Presentation Outline

• Introduction
• The importance of the Forestry Industry
• The importance of the Forest Products Industry
• Industry Contribution to Employment
• Investment
• Industry Contribution to GDP
• Industry Contribution to Foreign Trade
Section 1

INTRODUCTION
Forest Sector Value-Chain

Primary
- Forestry
  - Pulp mills
  - Board mills
  - Sawmills
  - Mining Timber mills
  - Pole Plants
  - Other Processing Plants

Secondary
- Pulp mills
- Board mills
- Sawmills
- Mining Timber mills
- Pole Plants
- Other Processing Plants

Tertiary
- Pulp, Paper & Recycling
- Boards
- Lumber
- Mng. Tim.
- Poles
- Charcoal
- Matches
- Tannin

Processing Plants
- Printing, Packaging & Publishing
- Construction
- Many Other
- Furniture
- Construction
- Trusses
- Cable drums
- Pallets
- Windows
- Doors Etc.

Forestry South Africa
Land Use in South Africa

- Grazing: 68.6%
- Arable: 13.9%
- Nature Conservation: 9.6%
- Other: 6.9%
- Forestry: 1.0%

Total RSA land area: 122.3 million ha

1 212 383 ha
Land Use in Mpumalanga

Total MP land area 8.2 million ha (6.0% of total)

- Grazing: 28.5%
- Arable: 21.9%
- Nature Conservation: 3.9%
- Other: 3.9%
- Forestry: 6.0%

Total MP land area 8.2 million ha (6.0% of total)
Land Use in KwaZulu Natal

- Grazing: 58.3%
- Arable: 12.9%
- Nature Conservation: 15.1%
- Other: 8.5%
- Forestry: 5.3%

Total KZN land area: 9.1 million ha (5.3% of total)

484 296 ha
Land Use in the Eastern Cape

Total E. Cape land area
17.1 million ha
(0.7% of total)

80.0%

Grazing
Arable
Nature Conservation
Other
Forestry

141 812 ha
Land Use in the Western Cape

Total W. Cape land area
12.9 million ha (0.3% of total)

- Grazing: 70.3%
- Arable: 20.2%
- Nature Conservation: 5.6%
- Other: 3.5%
- Forestry: 0.3%

Total land area: 43,146 ha
Land Use in Limpopo

- Grazing: 74.0%
- Arable: 14.4%
- Nature Conservation: 9.7%
- Other: 1.5%
- Forestry: 0.4%

Total Limpopo land area: 12.0 million ha (0.4% of total)

49,126 ha
Plantation area as % of land area by province

- Mpumalanga: 6.00%
- KZN: 5.30%
- E.Cape: 0.83%
- Limpopo: 0.41%
- W. Cape: 0.33%
Land Use Comparisons: 2008, 2013 & 2018

Drop in forestry area: 54 000 ha (-4.3%)
Plantation Area Comparisons 2018

<table>
<thead>
<tr>
<th>Country</th>
<th>Million Hectares</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>67.430</td>
</tr>
<tr>
<td>USA</td>
<td>26.364</td>
</tr>
<tr>
<td>Russia</td>
<td>19.841</td>
</tr>
<tr>
<td>India</td>
<td>12.031</td>
</tr>
<tr>
<td>Japan</td>
<td>10.270</td>
</tr>
<tr>
<td>Brazil</td>
<td>7.740</td>
</tr>
<tr>
<td>Indonesia</td>
<td>4.946</td>
</tr>
<tr>
<td>Chile</td>
<td>2.900</td>
</tr>
<tr>
<td>Australia</td>
<td>1.975</td>
</tr>
<tr>
<td>New Zealand</td>
<td>1.732</td>
</tr>
<tr>
<td>RSA</td>
<td>1.221</td>
</tr>
</tbody>
</table>
Section 2

THE FORESTRY INDUSTRY
Plantation Area by Species 2018

- Pine: 49.6%
- Eucalyptus: 43.0%
- Wattle: 7.0%
- Other: 0.4%

Total: 1,212,383 ha
Plantation Area by Ownership 2018

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate</td>
<td>50.5%</td>
</tr>
<tr>
<td>Commercial Farmers</td>
<td>16.1%</td>
</tr>
<tr>
<td>Corporate (Ex Safcol)</td>
<td>11.8%</td>
</tr>
<tr>
<td>SAFCOL</td>
<td>10.5%</td>
</tr>
<tr>
<td>State/ Municipalities</td>
<td>7.3%</td>
</tr>
<tr>
<td>Small Growers</td>
<td>3.7%</td>
</tr>
</tbody>
</table>

