2. Gender Disparities: Despite some progress, the forestry sector remains largely male-dominated. In 2020, men made up 65.7% of the workforce in forestry and related services and 75.7% in logging and related services,

according to Stats SA data. There has been a slight increase in female employment, with women's representation rising from 32.6% in 2019 to 34.3% in 2020 in forestry, and from 24.1% to 24.3% in logging-related services.

3. Impact of Policy Shifts: Government policies, such as afforestation initiatives and the Forestry Master Plan, have also influenced employment. These policies aim to improve inclusivity and promote transformation within the sector, particularly by focusing on job creation for historically disadvantaged communities. These efforts may lead to new employment opportunities in the future.

4. Industry Challenges: Environmental factors, including fires, pests, and climate change, continue to pose challenges for the forestry sector, impacting job security and reducing labour demand in certain regions.

While the forestry sector remains a significant source of employment, especially in rural areas, recent years have seen job losses due to economic, environmental, and policy-related challenges. Efforts to address gender disparities and promote workforce inclusivity are ongoing, but the sector continues to be predominantly male-dominated

Table 4: Forestry employment by gender (2019, 2020)

Types of Employment	Male Employees		Female Employees	
	2019	2020	2019	2020
Forestry and related services	67.4%	65.7%	32.6%	34.3%
Logging and related services	75.9%	75.7%	24.1%	24.3%

Source: Stats SA Forestry, Logging and Related Services Industry Report, 2020

2.2.3 Income

The table below presents the average monthly salary for formal and informal employees in the forestry industry for the 2019/20 period, as reported by Quantec Standardised Regional Data. The average monthly salary for formal workers is R12,576, while informal workers earn an average of R1,662 per month. When considering both formal and informal employees, the overall average monthly income in the forestry sector amounts to R10,026[1].

Table 5: Employment per Sub Sector (2019/20)

	Annual 2019/20 (millions)	Total Employees	Average Monthly Salary
Formal	R1,102 m	87,626	R12,576
Informal	R44 m	26,482	R1,662
Total	**R1,144 m**	**114,108**	**R10,026**

Source: Quantec Standardised Regional Data, 2019/20

2.3 Product Sales

The Stats SA Forestry, Logging, and Related Services Industry Report (2020) offer a comprehensive overview of the financial, production, employment, and related data for the forestry, logging, and related services sectors for the years 2018, 2019, and 2020. Key information from this report regarding product sales and capital expenditure is provided below.

It is important to note that the figures from this report exceed those reported through the 2019/20 Surveys. This discrepancy is primarily attributed to the lag between the execution of the surveys and the reporting period.

The total value of wood and unprocessed products in the forestry, logging, and related services industry, as reported by Stats SA, is detailed for 2019 and 2020 below:

- Total sales amounted to R17,857 million in 2019, which declined to R16,337 million in 2020. This decline is largely attributed to the impact of COVID-19, which significantly affected both production and demand in various sub-sectors of the forestry industry.

1 Note that informal workers include temporary and seasonal workers, who may not be employed full time.

Table 6: Sales of wood and unprocessed products (2019, 2020)

Product	2019		2020	
	R million	% contribution	R million	% contribution
Pine	R2 100	11.8%	R1 984	12.1%
Eucalyptus	R2 315	13.0%	R2 297	14.1%
Wattle	R504	2.8%	R511	3.1%
Other wood	R346	1.9%	R362	2.2%
Sawn wood products: poles, railway sleepers, logs	R2 470	13.8%	R2 276	13.9%
Wood pulp	R3 358	18.8%	R3 118	19.1%
Other timber products (e.g. paper)	R6 348	35.6%	R5 404	33.1%
Other sales	R416	2.3%	R385	2.4%
Total sales	**R17 857**	**100%**	**R16 337**	**100%**

Source: Stats SA Forestry, Logging and Related Services Industry Report, 2020

The table below outlines the capital expenditure on new assets in the forestry, logging, and related services industry for 2019 and 2020. In 2020, the forestry sector recorded a total capital expenditure of R1 594 million, a decrease from R1 945 million in 2019. The allocation of this expenditure was as follows:

- R1 376 million (86.3%) was directed toward forestry and related services.
- R218 million (13.7%) was allocated to logging and related services.

Table 7: Capital expenditure on new assets (2019, 2020)

Type of Service	2019	% contribution (2019)	2020	% contribution (2020)
Forestry and related services	R1 743 million	89.6%	R1 376 million	86.3%
Logging and related services	R202 million	10.4%	R218 million	13.7%
Total Capital Expenditure	R1 945 million	100%	R1 594 million	100%

The decline in capital expenditure from R1 945 million in 2019 to R1 594 million in 2020 can be attributed to several key factors:

1. Impact of the COVID-19 Pandemic: The global pandemic severely disrupted economic activities, including the forestry sector. Production slowdowns, temporary shutdowns of operations, and logistical challenges reduced the industry's capacity to invest in new assets. Companies were likely more cautious with their spending due to uncertainties about the future, leading to a reduction in capital investments.

2. Economic Uncertainty: The broader economic downturn caused by the pandemic, both locally and internationally, resulted in reduced demand for forestry products, which in turn affected revenues. This would have led companies to focus on cost-saving measures and defer large capital expenditures in favour of maintaining operations with existing assets.

3. Conversion of Plantations: As mentioned previously, some forestry plantations were converted to agricultural purposes. This shift reduced the need for investment in new forestry-related assets as the size of plantations decreased, further contributing to the decline in capital expenditure.

4. Environmental Challenges: Fires, pests, and other environmental factors also affected the forestry sector. In some cases, capital investment may have been redirected toward addressing these issues, but overall, expenditure on expanding operations or investing in new equipment likely declined as companies dealt with these challenges.

5. Policy and Regulatory Factors: While policies such as the Forestry Master Plan aim to promote growth, job creation, and transformation within the industry, the effects of these policies take time to materialize. Short-term regulatory hurdles and the slow implementation of new programs may have contributed to delays or reductions in capital investment during this period.

The decline in capital expenditure from 2019 to 2020 reflects a combination of pandemic-induced economic pressures, operational uncertainties, reduced revenues, and shifts in the sector's structure. Companies likely prioritized immediate operational needs over large capital investments in new assets.

2.4 Trade in Forestry Products

The table below presents the value of forestry products exported in 2019. Total exports amounted to R24.7 billion, reflecting a slight decrease compared to 2018 (R29.7 billion). In 2019, the breakdown of exports for wood and wood products was as follows:

Table 8: Forestry product exports (2019)

Product	Amount (R billions)	% of Exports
Pulp	8.104 bn	32.8%
Paper	8.468 bn	34.3%
Solid Wood & Other	8.124 bn	32.9%
Total	**24.7** bn	**100%**

Source: Quantec Trade Data, 2019

The table below presents the value of forestry products imported in 2019. Total imports amounted to R22.0 billion, reflecting a slight increase from R21.3 billion in 2018. In 2019, the breakdown of imports for wood and wood products was as follows:

Table 9: Forestry product imports (2019)

Product	Amount (R billions)	% of Imports
Pulp	1.754 bn	8.0%
Paper	14.937 bn	67.9%
Solid Wood & Other	5.281 bn	24.0%
Total	**22.0 bn**	**100%**

Source: Quantec Trade Data, 2019

2.5 TRANSFORMATION IN THE FORESTRY SECTOR

2.5.1 Black Ownership of Leading Forestry Companies

The desktop review collected publicly available information on Black and Black-Women ownership within leading forestry businesses. The data reflects the most recent information available, though it may post-date the reporting period. For privacy reasons, the specific names of the companies have been anonymized. The findings show significant progress toward Black ownership, with some companies achieving over 50% Black ownership. However, Black-Women ownership remains comparatively lower, suggesting that more efforts are needed to improve gender inclusivity in the industry.

Table 10: Black and Black Women ownership of leading forestry businesses

Company	Black Ownership (%)	Black-Women Ownership (%)
Company A	67.48%	36.31%
Company B	65.32%	32.16%
Company C	52.84%	19.75%
Company D	43.4%	23.65%
Company E	40.27%	20.82%
Company F	30.00%	12.81%
Company G	25.93%	11.26%
Company H	18.37%	7.25%

Source: B-BBEE information was gathered from publicly available sources.

2.5.2 Land Transfers to Communities

The DFFE, through policies such as the Forestry Sector Master Plan, aims to transform the industry, in terms of ownership and the ways in which communities benefit from their stewardship of forestry resources.

The DFFE has reported that seven plantations were handed to traditional communities prior to or during the reporting period. These seven plantations are small, totalling 641 ha (averaging 92 ha each), and are located within the Eastern Cape.

2.6 Forestry and the Environment

2.6.1 Climate Change

The forestry sector remains highly vulnerable to the effects of climate change, as identified in various studies, including a 2005 climate study by Fairbanks et al. According to the National Adaptation Plan, over the past 25 years, South Africa's national temperature has increased at twice the global average, resulting in more frequent and intense heatwaves, prolonged dry spells, and heavier rainfall (USAID, 2023). These climatic changes could have severe implications for timber plantations, including an increase in the frequency and severity of wildfires, unpredictable water supplies, and greater damage from insects and pests.

In 2017, UNESCO, in collaboration with the International Hydrological Programme, conducted a global study on climate change, water, and forestry management. Researchers agreed that rising temperatures are inevitable in South Africa's forestry zones, but there remains uncertainty regarding the impact on rainfall. The study concluded that declining rainfall combined with rising temperatures would negatively affect the total area suitable for optimal growth. However, an increase in rainfall could mitigate the adverse effects of temperature, expanding the areas with optimal conditions for species like pines and eucalyptus (UNESCO, 2017). As such, the long-term impact of climate change on the viability of South Africa's plantations remains uncertain, dependent largely on future rainfall patterns.

2.6.2 Water Use

Commercial timber plantations are responsible for approximately 3% of South Africa's total water use (FSA, 2022). These plantations intercept rainfall, reducing runoff into rivers and streams. Consequently, under the National Water Act (Act No. 36 of 1998), timber plantations are classified as a Stream Flow Reduction Activity (SFRA); the only sector with this designation. As a result, the Department of Water and Sanitation (DWS) mandates that plantations be registered as water users and eventually licensed, which may lead to water levies. This regulatory requirement has caused protracted conflict between the DWS and the forestry sector, represented by Forestry South Africa (FSA) (DFFE, 2019).

2.6.3 Losses due to Fire, Pests, Disease and Natural Disasters

The following table provides Stats SA data on the proportion of forestry enterprises that experienced losses due to fire, pests, diseases, and natural disasters in 2019 and 2020. Notably, the surveys conducted show that, with the exception of losses related to natural disasters, a much higher proportion of enterprises reported suffering losses compared to Stats SA data (see Table 19).

Table 11: Proportion of plantations reporting losses (Stats SA)

Type of Loss	Stats SA (2019)	Stats SA (2020)
Pests and Diseases	10.8%	9.6%
Forest Fires	11.5%	16.5%
Extreme Weather	23.0%	21.6%

Source: Stats SA Forestry, Logging and Related Services Industry Report, 2020

3. DATA GATHERING

3.1 Survey Methodology

The primary data source for the 2019/2020 Commercial Timber Resources and Primary Roundwood Processing Report is a comprehensive survey conducted across South Africa's Commercial Timber Plantations and Primary Roundwood Processors. In previous years, data was primarily collected through mailed surveys sent to identified plantation owners and timber processors. However, for the 2019/2020 report, the methodology was enhanced to include targeted outreach to major companies in both sectors. Surveys were conducted between August 2023 and April 2024.

The 2019/2020 surveys were updated to align, where feasible, with the Forestry Statistics Guidelines 2019, DFFE Key Performance Indicators (KPIs), and the approach utilized by Stats SA. A total of 3,180 surveys were distributed across the sector:

- 2,536 surveys were sent to companies owning, operating, or leasing commercial timber plantations.
- 644 surveys were sent to primary roundwood processors.