Total - 1 212 6 ha

FORESTRY SOUTH AFRICA
Plantation Area by Province 2018

Total – 1 212 383 ha
Plantation Area by Province and Genera 2018

Total – 601 176 ha (softwood); Total – 611 209 ha (hardwood)
Plantation Area by Province and Genera 2018

**Total** – 601 176 ha (softwood); **Total** – 611 209 ha (hardwood)
Pine Plantation Area by Province 2018

Total 601,176 ha
(49.6% of total)
Eucalyptus Plantation Area by Province 2018

- **Mpumalanga**: 57.8%
- **KZN**: 34.0%
- **E Cape**: 4.2%
- **W Cape**: 3.8%
- **Limpopo**: 0.2%

Total 521 718 ha (43.0% of total)
Wattle Plantation Area by Province 2018

Total 85,079 ha (7.0% of total)
Other Hardwood Plantation Area by Province 2018

Total 4 410 ha (0.4% of total)

- Mpumalanga: 58.7%
- KZN: 24.1%
- E Cape: 11.4%
- W Cape: 3.6%
- Limpopo: 2.2%
Plantation Area by Management Objectives
2018

- Pulpwood: 56.6%
- Sawlogs: 37.7%
- Mining Timber: 2.3%
- Poles: 2.6%
- Other: 0.8%

Total – 1 212 383ha
Softwood Plantation Area by Management Objectives 2018

Total – 601 176 ha

- Pulpwood: 24.9%
- Poles: 0.0%
- Sawlogs: 74.6%
- Other: 0.4%
Hardwood Plantation Area by Management Objectives 2018

Total – 611 207 ha
Plantation Area by Province and Ownership 2018

<table>
<thead>
<tr>
<th>Province</th>
<th>Hectares</th>
<th>Private</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mpumalanga</td>
<td>132,143</td>
<td>361,861</td>
<td>452,840</td>
</tr>
<tr>
<td>KZN</td>
<td>114,336</td>
<td>452,840</td>
<td>500,000</td>
</tr>
<tr>
<td>E.Cape</td>
<td>27,476</td>
<td>25,124</td>
<td>52,600</td>
</tr>
<tr>
<td>Limpopo</td>
<td>42,565</td>
<td>24,002</td>
<td>66,567</td>
</tr>
<tr>
<td>W. Cape</td>
<td>581</td>
<td>0</td>
<td>581</td>
</tr>
</tbody>
</table>

Leased Safcol packages included in “Private”
KLF included in “Public”

Total Private – 996,726 ha (82.2%)
Total Public – 215,657 ha (17.8%)
Percentage Plantation Ownership by Province 2018

- **Limpopo**: 51%
- **Mpumalanga**: 73%
- **E.Cape**: 81%
- **KZN**: 94%
- **W. Cape**: 99%

**Total Private**: 996,726 ha (82.2%)
**Total Public**: 215,657 ha (17.8%)
Plantation Area by Species and Ownership 2018

Total Private – 996 726 ha (82.2%)
Total Public – 215 657 ha (17.8%)
Percentage Plantation Ownership by Species 2018

<table>
<thead>
<tr>
<th>Species</th>
<th>Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pine</td>
<td>73%</td>
<td>27%</td>
</tr>
<tr>
<td>Other Hard.</td>
<td>81%</td>
<td>19%</td>
</tr>
<tr>
<td>Eucalyptus</td>
<td>90%</td>
<td>10%</td>
</tr>
<tr>
<td>Wattle</td>
<td>95%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Total Private – 996 726 ha (82.2%)
Total Public – 215 657 ha (17.8%)
Roundwood Production by Product 2018

- **Pulpwood**: 12.464 million m³
- **Sawlogs**: 4.702 million m³
- **Mining Timber**: 0.421 million m³
- **Other**: 0.375 million m³
- **Poles**: 0.370 million m³

Total – 6.8 million m³ / 7.1 mt (softwood)
Total – 11.5 million m³ / 8.5 mt (hardwood)
Roundwood Production by Province and Genera 2018

<table>
<thead>
<tr>
<th>Province</th>
<th>Hardwood</th>
<th>Softwood</th>
</tr>
</thead>
<tbody>
<tr>
<td>KZN</td>
<td>1.628</td>
<td>1.661</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>3.028</td>
<td>3.017</td>
</tr>
<tr>
<td>E. Cape</td>
<td>0.246</td>
<td>1.661</td>
</tr>
<tr>
<td>Limpopo</td>
<td>0.259</td>
<td>0.282</td>
</tr>
<tr>
<td>W. Cape</td>
<td>0.000</td>
<td>0.248</td>
</tr>
</tbody>
</table>

Million m3

Total – 6.8 million m³ / 7.1 mt (softwood)
Total – 11.5 million m³ / 8.5 mt (hardwood)
Roundwood Production by Province and Genera 2018

- **KZN**: 9.950 million m³ (7.1 mt)
  - Softwood: 0.248 million m³
  - Hardwood: 9.702 million m³
- **Mpumalanga**: 6.045 million m³
  - Softwood: 1.907 million m³
  - Hardwood: 4.138 million m³
- **E. Cape**: 1.907 million m³
  - Softwood: 0.541 million m³
  - Hardwood: 1.366 million m³
- **Limpopo**: 0.541 million m³
  - Softwood: 0.248 million m³
  - Hardwood: 0.293 million m³
- **W. Cape**: 0.248 million m³
  - Softwood: 0.248 million m³
  - Hardwood: 0.000 million m³

**Total**:
- **Softwood**: 6.8 million m³ / 7.1 mt
- **Hardwood**: 11.5 million m³ / 8.5 mt
Roundwood Production ex Plantations by Province & Product 2018

Total – 18.3 million m3 or 15.7 million tons
Roundwood Production ex Plantations by Province & Product 2018

Total – 18.3 million m3 or 15.7 million tons
Total Roundwood Production ex Plantations by Province 2018

KZN: 52.3%
Mpumalanga: 33.0%
E. Cape: 10.4%
Limpopo: 3.0%
W. Cape: 1.4%

Total – 18.3 million m³ or 15.7 million tons
Total Roundwood Production ex Plantations by Product 2018

- Pulpwood: 68.0%
- Sawlogs: 25.7%
- Mining Timber: 2.3%
- Poles: 2.0%
- Other: 2.0%

Total – 18.3 million m³ or 15.7 million tons
Hardwood Plantation Area by Management Objectives 2018

Total – 611 207 ha
Softwood Roundwood Production ex Plantations by Product 2018

- Sawlogs: 68.1%
- Pulpwood: 29.8%
- Poles: 0.9%
- Other: 1.2%

Total - 6.8 million m3 or 7.1 million tons
Hardwood Roundwood Production ex Plantations by Product 2018

Pulpwood - 90.7%
Mining Timber - 3.7%
Poles - 2.7%
Sawlogs - 0.4%
Other - 2.5%

Total - 11.5 million m3 or 8.5 million tons
Total Roundwood Production ex Plantations by Species 2018

- Pine: 54.8%
- Eucalyptus: 37.3%
- Wattle: 7.6%
- Other: 0.3%

Total - 18.3 million m³ or 15.7 million tons
Composition of Roundwood Production by Product 2018

Overall: Softwood = 37% & Hardwood = 63%
Total Plantation Area 1980 to 2018

- Total increase in planted area over period: 50,976 ha (4.4%)
- 305,755 ha decrease = -20.1%
Total Roundwood Production ex Plantations
1980 to 2018

Total increase in production over period: 54.3%
Total increase in afforested area over period: 4.4%
Index of Roundwood Production vs. Plantation Area 1980 to 2018

Total increase in production over period: 54.3%
Total increase in afforested area over period: 4.4%
Average Productivity per Hectare
1980 - 2018

Total increase in productivity over period: 4.9 m$^3$ per ha p.a. (48%)
### Production Comparisons
#### 2008, 2013 & 2018

<table>
<thead>
<tr>
<th>Product</th>
<th>2017</th>
<th>2012</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sugar</td>
<td>15.074</td>
<td>16.800</td>
<td>20.278</td>
</tr>
<tr>
<td>Forestry</td>
<td>15.666</td>
<td>15.819</td>
<td>17.756</td>
</tr>
<tr>
<td>Maize</td>
<td>17.551</td>
<td>17.551</td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td>1.532</td>
<td>1.878</td>
<td>1.913</td>
</tr>
</tbody>
</table>
Value of Roundwood Production 2018