Surveys were distributed via post and, where possible, email. The company database was also updated to reflect changes in the sector and new contact information, supporting continuous improvement in data collection efforts

In total, 191 surveys were returned with complete information:

- 159 surveys from companies in the Commercial Timber Plantation sector.
- 32 surveys from Primary Roundwood Processors.

Responses were received from all major commercial plantation owners and timber processors. Since the South African timber industry is largely consolidated, the results are considered broadly representative of the industry for the reporting period. However, some inconsistencies were noted across respondents:

- Larger, private companies provided more comprehensive data, answering most or all questions.
- Smaller companies and government-owned plantations submitted incomplete surveys.

The information presented in this section of the report is based solely on the actual data received from the surveys. Due to the updated database used for this report, comparison with previous years' reports is not advised.

It is important to note that the survey was not conducted consistently for three consecutive years, meaning the results reported for 2019/2020, 2020/2021, and 2021/2022 may be incomplete. Additionally, some companies only retain certain data for a limited time, which could lead to gaps in the survey findings for those periods.

4. COMMERICAL TIMBER PLANTATION SURVEYS (2019/20)

4.1 General Company Information

A targeted outreach was used to ensure a more comprehensive response from companies in the forestry sector. The specific methods for this outreach included:

1. Direct Email Campaigns: Companies were contacted via email, ensuring that the surveys reached the relevant departments or personnel responsible for compliance and reporting. This approach was particularly effective for major companies with clear lines of communication.

2. Personalized Follow-Ups: Follow-up communications were conducted, especially for larger companies. This included direct phone calls and additional email reminders to encourage participation and clarify any questions related to the survey.

3. Database Updates: The company database was updated to reflect new or changed contact information, ensuring the outreach was directed to the right individuals within the companies. This involved verifying the latest contact details and reaching out through multiple channels to ensure receipt of the surveys.

4. Utilization of Industry Networks: Worked with industry associations and networks to engage with key stakeholders, leveraging relationships with major players in the sector to facilitate responses from smaller and harder-to-reach companies.

These methods were implemented to improve the overall survey response rate and ensure that data collected was representative of the sector. The targeted outreach, combined with the updated database, supported continuous improvements in the data collection process.

The following data is presented at the company level (not plantation level) for all Commercial Timber Plantations that responded to the 2019/20 survey. This section applies exclusively to privately-owned companies.

4.1.1 Company Size (2019/20)

Among the **57 companies** that responded to the question regarding company size:

- **14** companies are **large enterprises**, with more than **250 employees**.
- **20** companies are **medium-sized enterprises**, employing between **50-250 employees**.
- **17** companies are **small enterprises**, with **10-49 employees**.
- **6** companies are **micro-enterprises**, with fewer than **10 employees**.

Table 12: Company size by number of employees (2019/20)

Company Size	No. of Companies at this Size	% of Companies at this Size
Micro Enterprise (<10 employees)	6	11%
Small Enterprise (10-49 employees)	17	30%
Medium Enterprise (50-250 employees)	20	35%
Large (more than 250 employees)	14	25%

**Due to rounding, percentages may not total 100%*

4.1.2 B-BBEE Status

Out of the 49 companies that reported their B-BBEE Status for the 2019/20 period:

- 2 companies (4%) are classified as Level 1.
- 2 companies (4%) are classified as Level 2.
- 12 companies (25%) fall within Levels 3-8.
- 29 companies (59%) are exempt from B-BBEE status reporting.
- 4 companies (8%) reported having no score or being non-compliant

Table 13: Plantations (Companies): B-BBEE Status (2019/20)

B-BEE Status	No. of Companies with this status	% of Companies with this Status
Level 1	2	4%
Level 2	2	4%
Level 3	1	2%
Level 4	3	6%
Level 5	0	0%
Level 6	3	6%
Level 7	1	2%
Level 8	4	8%
Exempt	29	59%
No Score/ Not Applicable	4	8%

4.2 Capital Investment

The following table outlines the capital investment and assets reported by Commercial Timber Plantations for the 2019/20 period, amounting to R375 million. In addition, R27 million was invested in research and development (R&D). It is important to note that this figure is likely an underestimate, as not all companies responded to the survey.

Table 14: Total Capital Investment (2019/20)

Total Capital Investment	R375 376 297
Additional Investment in R&D	R27 933 500
Additional Investment in Renewables	R0

4.3 Operational Expenditure, Other Costs and Taxes

The following tables provide a summary of operational expenditure and taxes reported by Commercial Timber Plantations in the 2019/20 surveys. It is important to note that only 56% of survey respondents answered these questions, and no data was provided by government-owned plantations. As a result, the figures presented may not represent the entire industry.

4.3.1 Operational Expenditure (2019/20)

In the 2019/20 reporting period, survey respondents reported a total of R1.67 billion in operational expenditure for managed Commercial Timber Plantations, with an additional R4.6 million reported for Indigenous Forests.

Table 15: Plantations: Operational Expenditure (2019/20)

Forest Type	Operational Cost (R)
Plantation	1,697,569,560
Indigenous Forest	4,604,738

Tax data collected through the surveys indicated a range of taxes paid by respondents, including corporate income tax and other relevant levies, but not all companies provided this information. The details on taxation will be further refined in future reports to capture a more comprehensive picture.

4.3.2 Costs due to Load Shedding (2019/20)

In addition to operational expenses, Commercial Timber Plantations reported an additional R5,905,506 in costs directly attributed to the impact of loadshedding during the 2019/20 reporting period. These costs reflect the increased burden on plantations to maintain operations during power outages, which included the use of backup power systems and associated disruptions to productivity.

4.3.3 Taxes Paid (2019/20)

Commercial Timber Plantations reported a total tax burden of R967 million across all tax categories for the 2019/20 reporting period.

Table 16: Plantations: Tax Burden (2019/20)

Tax	Tax Burden (R)
Skills Levy	15,014,597
Regional Council-Levy	5,907,233
Water Levy	3,649,259
Income Tax	668,005,427
VAT	274,454,168
Total	**967,030,684**

Tax data collected through the surveys indicated a range of taxes paid by respondents, including corporate income tax and other relevant levies, but not all companies provided this information. The details on taxation will be further refined in future reports to capture a more comprehensive picture.

4.4 Plantation Sales / Leases

No plantations were reported as acquired, leased, or sold during the 2019/20 reporting period. Factors contributing to this lack of activity may include:

- Economic Uncertainty: The forestry sector faced significant economic challenges, particularly due to the COVID-19 pandemic. This created financial instability, leading to reduced investment in new acquisitions or leases as companies prioritized financial risk management.
- Environmental Risks: The increasing threats posed by climate change, including wildfires, pest outbreaks, and water scarcity, likely deterred potential buyers or lessees. These environmental challenges made managing plantations more complex, reducing the attractiveness of transactions.
- Long-Term Investment Nature: Forestry plantations are long-term investments, and companies may have focused on maintaining and optimizing existing assets rather than expanding through acquisitions or sales. The capital-intensive nature of the forestry industry further encouraged a cautious approach during this period.

4.5 Total Plantation Area

The 2019/20 surveys recorded a total of 968,196 hectares of Commercial Timber Plantations, reflecting an 18.96% decrease from the 1,194,663 hectares reported in 2018/19. The most significant reduction occurred in the area managed by small growers (those with less than 500 hectares), which plummeted from 167,378 hectares in 2018/19 to just 5,092 hectares in 2019/20.

While it is possible that some small and medium plantations may have closed during this period, the more likely cause of this sharp decline is underreporting, which is estimated to account for around 162,286 hectares of the discrepancy. This suggests that the real decline in plantation area may not be as severe as the data indicates.

Table 17: Total plantation area (2019/20)

Plantation Type	2018/19 (ha)	2019/20 (ha)	% Difference
Plantations over 500 ha in size	807 891	742 088	-8.15%
Small and medium-scale farms (<500 ha)	167 378	5 092	-96,96%
Publicly owned timber plantations	219 394	221 016	+0.74%
Total	**1 194 663**	**968 196**	**-18.96%**

The low response rate from small and medium-scale growers in the 2019/20 surveys can be attributed to several factors:

- The total area of commercial plantations has been steadily decreasing over the past three decades, impacting the overall reporting base.
- The delay between the reporting period (2019/20) and the execution of the surveys (2023-2024) led to non-reporting from plantations that were operational in 2019/20 but have since been closed or liquidated.
- Many small growers are not linked to any company schemes or industry programs, making it difficult to reach them. This has become an increasingly prevalent issue as more growers operate independently.
- Inaccurate or outdated information in the forestry industry database further complicated communication efforts, leading to surveys not reaching all intended recipients.
- Some plantations were hesitant to provide data that had already been submitted to government authorities, reducing the overall survey response rate.
- A significant drop in the reliability of the South African Postal Service likely contributed to many surveys not being delivered to their intended recipients.
- A total of 641 hectares were transferred to traditional communities in the Eastern Cape, according to the DFFE. These communities were contacted but did not participate in the surveys, either declining to participate or lacking the necessary data to complete the survey. As a result, these 641 hectares are not included in the totals presented above.

4.6 Timber Age by Species

Data on afforestation and timber distribution by species was collected for 784,280 hectares, accounting for 80% of the total reported plantation area. The remaining plantations that did not respond were predominantly government-owned and smallholder plantations.

In recent years, the rate of new timber planting (afforestation) has dropped significantly, while the proportion of temporarily unplanted hectares has risen. This trend can be attributed to several factors, including:

- A reduction in the availability of suitable forestry land.
- Capacity issues in government-owned plantations.
- Stricter regulations and procedures for obtaining water licenses, which have slowed or hindered new planting efforts.

Table 18: Summary of new afforestation and distribution of timber (2019/20)

Age	Pines and SW (ha)	Pines and SW (%)	Eucalyptus (ha)	Eucalyptus (%)	Wattle (ha)	Wattle (%)	Other (ha)	Other (%)
TU	31,716	8%	28,848	8%	370	8%	393	4%
0-4y	55,658	13%	141,851	40%	1,706	37%	2,353	23%
5-9y	73,667	18%	138,075	39%	2,006	44%	4,576	45%
10-14y	82,765	20%	39,103	11%	443	10%	1,750	17%
15-19y	55,936	13%	2,029	0.6%	3	0.1%	661	7%
19-24y	38,639	9%	773	0.2%	0	0	247	2%
25-29y	27,825	7%	582	0.2%	0	0	132	1%
30-34y	11,698	3%	951	0.3%	15	0.4%	42	0.4%
35+y	39,249	9%	143	0.04%	19	0.4%	34	0.3%
Jungle	0	0%	22	0.01%	0	0	0	0
Total	**417,153**		**352,376**		**4,562**		**10,188**	

SW = Softwood

TU = Temporarily Unplanted

**Due to rounding off, percentages may not total 100%*

This shift towards more temporarily unplanted areas highlights the challenges faced by the sector, from environmental to regulatory and operational hurdles, affecting afforestation efforts.

4.7 Main Purpose for which Timber is Grown

The 2019/20 Commercial Timber Plantations survey revealed key insights into the distribution of timber by purpose and species. Softwoods accounted for 51.1% of the total plantation area, with 62.4% grown for sawlogs and 37.2% for pulpwood. On the other hand, hardwoods made up 48.9% of plantations, with an overwhelming 96.8% dedicated to pulpwood production and 2.8% allocated for mining timber.

A comparison with 2018/19 data shows a decline in the proportion of softwoods used for sawlogs, up from 75%, while the proportion of hardwoods for pulpwood increased from 87% in the previous year. Other uses, such as mining timber and miscellaneous purposes, remained relatively small in both years. These shifts indicate an increased focus on pulpwood production, particularly in hardwood plantations, while sawlog production saw a slight decrease for softwoods.