Total: R10.1 billion
(R1.1bn more than 2016)

Pulpwood: 68.6%
Mining Timber: 2.2%
Other: 3.7%
Sawlogs: 25.6%
Value of Roundwood Production ex Plantations by Product 2018

- Pulpwood: R6.930 billion
- Sawlogs: R2.583 billion
- Poles: R0.288 billion
- Mining Timber: R0.218 billion
- Other: R0.083 billion

Total – R10 102 million
Value of Roundwood Production ex Plantations by Province 2018

- **KZN**: 5,309 million Rands
- **Mupumlanga**: 3,328 million Rands
- **Eastern Cape**: 1,044 million Rands
- **Limpopo**: 285 million Rands
- **Western Cape**: 136 million Rands

Total: R10.102 million
Value of Roundwood Production ex Plantations by Province & Product 2018

Total – R10 102 million
Value of Roundwood Production ex Plantations by Province & Product 2018

KZN:
- Other: 0
- Sawlogs: 1044
- Pulpwood: 5309

Mupumlanga:
- Other: 285
- Sawlogs: 3328
- Pulpwood: 0

Eastern Cape:
- Other: 136
- Sawlogs: 0
- Pulpwood: 1044

Limpopo:
- Other: 0
- Sawlogs: 0
- Pulpwood: 285

Western Cape:
- Other: 0
- Sawlogs: 0
- Pulpwood: 136

Total – R10 102 million
Value of Roundwood Production
1980 to 2018

Nominal increase over period: R9.9 bn (6 034%)
Real increase over period: R5.9 bn (139%)
New afforestation over period: 390 912 ha
Average per year: 10 565 ha
Total New Afforestation by Region
1980 to 2018

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>KZN</td>
<td>54.5%</td>
</tr>
<tr>
<td>Mpumalanga &amp; Limpopo</td>
<td>33.6%</td>
</tr>
<tr>
<td>E&amp;W Cape</td>
<td>11.9%</td>
</tr>
</tbody>
</table>

Total – 392 711 ha
Total New Afforestation by Region
10 Yr Period - 2009 to 2018

- KZN: 72.7%
- Mpumalanga & Limpopo: 24.6%
- E&W Cape: 2.7%

Total – 16 900 ha
New afforestation over period: 16 900 ha
Average per year: 1 690 ha
New Afforestation by Province 2018

- W. Cape: 1.9%
- KZN: 43.6%
- Limpopo: 16.4%
- Mpumalanga: 37.0%
- E. Cape: 1.2%

Total – 1 799 ha

FORESTRY SOUTH AFRICA
New Afforestation by Species
1980 to 2018

AVERAGE PER ANNUM
1980 to 1985: 10 229 ha (13.0% of total)
1986 to 1990: 21 304 ha (27.1% of total)
1991 to 1995: 30 599 ha (39.0% of total)
1996 to 2000: 7 019 ha (8.9% of total)
Total New Afforestation by Species
1980 to 2018

<table>
<thead>
<tr>
<th>Species</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pine</td>
<td>46.8%</td>
</tr>
<tr>
<td>Eucalyptus</td>
<td>43.6%</td>
</tr>
<tr>
<td>Wattle</td>
<td>8.7%</td>
</tr>
<tr>
<td>Other</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

Total – 392 711 ha
New Afforestation by Species 2018

Total – 1 799 ha
New Afforestation by Product
1980 to 2018

AVERAGE PER ANNUM
2001 to 2005: 5,044 ha (6.4% of total)
2006 to 2010: 2,592 ha (3.3% of total)
2011 to 2018: 1,253 ha (2.2% of total)
Total New Afforestation by Product
1980 to 2018

Total – 392 709 ha
New Afforestation by Product 2018

<table>
<thead>
<tr>
<th>Product</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sawlogs</td>
<td>60.3%</td>
</tr>
<tr>
<td>Pulpwood</td>
<td>33.5%</td>
</tr>
<tr>
<td>Mining Timber</td>
<td>5.3%</td>
</tr>
<tr>
<td>Poles</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

Total – 1 799 ha

FORESTRY SOUTH AFRICA
Area Converted Out of Timber Production by Species 1980 to 2018

Area converted over period: 92 866 ha  
Average p.a.: 2 444 ha
Area Converted Out of Timber Production by Species 2009 to 2018

Area converted over period: 7 726 ha
Average p.a.: 773 ha
Total Area Converted out of Timber Production by Species 1980 to 2018

- Pine: 45.4%
- Eucalypts: 28.0%
- Wattle: 24.1%
- Other: 2.5%

Total – 92,866 ha
Total Area Converted out of Timber Production by Species 2018

- Pine: 0.0%
- Eucalypts: 30.8%
- Other Hardwood: 18.1%
- Wattle: 51.1%

Total – 613 ha
Net New Afforestation by Species
1980 to 2018

Net new afforestation over period: 299 843 ha
Average p.a.: 7 891 ha
Net New Afforestation by Species 2009 to 2018

Net new afforestation over period: 9 174 ha
Average p.a.: 917 ha
Net New Afforestation by Species
1980 to 2018

- Pine: 47.2%
- Eucalypts: 48.4%
- Wattle: 3.9%
- Other: 0.5%

Total: 299,843 ha
Net New Afforestation by Species 2018

Total net new afforestation: 1,186 ha
Area Converted Out of Timber Production by Region 1980 to 2018

Area converted over period: 92 870 ha
Average p.a: 2 444 ha
Area converted over period: 7 729 ha
Average p.a.: 773 ha
Total Area Converted out of Timber Production by Region 1980 to 2018

- Mpumalanga & Limpopo: 27.3%
- KZN: 42.8%
- E&W Cape: 29.9%

Total – 92 870 ha
Net New Afforestation by Region
1980 to 2018

Net new afforestation over period: 299 841 ha
Average p.a.: 7 891 ha
Net New Afforestation by Region 2009 to 2018

Net new afforestation over period: 9 171 ha
Average p.a.: 917 ha
Net New Afforestation by Region
1980 to 2018

Total – 299,841 ha

- Mpumalanga & Limpopo: 34.8%
- KZN: 58.2%
- W&E Cape: 7.1%
Conversion of Plantations out of Production & to Other Species 1980 to 2018

Net loss to production area over period: 92,866 ha
Average p.a.: 2,444 ha
Conversion of Plantations out of Production & to Other Species 2009 to 2018

Net loss to production area over period: 7 727 ha
Average p.a.: 773 ha
Total Area Converted out of Production & to Other Species 1980 to 2018

- Eucalypts: 47,188 hectares
- Wattle: -59,518 hectares
- Other: 2,892 hectares
- Pine: -83,429 hectares

Net loss to production area over period: 92,866 ha
Average p.a.: 2,444 ha
Area Converted out of Production & to Other Species 2018

Land taken out of timber production: 613 ha
Net Addition to Planted Area by Species
1980 to 2018

Total net addition to production area: 299 842 ha
Average p.a.: 7 891 ha
Net Addition to Planted Area by Species 2009 to 2018

Total net addition to production area: 9 173 ha
Average p.a.: 917 ha
Total Net Addition to Planted Area by Species 1980 to 2018

Total net addition to production area: 299 842 ha
Average p.a.: 7 891 ha
Net Addition (Loss) to Planted Area by Species
2018

Hectares

Species

Pine
Eucalyptus
Wattle
Other

-2 037
4 581
-1 370
12

Total net gain in production area: Plus 1 186 ha
Damage to Plantations by Genera 1980 to 2018

Total area damaged over period: 1 143 116 ha
Average p.a.: 30 082 ha
Damage to Plantations by Fires 1980 to 2018

Total area damaged over period: 1 143 116 ha
Total area damaged – fire: 669 439 ha (59%)
Total area damaged - other causes: 473 677 ha (41%)
Damage to Plantations by Fires 2009 to 2018

- **Fire**: 207,122 ha (66%)
- **Other Causes**: 105,379 ha (34%)

Total area damaged over period: 312,501 ha

Total area damaged - other causes: 105,379 ha (34%)
Damage to Plantations by Fires
1980 to 2018

Years

Fire
Other Causes
Damage to Plantations by Genera 2018

Total – 25,682 ha
(2.1% of total planted area)
Damage to Plantations by Cause 2018

Total – 25 682 ha

- Fire: 62.9%
- Other Causes: 37.1%
Damage to Plantations by Fire 2018

Total – 16 145 ha

- Arson: 13.6%
- Accidental: 33.3%
- Natural: 32.4%
- Unknown: 20.8%

- Total: 16 145 ha
RSA vs. Africa: as at January 2019

RSA FMU certificates cover 1.436 million ha or 21% of African total coverage of 6.781 million ha.