Table 19: Purpose for which timber is grown

Product	2019/20		2018/19	
	Softwood (51.1%)	Hardwood (48.9%)	Softwood (48.6%)	Hardwood (51.4%)
Sawlogs	62.4%	-	75%	2%
Pulpwood	37.2%	96.8%	25%	87%
Mining Timber	-	2.8%	-	5%
Other	0.3%	0.4%	0.1%	6%
Total	**100%**	**100%**	**100%**	**100%**

*****_Due to rounding, percentages may not total 100%_

4.8 Plantation Area by Province

Commercial Timber Plantations were reported across six provinces during the 2019/20 survey, with the largest plantation areas concentrated in KwaZulu-Natal, Mpumalanga, and the Eastern Cape. Specifically, KwaZulu-Natal reported 436,141 hectares, followed by Mpumalanga with 348,111 hectares, and the Eastern Cape with 83,556 hectares. The Western Cape showed notable growth, reporting 67,592 hectares, marking an 80% increase compared to the previous year.

This growth is particularly significant for the Western Cape, as it follows the reversal of a 2001 Cabinet decision to convert approximately 40,000 hectares of plantation land to other uses such as conservation, settlement, or community forestry. Initially, the region was deemed marginal and uneconomical for commercial forestry. However, concerns about job losses and timber shortages in the value chain led to a formal review in 2008, which resulted in Cabinet recommending that the area be classified as sustainable for forestry once again.

No commercial timber plantations were reported in the Free State, Northern Cape, or Gauteng during the survey period, underscoring the concentration of plantation forestry activities in the coastal and eastern regions, where favourable climatic and geographical conditions support timber growth.

Table 20: Plantation Area by Province (2018/29 vs 2019/20)

Province	2019/20 Survey Respondents (ha)	2018/19 Respondents (ha)	% Difference
Eastern Cape	83,556	141,905	(41.1%)
Limpopo	32,589	51,047	(36.2%)
Mpumalanga	348,111	491,891	(29.2%)
North West	207	304	(31.9%)
KwaZulu-Natal	436,141	478,318	(8.8%)
Western Cape	67,592	31,197	116.7%
Free State	-	-	-
Gauteng	-	-	-
Northern Cape	-	-	-
Total	**968,196**	**1,194,663**	**(226,467)**

4.9 The Provinces - Maps and Plantations by Genus

4.9.1 Plantations in KwaZulu-Natal Province

A total of 436,141 (ha) of commercial timber plantations were reported in KwaZulu-Natal Province during the 2019/20 survey. This includes:

- 93,888 ha of softwood plantations (21.5% of the total),
- 259,606 ha of hardwood plantations (59.5% of the total),
- 82,647 ha for which specific data on softwood or hardwood classification was not provided (18.9% of the total).

Table 21: KwaZulu-Natal Province: Area under plantation by genus (2019/20)

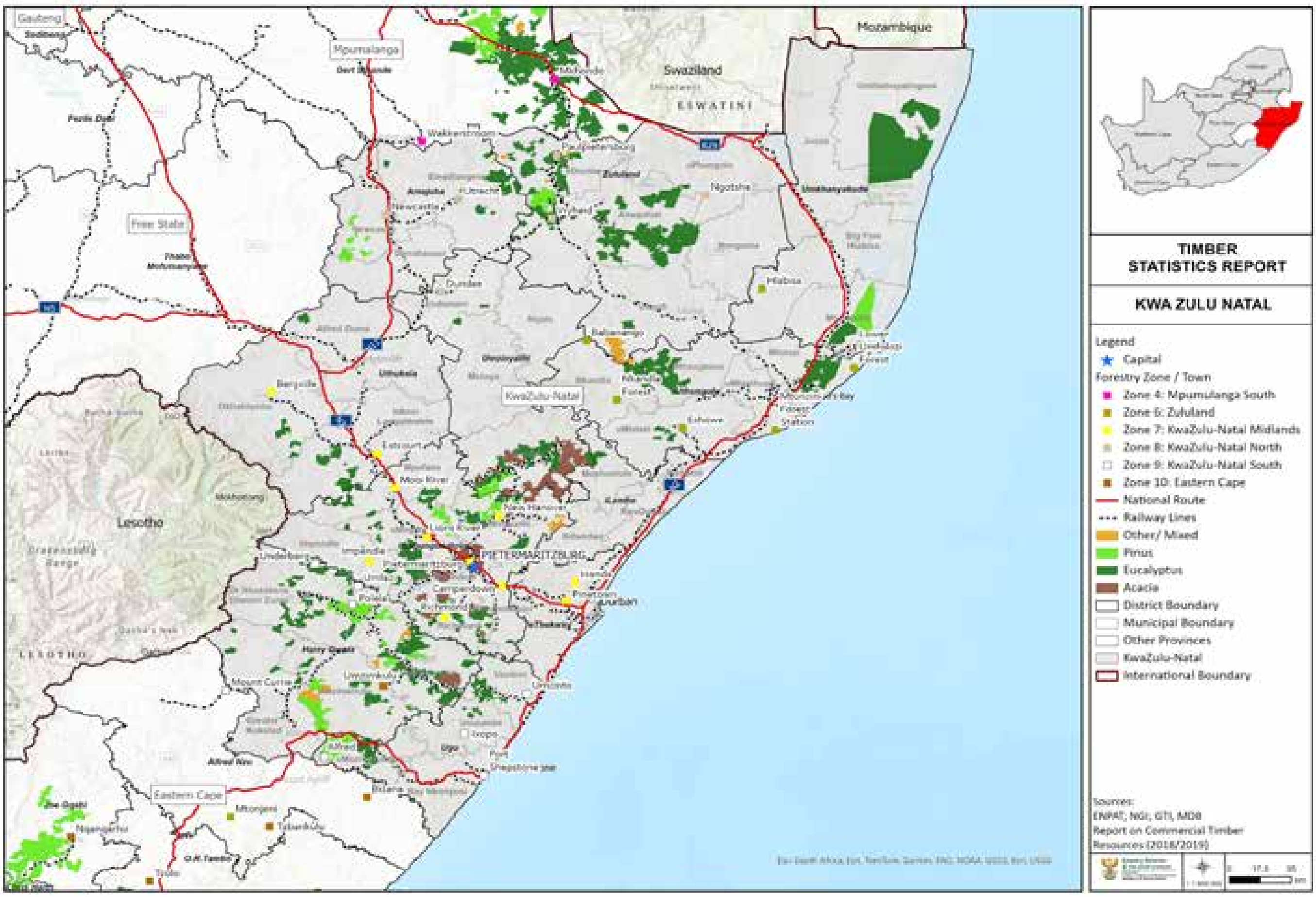
KwaZulu-Natal Province				
Softwood				
Genus	**Sawlogs (ha)**	**Pulpwood (ha)**	**Other (ha)**	**Total Softwood (ha)**
P. patula	23,336	18,197	0	41,533
P. elliotti	20,436	26,195	0	46,631
P. taeda	1,825	821	0	2,646
P. radiata	0	0	0	0
P. pinaster	0	0	0	0
Other	1,179	1,899	0	3,078
Genus not reported				22,126
Total Softwood				93,888
Hardwood				
Genus	**Pulpwood (ha)**	**Mining Timber (ha)**	**Other (ha)**	**Total Hardwood (ha)**
E. grandis	113,791	12	334	114,137
Other Eucalyptus	134,192	6	0	134,198
Wattle	3,784	144	0	3,928
Poplars	7,313	0	0	7,313
Other	9	21	0	30
Genus not reported				60,521
Total Hardwood				259,606
Other				
Genus not reported				82,647
TOTAL (ha)				**436,141**

The map (Figure 1) illustrates the distribution of plantations across KwaZulu-Natal Province, as highlighted in the 2019/20 Timber Statistics Report. The majority of the plantations are located inland, with some extending to the Mtunzini area between Durban and Richards Bay. As depicted on the map, the plantations are primarily comprised of Pinus and Eucalyptus species. Additionally, Acacia plantations are specifically grown in the uMgungundlovu District Municipality, which includes Pietermaritzburg, and near Ixopo in the Umzimkulu Local Municipality. The colour coding on the map distinguishes between various forestry zones and species:

- Green areas represent plantations of Pinus species.
- Yellow areas represent plantations of Eucalyptus species.
- Brown areas indicate the presence of Acacia species.
- Orange areas indicate the presence of other/mixed species.

This map visually confirms the widespread presence of timber plantations across the region, with notable clusters in both the midlands and northern regions of the province, in addition to the areas around Mtunzini.

Figure 1: Map of commercial timber plantations in KwaZulu-Natal Province (2019/20)



4.9.2 Plantations in the Mpumalanga Province

A total of 348,111 ha of commercial timber plantations were recorded in Mpumalanga Province during the 2019/20 survey. This includes:

- 206,960 ha of softwood plantations (59.5% of the total),
- 92,657 ha of hardwood plantations (26.6% of the total),
- 48,494 ha for which specific data on softwood or hardwood classification was not provided (13.9% of the total).

Table 22: Mpumalanga Province: Area under plantation by genus (2019/20)

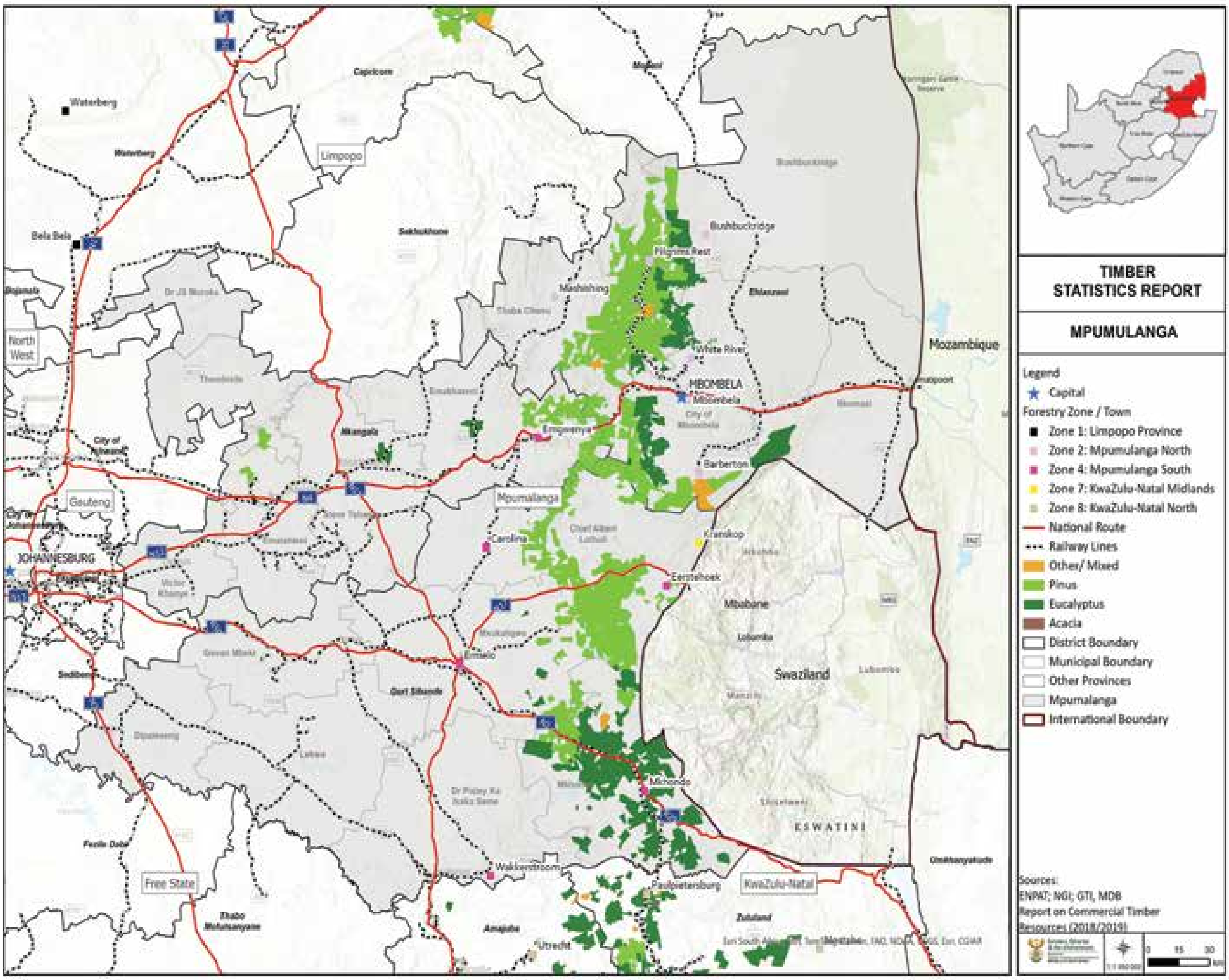
Mpumalanga Province				
Softwood				
Genus	**Sawlogs (ha)**	**Pulpwood (ha)**	**Other (ha)**	**Total Softwood (ha)**
P. patula	43,540	51,064	0	94,604
P. elliotti	44,786	6,816	0	51,602
P. taeda	4,255	2,092	0	6,347
P. radiata	0	0	0	0
P. pinaster	0	2,710	0	2,710
Other Softwood	31,758	19,939	0	51,697
Total Softwood				206,960
Hardwood				
Genus	**Pulpwood (ha)**	**Mining Timber (ha)**	**Other (ha)**	**Total Hardwood (ha)**
E. grandis	12,386	17,585	1,853	20,824
Other Eucalyptus	64,514	1,974	2,104	68,592
Wattle	666	0	0	666
Poplars	2,541	0	0	2,541
Other Hardwood	34	0	0	34
Total Hardwood				92,657
Other				
Genus not provided				48,494
TOTAL (ha)				**348,111**

The map (Figure 2) illustrates the distribution of plantations across eastern Mpumalanga Province. Plantations extend along a north south corridor and are widespread throughout the province. Pine is more prevalent in the northern and central regions of the province, while Eucalyptus is present in the north-eastern region and in the south. There is also a small cluster of pine plantations located in the west of the province, near the Gauteng Province border. The colour coding on the map distinguishes between various forestry zones and species:

- Green areas represent plantations of Pinus species.
- Yellow areas represent plantations of Eucalyptus species.
- Orange areas indicate the presence of other/mixed species.