RSA 66% of African Total

RSA 39% of African Total
FSC Certified Forest Areas in Africa as at January 2019

Total FSC certified area in Africa: 6 781 166 ha
FSC Certified Forest Areas in Selected Countries as at January 2019

Brazil: 7,075 thousand hectares
Chile: 2,334 thousand hectares
RSA: 1,436 thousand hectares
NZ: 1,260 thousand hectares
Australia: 1,239 thousand hectares
Uruguay: 990 thousand hectares
China: 984 thousand hectares
Argentina: 468 thousand hectares

Total FSC certified area in world: 192 million ha in 82 countries
FSC Certified Forest Areas
Top 5 Countries as at January 2019

- Canada: 50.690 million hectares
- Russia: 47.192 million hectares
- USA: 14.099 million hectares
- Sweden: 13.315 million hectares
- Belarus: 8.961 million hectares

Total FSC certified area in world: 192 million ha
FSC Certified Forests by Region as at January 2019

- Europe: 93.178 million ha
- North America: 66.046 million ha
- Latin America: 13.637 million ha
- Asia: 9.462 million ha
- Africa: 6.780 million ha
- Oceania: 2.658 million ha

Total FSC certified area: 192 million ha in 82 countries
FSC Certified Forests by Ownership: as at January 2019

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Certified Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Cos</td>
<td>64.3%</td>
</tr>
<tr>
<td>SAFCOL (KLF)</td>
<td>13.0%</td>
</tr>
<tr>
<td>Private Cos (ex SAFCOL)</td>
<td>11.8%</td>
</tr>
<tr>
<td>Group Schemes</td>
<td>10.9%</td>
</tr>
</tbody>
</table>

Certified Area – 1 436 178 ha (incl. planted & non-planted areas)
FSC Certified Forests by Ownership as at January 2019

Total FSC certified area: 1,436,178 ha
Section 3

THE FOREST PRODUCTS INDUSTRY
Number of Processing Plants by Type 2018

- Sawmills: 75 plants
- Pole Plants: 32 plants
- Pulp, Paper & Board Mills: 20 plants
- Mining Timber Mills: 14 plants
- Charcoal Plants: 3 plants
- Veneer Plants: 2 plants
- Match Factories: 1 plant

Total number of plants: 147
Roundwood Intake into Processing Plants
1980 to 2018

Total increase in intake over period: 6.6 m m$^3$ (60%)
Biggest increase that of pulpwood: 7.8 m m$^3$ (184%)
Roundwood Intake into Processing Plants
2018

- Pulp, Paper & Board Mills: 67.6%
- Sawmills: 25.8%
- Mng. Timber Mills: 2.7%
- Other: 3.9%

Total: 17.7 million m³
Roundwood Intake into Processing Plants by Province & Product 2018

KZN
- Pulpwood: 9.361
- Sawlogs: 1.202
- Other: 0.229

Mpum
- Pulpwood: 2.298
- Sawlogs: 1.623
- Other: 0.530

E Cape
- Pulpwood: 0.305
- Sawlogs: 0.567
- Other: 0.016

Limpopo
- Pulpwood: 0.000
- Sawlogs: 0.769
- Other: 0.300

W Cape
- Pulpwood: 0.000
- Sawlogs: 0.400
- Other: 0.102

Total – 17.7 million m³
Roundwood Intake into Processing Plants by Province & Product 2018

KZN: 10.792
Mpum: 4.451
Limpopo: 1.068
E Cape: 0.888
W Cape: 0.502

Total – 17.7 million m³
Overall average intake has increased by: 161%

Average intake of Sawmills has increased by: 140%

Only average intake of MT Mills has declined by: 53%
Sales of Certain Products from Processing Plants 1980 to 2018

Biggest increase that of chips: 1.9 million tons (+467%)
Biggest decrease that of mining timber: 1.3 million tons (-80%)
Value of Sales from Primary Processing Plants 2018

- **Pulp**: 54.7%
- **Chips**: 5.8%
- **Lumber**: 24.9%
- **Panels**: 7.1%
- **Mng. Timber**: 1.3%
- **Poles**: 4.4%
- **Other**: 1.8%

Total: R26.6 billion
Value of Sales from Primary Processing Plants 2018

- **Pulp**: 14.554 Billion Rand
- **Lumber**: 6.632 Billion Rand
- **Panels**: 1.881 Billion Rand
- **Chips**: 0.000 Billion Rand
- **Poles**: 1.172 Billion Rand
- **Mng. Timber**: 0.340 Billion Rand
- **Other**: 0.474 Billion Rand

**Total**: R26.6 billion
Value of Sales from Primary Processing Plants 1980 to 2018

Nominal increase over period
R25.9 bn (3.717%)

Real increase over period
R8.7 bn (49%)
Value of Roundwood Sales from Processing Plants by Product & Province 2018

Total R26.6 billion
Value of Roundwood Sales from Processing Plants by Product & Province 2018

Total R26.6 billion
Gross Value of Output Comparisons per Planted Hectare 2008, 2013 & 2018

<table>
<thead>
<tr>
<th>Product</th>
<th>2007</th>
<th>2012</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>For. Prods.</td>
<td>5831</td>
<td>6973</td>
<td>21955</td>
</tr>
<tr>
<td>Sugar</td>
<td>8686</td>
<td>11247</td>
<td>23503</td>
</tr>
<tr>
<td>Wheat</td>
<td>7585</td>
<td>9951</td>
<td>14586</td>
</tr>
<tr>
<td>Maize</td>
<td>3673</td>
<td>7999</td>
<td>16131</td>
</tr>
<tr>
<td>Forestry</td>
<td>4081</td>
<td>5831</td>
<td>16287</td>
</tr>
</tbody>
</table>
Value Addition in Primary Processing Industry 2018

<table>
<thead>
<tr>
<th>Industry</th>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Industry</td>
<td>10 102</td>
<td>26 609</td>
</tr>
<tr>
<td>Pulp / Paper Mills</td>
<td>2 584</td>
<td>6 930</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17 991</td>
</tr>
<tr>
<td>Sawmills</td>
<td>6 633</td>
<td></td>
</tr>
<tr>
<td>Pole Plants</td>
<td>288</td>
<td>1 172</td>
</tr>
<tr>
<td>M. T. Mills</td>
<td>218</td>
<td>340</td>
</tr>
<tr>
<td>Charcoal Plants</td>
<td>54</td>
<td>119</td>
</tr>
</tbody>
</table>

Note: excludes secondary processing (e.g. paper manufacturing)
Value Addition Comparisons in Primary Processing Industry 2018

<table>
<thead>
<tr>
<th>Industry</th>
<th>Output as ratio of Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pole Plants</td>
<td>4.07</td>
</tr>
<tr>
<td>Total Industry</td>
<td>2.63</td>
</tr>
<tr>
<td>Pulp / Paper Mills</td>
<td>2.60</td>
</tr>
<tr>
<td>Sawmills</td>
<td>2.57</td>
</tr>
<tr>
<td>Charcoal Plants</td>
<td>2.21</td>
</tr>
<tr>
<td>M. T. Mills</td>
<td>1.56</td>
</tr>
</tbody>
</table>

Note: Based only on input value of raw fibre (i.e. excludes all other input costs)
Section 4

CONTRIBUTION TO EMPLOYMENT
## Forest Sector Employment – RSA 2018

<table>
<thead>
<tr>
<th>Sub-sector</th>
<th>No. of employees</th>
<th>Total Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Direct</td>
<td>Indirect</td>
</tr>
<tr>
<td>Forestry</td>
<td>59 800</td>
<td>27 500</td>
</tr>
<tr>
<td>Pulp and Paper</td>
<td>13 200</td>
<td>10 800</td>
</tr>
<tr>
<td>Sawmilling</td>
<td>20 000</td>
<td>8 000</td>
</tr>
<tr>
<td>Timber Board</td>
<td>6 000</td>
<td>n/a</td>
</tr>
<tr>
<td>Mining Timber</td>
<td>2 200</td>
<td>n/a</td>
</tr>
<tr>
<td>Other</td>
<td>10 000</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>111 200</td>
<td>46 300</td>
</tr>
</tbody>
</table>

Direct jobs in Forestry = 59 800
Indirect jobs in Forestry (157 500 less 59 800) = 97 700
Direct Employment in Forestry Industry by Province 2018