This map visually confirms the widespread presence of timber plantations across the region, extending from the north to the south of province, near to the borders of the Kruger National Park and eSwatini.

Figure 2: Map of commercial timber plantations in Mpumalanga Province (2019/20)



4.9.3 Plantations in the Eastern Cape Province

A total of 83,556 ha of commercial timber plantations were recorded in the Eastern Cape Province during the 2019/20 survey. This includes:

- 46,809 ha of softwood plantations (56.0% of the total),
- 10,047 ha of hardwood plantations (12.0% of the total),
- 26,710 ha for which specific data on softwood or hardwood classification was not provided (32.0% of the total).

Table 23: Eastern Cape Province: Area under plantation by genus (2019/20)

Eastern Cape Province				
Softwood				
Genus	**Sawlogs (ha)**	**Pulpwood (ha)**	**Other (ha)**	**Total Softwood (ha)**
P. patula	22,288	778	0	23,066
P. elliotti	14,641	9	0	14,650
P. taeda	64	121	0	185
P. radiata	559	8	0	567
P. pinaster	31	0	0	31
Other	863	7,447	0	8,310
Total Softwood				46,809
Hardwood				
Genus	**Pulpwood (ha)**	**Mining Timber (ha)**	**Other (ha)**	**Total Hardwood (ha)**
E. grandis	731	0	1,007	1,738
Other Eucalyptus	8,036	0	0	8,036
Wattle	3	0	0	3
Poplars	150	0	0	150
Other	120	0	0	120
Total Hardwood		0	1,007	10,047
Other				
Genus not provided				26,710
TOTAL (ha)				**83,566**

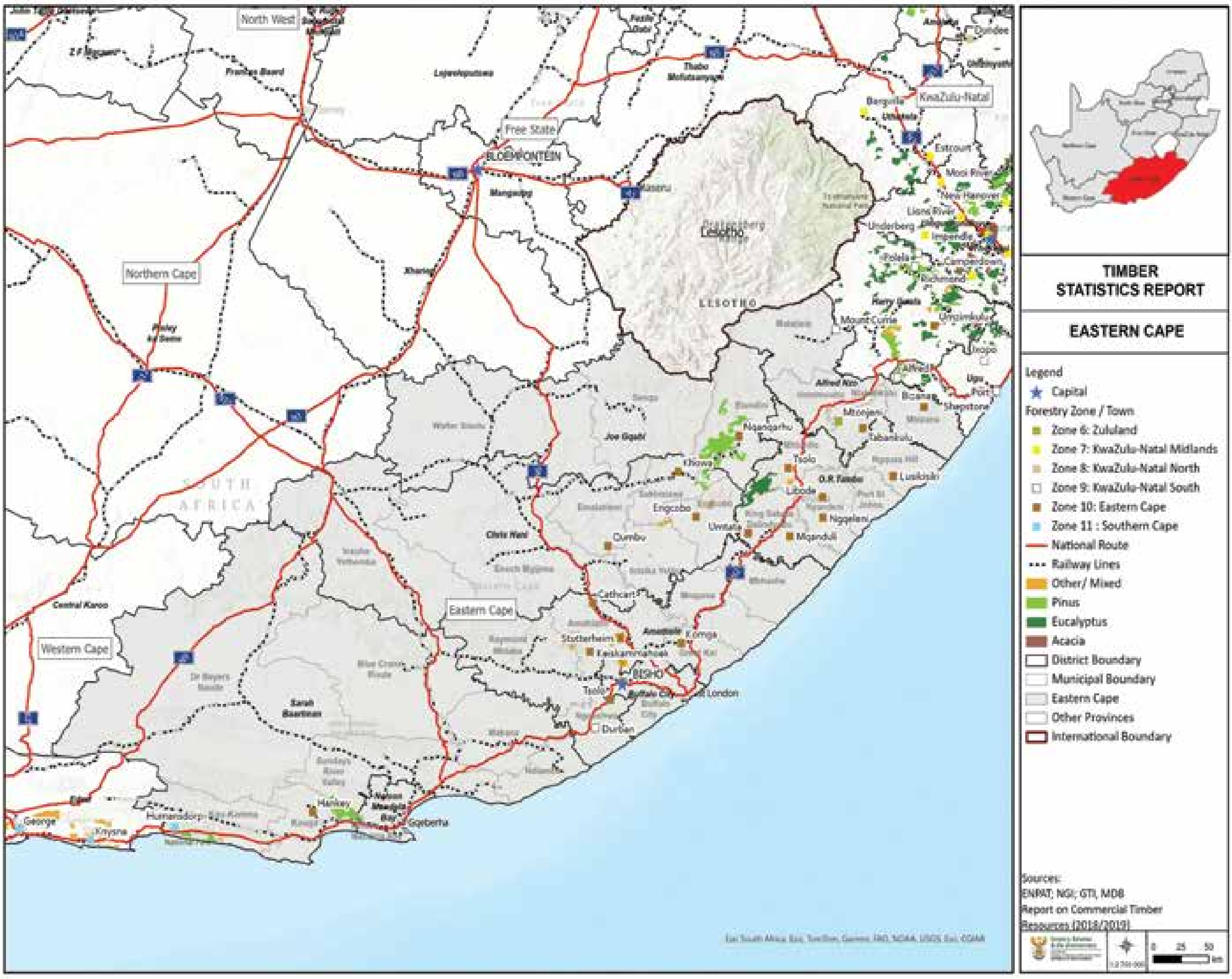
The map (Figure 3) illustrates the location of plantations across in the Eastern Cape Province. Plantations are scattered across inland and coastal regions, including areas near Humansdorp, Hankey (Kouga Local Municipality), Elundini (Elundini Local Municipality), and north of Umtata (OR Tambo District Municipality). Plantations comprise both pine and eucalyptus, with small Acacia plantations located near Hankey, Stutterheim and Engcobo.

The colour coding on the map distinguishes between various forestry zones and species:

- Green areas represent plantations of Pinus species.
- Yellow areas represent plantations of Eucalyptus species.
- Brown areas indicate the presence of Acacia species.
- Orange areas indicate the presence of other/mixed species.

This map visually confirms that timber plantations are scattered throughout the Eastern Cape Province, with fewer contiguous areas of plantation than in the more northern provinces.

Figure 3: Map of commercial timber plantations in the Eastern Cape Province (2019/20)



4.9.4 Plantations in the Limpopo Province

A total of 32,589 ha of commercial timber plantations were recorded in the Limpopo Province during the 2019/20 survey. This includes:

- 10,192 ha of softwood plantations (31.3% of the total),
- 10,421 ha of hardwood plantations (31.0% of the total),
- 11,976 ha for which specific data on softwood or hardwood classification was not provided (36.7% of the total).

Table 24: Limpopo Province: Area under plantation by genus (2019/20)

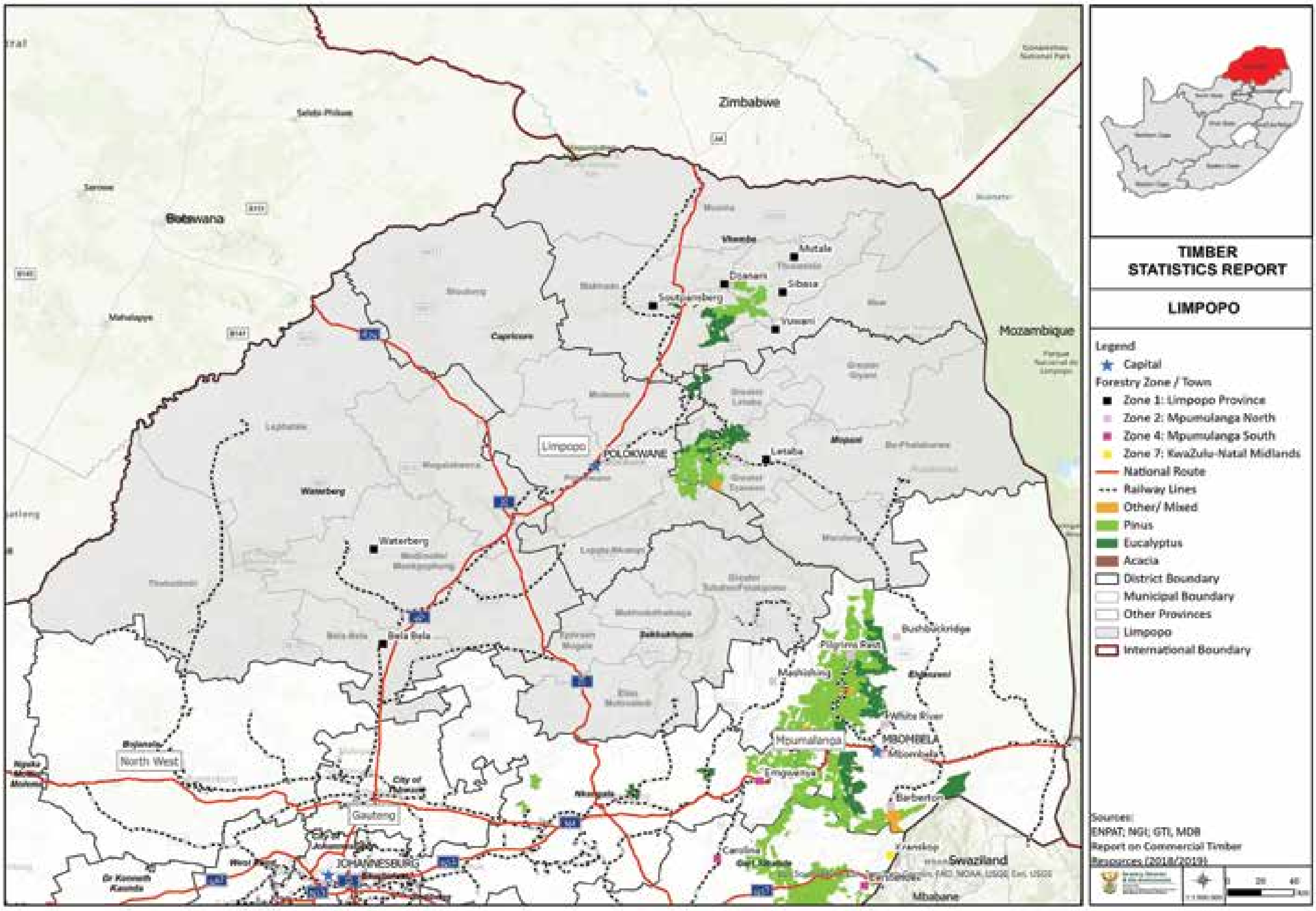
Limpopo Province				
Softwood				
Genus	**Sawlogs (ha)**	**Pulpwood (ha)**	**Other (ha)**	**Total Softwood (ha)**
P. patula	3 151	0	0	3 151
P. elliotti	2 827	0	0	2 827
P. taeda	48	0	0	48
P. radiata	0	0	0	0
P. pinaster	0	0	0	0
Other	4 166	0	0	4 166
Total Softwood				10 192
Hardwood				
Genus	**Pulpwood (ha)**	**Mining Timber (ha)**	**Other (ha)**	**Total Softwood (ha)**
E. grandis	215	9	8 947	9 171
Other eucalyptus	0	0	1 250	1 250
Wattle	0	0	0	0
Poplars	0	0	0	0
Other	0	0	0	0
Total Hardwood				10 421
Other				
Genus not reported				11,976
TOTAL (ha)				**32,589**

The map (Figure 4) illustrates the distribution of plantations in Limpopo Province. Plantations are located mainly in two clusters, the southern-most cluster is located east of the N1 highway near Tzaneen and is comprised of pine in the south and eucalyptus in the north.

The colour coding on the map distinguishes between various forestry zones and species:

- Green areas represent plantations of Pinus species.
- Yellow areas represent plantations of Eucalyptus species.
- Orange areas indicate the presence of other/mixed species.

Figure 4: Map of commercial timber plantations in Limpopo Province (2019/20)



4.9.5 Plantations in the Western Cape Province

A total of 67,592 ha of commercial timber plantations were recorded in the Western Cape Province during the 2019/20 survey. This includes:

- 41,561 ha of softwood plantations (61.5% of the total),
- 639 ha of hardwood plantations (0,9% of the total),
- 25,392 ha for which specific data on softwood or hardwood classification was not provided (37.6% of the total).

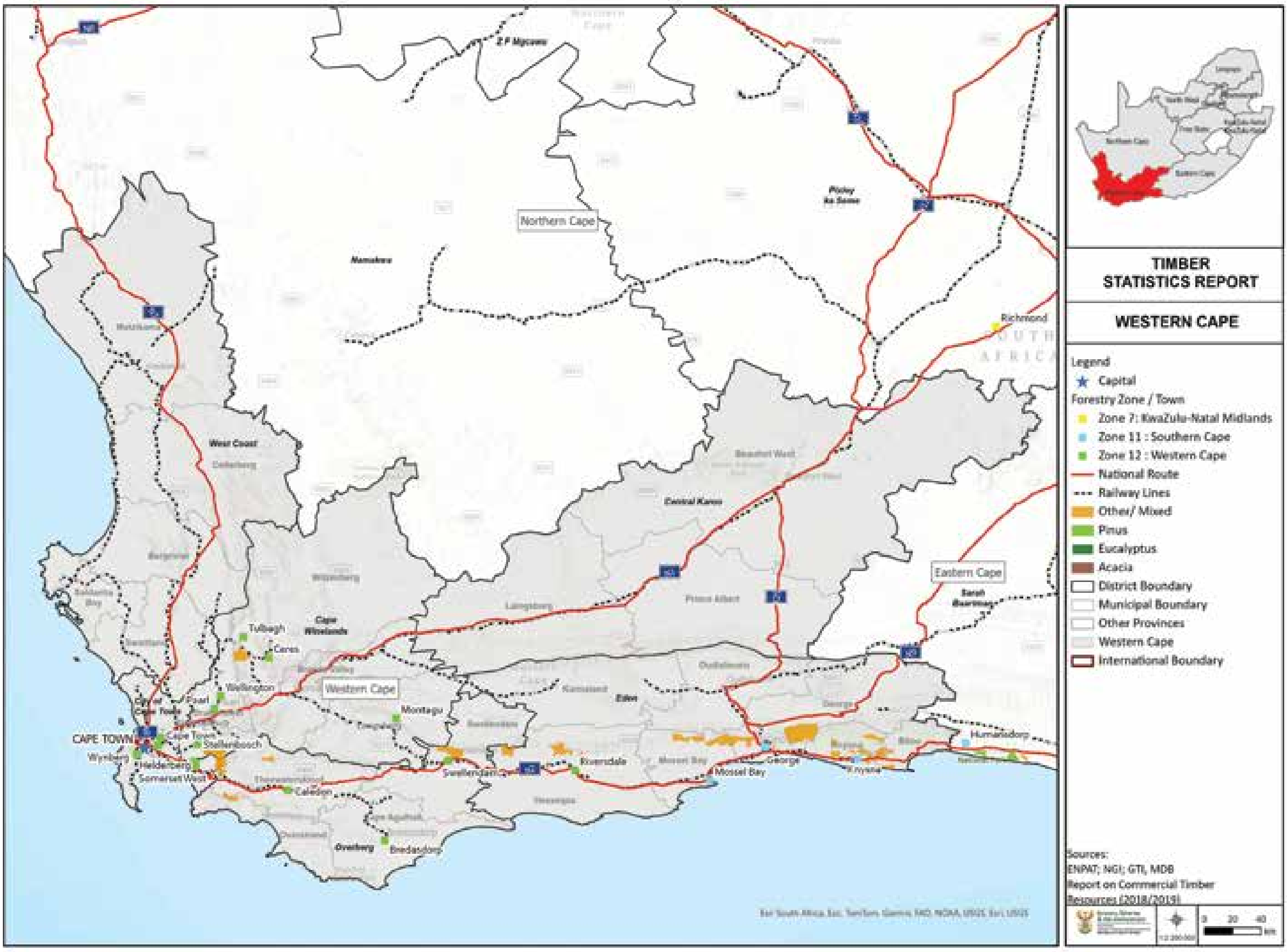
Table 25: Western Cape Province: Area under plantation by genus (2019/20)

Western Cape Province				
Softwood				
Genus	**Sawlogs (ha)**	**Pulpwood (ha)**	**Other (ha)**	**Total Softwood (ha)**
P. patula	26	0	0	26
P. elliotti	21,647	0	0	21,647
P. taeda	2,267	0	0	2,267
P. radiata	6,121	0	1,197	7,318
P. pinaster	10,303	0	0	10,303
Other	0	0	0	0
Total Softwood				41,561
Hardwood				
Genus	**Pulpwood (ha)**	**Mining Timber (ha)**	**Other (ha)**	**Total Softwood (ha)**
E. grandis	0	0	0	0
Other eucalyptus	163	0	0	163
Wattle	0	0	0	0
Poplars	0	0	0	0
Other	476	0	0	476
Total Hardwood				639
Other				
Genus not reported				25,392
TOTAL (ha)				**67,592**

In the Western Cape Province, commercial timber plantations are located mainly around Cape Town, the Cape Winelands, the Overberg, and along the N2.

The map (Figure 5) illustrates the location of plantations in the Western Cape Province. Plantations are located both inland and along coastal regions, primarily in the Cape Winelands, the Overberg, and along the N2. Plantations consist mainly of ‘other and mixed’ species.

Figure 5: Map of commercial timber plantations in the Western Cape Province (2019/20)



4.10 Plantation Ownership

Of all reported plantations, 747,180 ha (77.2%) are privately owned, and 221,016 ha (22.8%) are publicly owned and managed by the DFFE (2018/19: 82% private, 18% public).

Due to gaps in reporting the figures in the tables below may not align with the totals reported above.

4.10.1 Government Owned Plantations (2019/20)

Public (government) owned plantations consist of approximately 74% softwood and 26% hardwood, primarily grown for sawlogs and other purposes.

Table 26: Public (Government) owned plantations by genus (2019/20)

Public (Government) Owned Plantations				
Softwood				
Genus	**Sawlogs (ha)**	**Pulpwood (ha)**	**Other (ha)**	**Total Softwood (ha)**
P. patula	47,226	1,319	0	48,545
P. elliotti	56,604	6,347	0	62,951
P. taeda	3,372	267	0	3,639
P. radiata	0	0	0	0
P. pinaster	0	0	0	0
Other	36,317	343	0	36,660
Total Softwood				151,794
Hardwood				
Genus	**Pulpwood (ha)**	**Mining Timber (ha)**	**Other (ha)**	**Total (ha)**
E. grandis	20,157	231	3,156	23,544
Other eucalyptus	12,302	0	546	12,848
Wattle	597	0	0	597
Poplars	1,953	0	0	1,953
Other	37	0	0	37
Total Hardwood				38,979
Other				
Genus not reported				30,243
TOTAL (ha)				**221,016**

4.10.2 Privately Owned Plantations (2019/20)

Privately owned plantations are composed of 51% softwood and 49% hardwood, cultivated for sawlogs, pulpwood, and other uses. Privately owned plantations also show greater diversity in the types of genera grown.

Table 27: Private owned plantations by genus (2019/20)

Private Owned Plantations				
Softwood				
Genus	**Sawlogs (ha)**	**Pulpwood (ha)**	**Other (ha)**	**Total Softwood (ha)**
P. patula	89,495	68,721	1,197	159,413
P. elliotti	73,687	26,673	0	100,360
P. taeda	7,185	2,768	0	9,953
P. radiata	6,680	8	0	6,688
P. pinaster	10,334	2,710	0	13,044
Other	35,360	28,942	0	64,302
Total Softwood			1,197	353,760
Hardwood				
Genus	**Pulpwood (ha)**	**Mining Timber (ha)**	**Other (ha)**	**Total Hardwood (ha)**
E. grandis	106,967	17,375	8,986	133,328
Other eucalyptus	194,603	1,980	2,807	199,390
Wattle	3,856	153	0	4,009
Poplars	8,051	0	0	8,051
Other	126	21	0	147
Total Hardwood				344,925
Other				
Genus Not Reported				48,495
TOTAL (ha)				**747,180**

4.11 Mean annual increments

The average Mean Annual Increments (MAI) reported by Plantations in the 2019/20 surveys are presented in the table below.

Table 28: Mean Annual Increments (2019/20)

Species	Average MAI
All softwood species	13.3
Eucalyptus Grandis	16.3
Other Eucalyptus	17.1
Wattle	9.9
Other hardwoods (incl. poplar	0.7

4.12 Employment and Income in the Commercial Timber Sector

The Commercial Timber Plantation surveys sought detailed information on employment and wages, categorized by job type and population group. However, less than 20% of respondents provided this information. As a result, the employment and income figures are presented as averages rather than representative industry totals. Furthermore, employment and salary data was not provided for government-owned plantations.

4.12.1 Employment of Locals (2019/20)

Survey respondents indicated that 98% of their employees are local, residing within the same local municipality as the plantation.

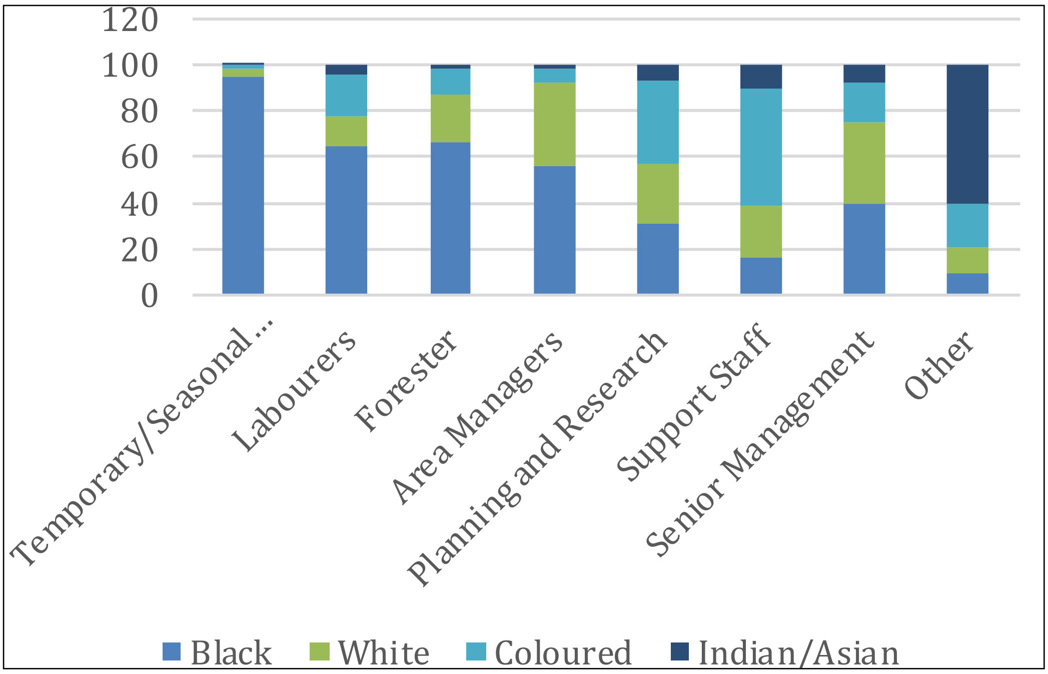
4.12.2 Employment by Population Group (2019/20)

The survey data presents the breakdown of employment in the Commercial Timber Sector by population group for various job roles. It indicates that:

- Temporary and seasonal workers are predominantly Black, comprising 94% of the workforce in this category, with smaller proportions of White (3%), Coloured (2%), and Indian/Asian (1%) workers.
- Labourers in the industry are similarly dominated by Black employees (65%), with Coloured workers making up 18%, White workers at 13%, and Indian/Asian workers at 4%.
- In roles such as supervisors, operators, and drivers, the majority are Black workers (78%), followed by Coloured (10%), White (8%), and Indian/Asian workers (4%).
- At the forester level, Black employees account for 66% of the workforce, while White employees make up 21%, with smaller representations of Coloured (11%) and Indian/Asian (2%).
- Area managers are mostly Black (56%), followed by White (36%), Coloured (6%), and Indian/Asian workers.
- For roles in planning and research, the distribution is more balanced, with Coloured workers representing 36%, followed by Black (31%), White (26%), and Indian/Asian (6%).
- Support staff is largely composed of Coloured workers (51%), followed by White (23%), Black (16%), and Indian/Asian (10%).
- In senior management, Black employees account for 40% of the workforce, with White workers making up 35%, followed by Coloured (17%) and Indian/Asian (9%).
- The "Other" category shows a distinct composition, with Indian/Asian workers making up 60%, while Coloured workers represent 19%, Black workers 10%, and White workers 12%.

The following graph indicates a high representation of Black workers, especially in roles such as labourers and temporary/seasonal workers, while more senior and specialized roles show a greater proportion of White employees. The Coloured and Indian/Asian population groups are most prevalent in support roles and "other" categories, where a higher diversity in representation is observed.

Figure 6: Employment Statistics by Population Group (2019/20)



4.12.3 Employment of Women and People with Disabilities (2019/20)

The following table outlines the percentage of women and people with disabilities employed in various roles within the Commercial Timber Sector. Key observations include:

- Temporary/Seasonal workers have the highest proportion of women at 33%, with 2% representation of people with disabilities.
- Among labourers, 28% are women, with a very low representation (1%) of people with disabilities.
- In the supervisors, operators, and drivers category, only 8% are women, and no individuals with disabilities were reported.

- Foresters are composed of 28% women, but no individuals with disabilities were reported.
- Area managers show 22% women in their ranks, but again no reported individuals with disabilities.
- In planning and research roles, the highest proportion of women (70%) is reported, along with 8% representation of people with disabilities.
- Support staff roles have a significant presence of women (49%) and 5% representation of people with disabilities.
- At the senior management level, 40% of the workforce are women, but there is no representation of individuals with disabilities.
- In the “Other” category, 31% of employees are women, and 6% are people with disabilities.

This table highlights a gender disparity in some of the more senior roles, such as area managers and supervisors, while women are more prevalent in roles like planning, research, and support staff. Representation of people with disabilities is generally very low across all categories.

Table 30: Plantations: Employment of Women and People with Disabilities (2019:20)

Job Type	Women (%)	People with Disabilities (%)
Temporary / Seasonal workers*	33%	2%
Labourers	28%	1%
Supervisors, operators, drivers, etc	8%	0%
Foresters	28%	0%
Area Managers	22%	0%
Planning & Research	70%	8%
Support Staff	49%	5%
Senior Managers	40%	0%
Other	31%	6%

4.12.4 Salaries (2019/20)

The following table presents the median monthly wages and the lowest monthly wage/salary rates across different job types within the sector. Key insights include:

- Temporary/Seasonal workers have the lowest median wage at R4,465, with the lowest reported wage being R4,324, these workers represent the entry-level pay scale in the sector.
- Labourers earn a median monthly wage of R8,684, with the lowest salary being R7,423.
- Supervisors, operators, and drivers earn a median wage of R12,080, with the lowest being R8,864.
- Foresters are paid a significantly higher median wage of R29,373, with the lowest salary being R23,676.
- Area managers earn the highest median salary at R70,736, with the lowest salary in this role being R62,363.
- Planning and research roles also command a higher wage, with a median of R34,645 and the lowest salary at R31,184.
- Support staff earn a median of R17,245, with the lowest wage being R16,004.
- Senior managers have a median salary of R42,242, with the lowest salary being R41,801.
- In the “Other” category, the median wage is R35,276, with the lowest wage being R35,021.

This table shows a clear wage progression based on job type, with area managers and foresters earning significantly higher wages than entry-level workers. It highlights the pay disparity between lower-skilled roles, such as labourers and temporary/seasonal workers, and senior or specialized positions like foresters and area managers.

Table 31: Plantations: Median and Lowest Monthly Wages (2019:20)

Job Type	Median Monthly Wage (R)	Lowest Monthly Wage / Salary Rate (R)
Temporary / Seasonal workers*	4,465	4,324
Labourers	8,684	7,423
Supervisors, operators, drivers, etc	12,080	8,864
Foresters	29,373	23,676
Area Managers	70,736	62,363
Planning & Research	34,645	31,184
Support Staff	17,245	16,004
Senior Managers	42,242	41,801
Other	35,276	35,021

4.12.5 Jobs Created (2019/20)

The 2019/20 survey reported a total of 702 new jobs created within the Commercial Timber Plantation sector. These jobs were distributed across permanent, temporary, and casual employment categories, with:

- 34% of the jobs being permanent positions,
- 42% being temporary roles, and
- 24% being casual employment.

Table 32: Plantations: Jobs Created (2019:20)

Employment Type	Total New Jobs Created
Permanent	245
Temporary	292
Casual	165

4.13 Employee Health – Plantation Sector

4.13.1 Support for Employee Health and Wellness (2019/20)

The table below summarizes the health and wellness support provided to employees in the plantation sector, based on survey responses. It is important to note that this data predominantly reflects larger enterprises, as many smallholder and government-owned plantations did not respond to these specific questions.

Key findings include:

- 66% of employers have an HIV/AIDS policy in place.
- 53% provide HIV/AIDS awareness to their employees.
- 46% offer access to anti-retroviral therapy.
- 55% provide voluntary testing and counselling for HIV/AIDS.
- 51% distribute condoms to employees.

Additionally:

- 50% of employers offer wellness and nutrition programs.
- 79% had a COVID-19 policy in place during the 2019/20 period.

Table 33: Plantations: Support for Health and Wellness (2019/20)

	No. of Plantations Responding YES	% of Plantations Responding YES
Do you have a policy in place regarding HIV-AIDS?	61	66%
Do you provide employees HIV-AIDS education?	50	53%
Do you provide employees access to anti-retroviral therapy?	43	46%
Do you provide voluntary testing/counselling for HIV/AIDS?	52	55%
Do you distribute condoms to employees?	48	51%
Do you offer employees wellness/nutrition programming?	47	50%
Do you have a policy in place regarding COVID-19?	73	79%

This data underscores the emphasis placed on health and wellness in larger plantations, particularly in relation to HIV/AIDS and COVID-19 measures.

4.13.2 Man Days Lost due to covid-19 and hiv/aids (2019/20)

The 2019/20 surveys recorded significant man-days lost due to both COVID-19 and HIV/AIDS, impacting the productivity of the sector:

- A total of 15,150 man-days were lost due to COVID-19.
- A total of 18,800 man-days were lost due to HIV/AIDS.

4.14 Transformation

4.14.1 2019/20 Survey: Transformation Indicators (2019/20)

The 2019/20 survey marked the first effort to track key transformation indicators in line with the Forestry Master Plan. The data collected provides an initial baseline for evaluating ownership based on race and gender, establishing a foundation for ongoing monitoring and assessment in future reports. This baseline will help track progress toward achieving more inclusive ownership and equitable representation in the forestry sector over time.

4.14.2 Ownership by Race (2019/20)

Of the commercial timber plantations that participated in the survey:

- Nine plantations (24% of respondents) reported being 100% Black-owned.
- An additional five plantations indicated minority Black ownership.

In total, 37% of the respondents reported some level of Black ownership, with 24% being fully Black-owned.

4.14.3 Ownership by Gender (2019/20)

Ownership by gender:

- 51 plantations (88% of respondents) reported being 100% male-owned.
- Seven plantations (12% of respondents) reported being 100% female-owned.

No respondents indicated a split in ownership between genders, meaning all reported ownership was either fully male or fully female.

4.15 Competitiveness in the Commercial Timber Sector

4.15.1 2019/20 Survey: Competitiveness Indicators (2019/20)

The **2019/20 survey** was the first to track key indicators of **competitiveness** in alignment with the **Forestry Master Plan**. The data collected serves as a **baseline** for assessing industry competitiveness moving forward. Due to the low response rate for these specific questions, the findings are presented as **averages**, rather than as industry-wide totals.

4.15.2 Transport Costs and Volumes (2019/20)

The following table provides the average transport costs and volumes per plantation, by province, for the 2019/20 reporting period.

Table 34: Average transport costs and volumes by province (2019/20)

Transport	KZN	Mpumalanga	Limpopo	Eastern Cape	Western Cape
Average cost (Rand) of transporting timber by road	18,348,578	14,303,583	22,838,000	33,527,023	1,836
Average cost (Rand) of transporting timber by rail	15,471,201	8,648,325	NR	NR	NR
Average volumes (m3) of timber moved to processing plants by road	3,243,006	104,167	NR	13,495,129	72,910
Average volumes (m3) of timber moved to processing plants by rail	86,832	43,281	NR	NR	NR
Weighted average of lead distance travelled to deliver timber by road	141.9	89.7	NR	NR	129.5
Weighted average of lead distance travelled to deliver timber by rail	193.3	209.7	NR	NR	NR

**NR = No responses received*

***No responses were received from plantations in the North West province*

4.14.3. Amount Received at Processing Plants (2019/20)

The following table provides the average amount received per plantation at processing plants in 2019/20, for timber transported by road and rail.

Table 35: Weighted average amounts received at processing plants (2019/20)

Amounts Received from Processing Plants	KZN	Mpumalanga	Limpopo	Eastern Cape	Western Cape
Delivery by Road - weighted average received at processing plants (tons)	21,148,229	19,388,913	NR	18,355,128	17,026,371
Delivery by Rail - weighted average received at processing plants (tons)	16,754,534	8,648,325	NR	100,237,980	NR

**NR = No responses received*

***No responses were received from plantations in the North West province*

The following table provides the capital investment and assets reported by primary roundwood processors in the 2019/20 surveys.

Table 36: Capital investments and assets (2019/20)

Asset Category	Rand	% of Total
Land, Buildings and Housing	R2,680,528,861	15.3%
Machinery, Equipment and Furniture	R9,880,044,790	56.2%
Vehicles	R91,703,107	0.5%
Other	R4,902,750,680	27.9%
Total Fixed Assets	R17,555,027,438	

4.16 Plantations – Non-Forestry Sites and Activities

4.16.1 Significant Sites (2019/20)

A total of **363 significant sites** were reported by Commercial Timber Plantation companies for 2019/20, described as follows:

Table 37: Significant Sites on Forestry Land (2019/20)

Land Use	No of Burial Sites	No of Archaeological Sites	No of Recreational Sites	No of Special Conservation Sites
Plantation	1,411	58	17	52
Indigenous Forest	36	8	21	26
Open Areas	852	68	34	213
TOTALS	**2,299**	**134**	**72**	**291**

4.16.2 Non-Timber Forest Products and Activities (2019/20)

A total of 1,532 licences were reported issued by commercial timber plantations for non-timber forest use in 2019/20, worth a measured value of R156,004. The total area of Forestry Management Unit (FMU) accessible for non-forest use was 2,165 ha.

Table 38: Non-Timber Forest Products, Activities and Land Use (2019/20)

Non-Timber Forest Products & Activities	Number of Permits/Licenses Distributed	Value Extracted (Rands)	Area of FMU Currently Accessible to User Groups (ha)
Firewood	1,040	21,600	1,000
Honey	14	-	-
Thatch	16	-	-
Grass for grazing	27	13,920	200
Wood for carving	-	-	-
Fruits	-	-	-
Medicinal plants	31	-	65
Fence posts	85	-	-
Recreational activities	-	120,484	500
Fishing/Hunting	63	-	-
Tourist accommodation	100	-	-
Hiking, horse riding and bike trails	38	-	200
Other	118	-	200
TOTALS	**1 532**	**156,004**	**2,165**

**Respondents were also asked to report on the number of initiatives and area available to produce alternative resources, however, no respondents answered this question.*

4.17 Environmental Impact on Timber Plantations

4.17.1 Average Annual Rainfall (2019/20)

Based on responses from **67 commercial timber plantations**, the **average annual rainfall** was reported at **920 mm**. Notably, **14 plantations** reported an average rainfall of less than **750 mm per year**, which is below the minimum generally required to sustain commercial forestry operations.

4.17.2 Use of Chemicals and Pesticides (2019/20)

A total of **14 commercial timber plantation companies**, managing **51 unique plantations**, reported the use of **chemicals and pesticides**. This highlights the reliance on chemical treatments to manage pests and ensure the health of the plantations.

4.17.3 Fires, Pests, and Other Environmental Disturbances (2019/20)

Environmental disturbances continue to pose significant challenges to commercial timber plantations:

- **Pests and diseases** impacted **17.1%** of plantations.
- **Extreme weather events** affected **21.6%** of plantations.

In total, **19,050 hectares** of plantations were damaged due to **fires**, **extreme weather**, **diseases**, and **pests**. The breakdown of the damage shows that:

- **39%** of the damage occurred in **softwood plantations**.
- **61%** of the damage occurred in **hardwood plantations**.

This represents an 11.3% increase in damage compared to the previous reporting period, underlining the growing threats to the sector.

4.17.4 Impact of Fires, Extreme Weather, and Pests 2019/20)

Table 39: Impact of fire, extreme weather, pests and theft (2019/20)

Impact Caused by:	Softwood (ha)	Hardwood (ha)	Indigenous Forest (ha)	Total Damage (ha)
Fire	5,424	5,250	-	10,674
Extreme Weather (ha)	1,390	3,917	-	5,304
Insects (ha)	7	1,642	-	1,649
Diseases (ha)	12	186	-	198
Animals and Rodents (ha)	667	558	-	1,225
Total	**7,500**	**11,553**	**-**	**19,050**

4.17.5 Fire Incidents (2019/20)

In total, **40.9%** of respondents reported **1,527 fires** on their plantations during the 2019/20 period, impacting a total of **10,674 hectares**. Of the affected areas:

- **58%** of the damage was in **hardwood plantations**.
- **42%** of the damage was in **softwood plantations**.

4.17.6 Causes of Plantation Fires (2019/20)

Most respondents (**84%**) either did not know or did not report the cause of the fires, reflecting the complexity of fire management and the difficulties in tracking and preventing such incidents within the forestry sector.

Table 40: Causes of plantation fires, if known (2019/20)

Causes of Fires	Natural Causes	Accidental	Arson	Not Known	Not Answered
Number of Fires Reported	89	243	231	461	826

4.17.7 Estimated Cost (2019/20)

Survey respondents reported a total estimated cost of R180.4 million because of disturbances in 2019/20. These disturbances included fires, extreme weather, insects, diseases, animals/rodents, and alien species. This data was not available for the previous year (2018/19).

Table 41: Total costs as a result of plantation disturbances (2019/20)

Disturbance Type	Total Expenditure (R)
Fire	178,770,681
Weather	1,358,200
Insects	64,000
Diseases	66,000
Animals/Rodents	97,120
Alien Species	4,000
Total	**180,360,001**

4.17.8 Conclusion

The **2019/20 survey** results highlight the growing risks posed by **environmental disturbances**, particularly **fires** and **extreme weather events**. The sector has experienced an increase in damage to both **softwood** and **hardwood** plantations, indicating a need for improved **risk management strategies** to safeguard South Africa’s timber plantations in the face of these challenges

4.18 Theft and its Impact on the Timber Sector

Of the survey respondents, 40.9% reported losses due to timber theft (compared to 14% reported through Stats SA for the same period). The amount of timber reported stolen (1,441 m^3) and associated cost (R113,502), is however low relative to the proportion of businesses reporting theft. It is thus assumed that not all businesses retained/ reported information on the extent of their losses.

4.19 Community and Socio-Economic Investments

4.19.1 Community Infrastructure Projects (2019/20)

A total of 139 community infrastructure projects were reported by enterprises in the Commercial Timber Plantation sector, with 87 new projects launched during the 2019/20 period and 52 projects carried over from previous reporting periods. These initiatives focused on five primary categories: health care, food security, schooling, housing, and water and sanitation

These community projects reflect the investment value and impact of the sector, with significant resources directed toward critical areas such as education and food security, which together account for a major portion of both funding and beneficiaries.

Table 42: Investment in Community Infrastructure Projects (2019/20)

Focus Area	No of Projects Started (2019/20)	No of projects carried over from previous years	Investment Value (Rands)	Number of Beneficiaries
Health Care	4	3	20,055	1,283
Food Security	17	18	956,911	4,920
Schooling	31	12	2,466,609	7,179
Housing	9	11	387,582	1,852
Water & Sanitation	15	4	247,079	1,695
Other	11	4	131,606	6,232
TOTALS	**87**	**52**	**4,209,842**	**23,161**

4.19.2 Support for Local Businesses (2019/20)

In addition to infrastructure projects of the companies responded, a total of 31 initiatives supporting local businesses were reported during the 2019/20 period. These initiatives benefited 780 Previously Disadvantaged Individuals (PDIs) and focused on enhancing local business opportunities through:

- Contract opportunities for local SMMEs in harvesting, silviculture, timber collection, road maintenance, transport, and wash bays.
- Donations of animal feed (cane tops) to support local farmers.
- Support for small-scale farming projects, including avocado and groundnut production.
- Donation of cleaning materials and masks as part of COVID-19 prevention efforts.

These initiatives demonstrate the sector's commitment to promoting local economic development, particularly in supporting small and emerging businesses within the broader forestry value chain.

4.20 Timber Markets and Sales

4.20.1 Timber Sales (2019/20)

A total value of **R5,209.5 million** in timber sales was reported for the **2019/20** period. The majority of sales were dominated by **eucalyptus** (**44.3%**) and **pine** (**39.2%**).

- **Eucalyptus** is primarily sold for use in **pulpwood** and **mining timber**.
- **Pine** is sold for use in both **sawlogs** and **pulpwood**.

These two species represent the backbone of the timber market, reflecting their versatile applications across multiple industries.

Table 43: Summary of timber sales by product and value

Type of Product	R Value (millions)	% Contribution
Pine	2,042	39.2%
Eucalyptus	2,306	44.3%
Wattle	507.5	9.7%
Other (Poplar, etc)	354	6.8%
TOTAL	**5,209.5**	**100%**

4.20.2 Roundwood Sales by Product (2019/20)

The following table provides a more detailed assessment of **roundwood sales by product** for the **2019/20** reporting period, based on the survey data. It highlights the **purpose** for which each type of roundwood is sold, along with the **associated volume** and **value** for each category.

Note that not all businesses reported this information, and some responses were incomplete.

Table 44: Timber sales by product and purpose

Type of Product	Tons (2019/20)	R million (2019/20)
Pine		
Saw logs	1,737,939	R1,277,249
Pulpwood	695,767.5	R586,763
Other	-	R178,028
Total Pine	**2,433,706.5**	**R2,042,039**
Eucalyptus		
Saw logs	316,366	R201,713
Pulpwood	2,967,179	R1,823,308
Other	-	R130,871
Total Eucalyptus	**3,283,545**	**R2,155,891**
Wattle		
Pulpwood	401 594,5	R353,173
Other uses	-	R154,541
Total Wattle	**401 594,5**	**R507,713**
Other Wood	-	R353,960
TOTAL (all sales)	**6,118,846**	

4.20.3 Comparison of Reported Sales of Tonnage (2019/20)

The total tonnage of sales reported by survey respondents for the **2019/20** period is significantly lower than the sales reported by **Forestry South Africa (Forestry SA)** for 2020. According to **Forestry SA,** the total tonnage of sales recorded by their members was **11,639,000 tons**, compared to the **6,118,846 tons** reported through the surveys.

This discrepancy is largely attributed to the **lack of response** from some survey participants, resulting in incomplete data.

It is important to note that both the survey data and Forestry SA figures reflect the continuation of a downward trend observed over the last six years. For Forestry SA, the 2020 sales figures were the lowest on record since the organization was established in 2002, representing a 14.6% decrease from the 2019 total of 13,625,000 tons.

This decline is predominantly attributed to the impact of COVID-19 and the resulting restrictions on trade, which significantly affected the forestry sector.

5. PRIMARY ROUNDWOOD PROCESSORS

5.1 General Company Information

The following data provides an overview of the company size for Primary Roundwood Processors who responded to the 2019/20 survey. This information reflects responses from private sector companies only.

5.1.1 Company Size (2019/20)

Survey results provide insights into the company size of Primary Roundwood Processors in the private sector. Of the 20 processors who responded to this question:

- 12 processors (60%) are classified as large enterprises, employing more than 205 employees.
- Three (3) processors are medium-sized enterprises, with between 30 and 250 employees.
- Four (4) processors are small enterprises, employing 10 to 49 employees.
- One (1) processor is a micro-enterprise, with fewer than 10 employees.

Table 45: Company size by number of employees (2019/20)

Company Size	No. of Companies at this Size	% of Companies at this Size
Micro Enterprise (<10 employees)	1	5%
Small Enterprise (10-49 employees)	4	20%
Medium Enterprise (30-250 employees)	3	15%
Large Enterprise (more than 250 employees)	12	60%

5.1.2 B-BBEE Status (2019/20)

Out of the 22 companies that reported their B-BBEE status in the 2019/20 survey:

- Five (5) companies achieved Level 1 status.
- Eight (8) companies were classified between Levels 2 and 7.
- Three (3) companies were either non-compliant or reported a zero score

Table 46: Plantations (Companies): B-BBEE Status (2019/20)

B-BEE Status	No. of Companies with this status	% of Companies with this Status
Level 1	5	23%
Level 2	0	0%
Level 3	4	18%
Level 4	1	5%
Level 5	0	0%
Level 6	0	0%
Level 7	0	0%
Level 8	3	14%
Non-Compliant or 0 Score	3	14%
No Score/ Not Applicable	6	28%

**Percentages are rounded off and therefore do not add to 100%*

5.2 Capital Investment

The following table provides the capital investment and assets reported by Primary Roundwood Processors in the 2019/20 surveys. A total of 3,047 billion was reported for 2019/20. This value should be viewed as an under-estimate, as not all companies responded to the survey.

Table 47: Capital investment (2019/20)

Total Capital Investment	R3 047 958 566
Additional Investment in R&D	R27 100 000
Additional Investment in Renewables	R3 000 000

5.3 Operational Expenditure and Taxes

The following tables summarize the tax reported by Primary Roundwood Processors in the 2019/20 surveys. The total tax burden reported across all categories amounted to R267 million.

Please note that only 44% of survey respondents answered these questions, and not all companies participated, meaning the data does not fully represent the entire sector.

5.3.1 Taxes Paid (2019/20)

Tax	Tax Burden (R)
Skills Levy	13,132,455
Regional Council-Levy	4,931,935
Water Levy	466,758
Income Tax	157,136,146
VAT	91,449,867
Total	**267,117,161**

5.3.2 Costs due to Load Shedding (2019/20)

Primary Roundwood Processors reported an additional R3,336,437 in costs directly attributed to load shedding during the 2019/20 reporting period.

5.4 Roundwood Intake

The following two tables provide roundwood intake numbers obtained from Primary Roundwood Processing surveys.

5.4.1 Roundwood Intake by Primary Processors: Quantity (2019/20)

The following table provides roundwood intake by volume in 2019/20, for the different types of roundwood processed.

Table 48: Roundwood intake by volume (2019/20)

Purpose	2020	2019
Sawlogs and Veneer Logs	1,523,782 m³	4,955,110 m³
Poles	72,899 m³	359,680 m³
Mining Timber	136,893 m³	348,159 tons
Pulpwood	5,216,750 tons	8,437,390 tons
Charcoal & Firewood	120 000 tons estimated Sawmilling SA	175,775 tons
Other	186,976 tons	67,759 tons

6.4.2. Roundwood Intake by Primary Processors: Rand Value (2019/20)

The following table provides roundwood intake by Rand Value in 2019/20 for the different types of roundwood processed. A total value of R5,787 million in-take of roundwood products was reported in 2019/20.

Table 49: Roundwood intake by value (2019/20)

Product	Private Sector
Sawlogs and Veneer logs	R 1 282 539 427
Wooden Poles	R 54 923 197
Mining Timber	R 117 155 806
Woodchips	R 45 894 391
Pulpwood	R 4 287 055380
Matchwood	
Roundwood for Charcoal	-
Total	**R 5 787 568 201**

5.5 Roundwood Markets & Sales

The following table details the Rand value of the various roundwood products sold during the reporting period, reported through the Primary Roundwood Processors survey.

5.5.1 Roundwood Sales by Product and Market: Rand Value (2019/20)

Roundwood product sales to the value of R19,18 billion were reported for 2019/20. The greatest value of sales is in the wood-pulp, paper and paper products industry at R16,17 billion**.**

Table 50: Roundwood sales by product and market (2019/20)

Product	Rand Value			
	Local	Export	Not Specified	Total
Sawn and Planed Timber	R2,295,146,533	R48,038,882	R41,967,237	R2,385,152,652
Wooden Poles	R138,246,967	R5,244,866	R44,257,080	R187,748,913
Mining Timber	R6,823,328	-	R166,711,258	R173,534,586
Wood-Based Panel Products	-	-	-	-
Wood-pulp, Paper and Paper Products	R6,593,183,141	R9,572,304,000	R2,027,236	R16,167,514,377
Firewood	R66,270	-	-	R66,270
Wood Chips	R39,507,688	-	R31,241,652	R70,749,340
Mill Residues	R22,143,824	-	-	R22,143,824
Charcoal	R30,000,000	R70,000,000	-	R100,000,000
Other	R82,480,054	-	-	R82,480,054
TOTAL	**R9,207,597,805**	**R9,695,587,748**	**R286,204,463**	**R19,189,390,016**

5.5.2 Comparison of Roundwood Sales (2019/20)

Roundwood product sales to the value of R19,189,390,016 were made during the reporting period. Comparatively, the desktop review has noted a higher figure of R24,933,700,922. This discrepancy, shown in the table below, is attributed to the various reporting challenges noted earlier in the report. Further comparisons are noted in the table below:

Table 51: Roundwood sales by product, SARS vs Survey Results (2019/20)

Product	2019/20 Rand Value (SARS)	2019/20 Rand Value (Survey execution)
Total	R24,933,700,922	R19,189,309,016
Sawmilling and Planing	R1,450,753,475	R2,385,152,652
Paper and Paper Products	R7,839,037,800	R16,167,514,377
Other	**R15,643,909,647**	**R636,641,987**

5.6 Employment and Income in the Primary Roundwood Processing Sector

The Primary Roundwood Processing surveys requested detailed data on employment and wages, by job type and population group. However, less than 25% of respondents provided this data. Income and employment figures are therefore presented as averages, rather than industry totals. Employment and salary data was not provided for government-owned plantations.

5.6.1 Employment of Locals (2019/20)

Survey respondents indicated that 92% of their employees are local, residing within the same municipality as their place of work (processing plant, sawmill, etc).

5.6.2 Employment by Population Group (2019/20)

The survey data presents the breakdown of employment in the Primary Roundwood Processing by population group for various job roles. It indicates that:

- Temporary and seasonal workers are predominantly Black, comprising 84% of the workforce in this category, with smaller proportions of White (3%), Coloured (8%), and Indian/Asian (4%) workers.
- Labourers in the industry are similarly dominated by Black employees (93%), with Coloured workers making up 5% and Indian/Asian workers at 2%, while no white labourers were reported.
- In roles such as supervisors, operators, and drivers, the majority are Black workers (87%), followed by Coloured (9%), Indian/Asian (3%), and White workers (1%).
- In planning and research, the majority are Black workers (78%), followed by White workers (12%), Indian/Asian workers (8%), and Coloured workers (2%).
- Support staff is largely composed of Black workers (84%), followed by Coloured workers (11%), White (3%) and Indian/Asian (3%).
- In senior management, White employees account for 60% of the workforce, Black workers 23%, Coloured (9%) and Indian/Asian (9%).

The following table indicates a high representation of Black workers across the different job types, except for in senior management roles, which show a greater proportion of White employees. The Coloured and Indian/Asian population groups are represented across all job categories.

Table 52: Processors: Employment by population group (2019:20)

Job Type	White (%)	Black (%)	Coloured (%)	Indian/ Asian (%)
Temporary workers	3%	84%	8%	4%
Labourers	0%	93%	5%	2%
Supervisors, operators, drivers, etc	1%	87%	9%	3%
Planning & Research	12%	78%	2%	8%
Support Staff	3%	84%	11%	3%
Senior Managers	60%	23%	9%	9%

5.6.3 Women and People with Disabilities

The following table outlines the percentage of women and people with disabilities employed in various roles within the Roundwood Processing Sector. Key observations include:

- The highest proportion of women employees is found in the labourer (37%), and planning and research (37%) categories.
- Among temporary workers, 31% are women.
- In the supervisors, operators, and drivers category, only 1% are women.
- At the senior management level, only 7% of the workforce are women.
- No companies reported employing people with disabilities.

This table highlights a gender disparity across all roles, but especially within Senior Management and the supervisors, operators and drivers category, with no representation by people with disabilities.

Table 53: Processors: Employment of Women and People with Disabilities (2019/20)

Job Type	Women (%)	People with Disabilities (%)
Temporary workers	31%	0%
Labourers	37%	0%
Supervisors, operators, drivers, etc	17%	0%
Planning & Research	37%	0%
Support Staff	43%	0%
Senior Managers	7%	0%

5.6.4 Salaries (2019/20)

The following table presents the median monthly wages and the lowest monthly wage/salary rates across different job types within the sector. Key insights include:

- Temporary/Seasonal workers have the lowest median wage at R7,239, with the lowest reported wage being R5,555. These workers represent the entry-level pay scale in the sector.
- Labourers earn a median monthly wage of R21,898, with the lowest salary being R5,512.
- Supervisors, operators, and drivers earn a median wage of R23,612, with the lowest being R8,546.
- Planning and research roles also command a higher wage, with a median of R28,458 and the lowest salary at R12,792.
- Support staff earn a median salary of 20,992, with the lowest wage being R10,279.
- Senior managers have a median salary of R63,593, with the lowest salary being R50,576.

This table shows a clear wage progression based on job type, with senior managers earning significantly higher wages than all other level of workers, while temporary workers earn significantly lower than all other categories.

Table 54: Processors: Median and Lowest Monthly Wage (2019/20)

Job Type	Median Monthly Wage (R)	Lowest Monthly Wage / Salary Rate (R)
Temporary workers	7,239	5,555
Labourers	21,898	5,512
Supervisors, operators, drivers, etc	23,612	8,546
Planning & Research	28,458	12,792
Support Staff	20,992	10,279
Senior Managers	63,593	50,576

5.6.5 Jobs Created (2019/20

The 2019/20 survey reported a total of 1,058 jobs created within the Primary Roundwood Processing sector. These jobs were distributed across permanent, temporary, and other (not-specified) employment categories:

- 57% of the jobs were permanent positions,
- 33% were temporary roles, and
- 10% were classified as other (not-specified) employment.

Table 55: Processors: Jobs Created (2019/20)

Employment Type	Total New Jobs Created
Permanent	605
Temporary	344
Other (not specified)	109
Casual	1,058

5.7 Employee Health – Processing Sector

5.7.1 Support for Employee Health and Wellness (2019/20)

The table below provides an overview of the health and wellness support offered to employees in the Primary Roundwood Processing sector for the 2019/20 reporting period. This data reflects responses from companies that participated in the survey, excluding most small-holder and government-owned plantations.

Key findings include:

- 33% of employers have an HIV/AIDS policy in place.
- 31% provide employees with HIV/AIDS education.
- 23% offer employees access to anti-retroviral therapy.
- 35% provide voluntary testing and counselling for HIV/AIDS.
- 27% of employers distribute condoms to their employees.

Additionally:

- 35% of employers provide nutrition and wellness programming.
- 42% had a COVID-19 policy in place during the 2019/20 period.

Table 56: Plantations: Support for Health & Wellness

	No. of Plantations Responding YES	% of Plantations Responding YES
Do you have a policy in place regarding HIV-AIDS?	10	38%
Do you provide employees HIV-AIDS education?	8	31%
Do you provide employees access to anti-retroviral therapy?	6	23%
Do you provide voluntary testing/counselling for HIV/AIDS?	9	35%
Do you distribute condoms to employees?	7	27%
Do you offer employees wellness/nutrition programming?	9	35%
Do you have a policy in place regarding COVID-19?	11	42%

5.7.2 Man Days Lost due to COVID-19 and HIV/AIDS (2019/20)

The 2019/20 surveys recorded significant man-day losses in the Primary Roundwood Processing sector:

- 6,968 man-days were reported lost due to COVID-19.
- 41,110 man-days were reported lost due to HIV/AIDS.

Several processors who responded to the surveys indicated that they experienced man-day losses due to absenteeism and COVID-19, but they were unable to provide exact figures for the total losses.

6. CONCLUSION

The 2019/20 Annual Forestry Report reinforces the strategic importance of South Africa›s forestry sector in promoting economic growth, job creation, and environmental sustainability. Despite demonstrating resilience in the face of significant challenges—such as climate change, wildfires, pests, and economic pressures—the sector still faces critical issues that require attention. A notable concern is the decline in the total area of commercial plantations, particularly among small and medium-sized growers, which underscores ongoing challenges with afforestation and underreporting.

However, the sector has made progress in several key areas. Investments, job creation, and inclusivity efforts, as outlined in the Forestry Master Plan, are beginning to materialize. The plan's emphasis on increasing participation of black-owned businesses, promoting transformation, and delivering broader community benefits is becoming more apparent. Still, the decline in plantation areas and gaps in data accuracy highlight the urgent need for improved and more comprehensive data collection processes to fully understand the sector's contributions and challenges.

Going forward, the forestry sector must prioritize long-term sustainability through continued innovation in plantation management, enhanced stakeholder collaboration, and deeper community involvement. Emphasis on building climate resilience, implementing better risk management strategies, and accelerating afforestation initiatives will be critical to mitigating environmental impacts and ensuring the sustained growth and transformation of South Africa›s forestry resources.

As the sector navigates these challenges and opportunities, the ongoing commitment to transformation, inclusivity, and sustainable practices will play a central role in shaping its future, ensuring that it continues to contribute meaningfully to the country's economic and environmental goals.

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