Total 59 800

KZN: 47.4%
Mpumalanga: 37.1%
E Cape: 9.2%
Limpopo: 3.7%
W Cape: 2.5%
Direct Employment in Forestry Industry by Region 2018

- **KZN**: 28,370
- **Mpumalanga**: 22,210
- **E. Cape**: 5,530
- **Limpopo**: 2,200
- **W. Cape**: 1,520

Total est. direct jobs in industry: 59,800

Total Employment:
- **W. Cape**: 2,403,000
- **Limpopo**: 1,390,000
- **E. Cape**: 1,416,000
- **Mpumalanga**: 1,212,000
- **KZN**: 2,583,000

Total: 12,316,000
Direct Employment in Forestry Industry as % of Those Employed in 2018

Mpumalanga: 1.83%
KZN: 1.10%
E. Cape: 0.39%
RSA: 0.37%
Limpopo: 0.16%
W. Cape: 0.06%

Total employed in RSA: 16 288 000
**Indirect Employment Created by Forestry Industry by Province 2018**

- **KZN**: 44,480 indirect jobs
- **Mpumalanga**: 30,590 indirect jobs
- **E. Cape**: 7,700 indirect jobs
- **Limpopo**: 10,030 indirect jobs
- **W. Cape**: 4,900 indirect jobs

Total estimated indirect jobs created by industry in forestry and wood processing activities – 97,700
Indirect Employment Created by Forestry Industry as % of Those Employed in 2018

- Mpumalanga: 2.52%
- KZN: 1.72%
- Limpopo: 0.78%
- RSA: 0.61%
- E. Cape: 0.54%
- W. Cape: 0.20%

% of Total Employed in Formal Sector
Direct & Indirect Jobs in & Created by Forestry Industry by Province 2018

Estimated total – 157 500 jobs
Total Employment in Industry as % of Those Employed in Formal Sector 2018

- W. Cape: 0.27%
- Limpopo: 0.70%
- E. Cape: 1.17%
- RSA: 0.98%
- KZN: 2.83%
- Mpumalanga: 4.36%
Dependants of Those Working in Forestry Industry by Province 2018

<table>
<thead>
<tr>
<th>Province</th>
<th>Direct Job Dependents</th>
<th>Indirect Job Dependents</th>
<th>Number of Dependents</th>
</tr>
</thead>
<tbody>
<tr>
<td>KZN</td>
<td>45 200</td>
<td>201 400</td>
<td>246 900</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>19 300</td>
<td>161 300</td>
<td>180 600</td>
</tr>
<tr>
<td>E. Cape</td>
<td>38 900</td>
<td>53 700</td>
<td>92 600</td>
</tr>
<tr>
<td>Limpopo</td>
<td>19 300</td>
<td>181 700</td>
<td>201 000</td>
</tr>
<tr>
<td>W. Cape</td>
<td></td>
<td></td>
<td>19 300</td>
</tr>
</tbody>
</table>

Est. total – 531 000 dependants
Total Number of People Dependent on Forestry Industry by Province 2018

- **KZN**: 319,800
- **Mpumalanga**: 233,400
- **E. Cape**: 58,500
- **Limpopo**: 51,100
- **W. Cape**: 25,700

Est. total – 688,000 livelihoods
Estimated % of Population Dependent on Forestry Industry 2018

% of Provincial Population

- Mpumalanga: 5.25%
- KZN: 2.89%
- RSA: 1.22%
- E. Cape: 0.90%
- Limpopo: 0.88%
- W. Cape: 0.39%

Total RSA population: 57.7 million

- Total Population
  - Mpumalanga: 4,523,874
  - KZN: 11,384,722
  - RSA: 57,725,606
  - E. Cape: 6,522,734
  - Limpopo: 5,797,275
  - W. Cape: 6,621,103
INVESTMENT IN THE SECTOR
Investment in RSA Forestry Industry 2018

Total Investment
R46.7 billion

36.2% Trees
51.6% Land
7.1% Roads
3.9% Fixed Assets
1.3% Moveable Assets
Investment in RSA Forestry Industry 2018

Total Investment
R46.7 billion
Investment in RSA Forestry Industry 2018

- **Mpumalanga**: 41.9%
- **KZN**: 35.6%
- **E. Cape**: 13.6%
- **W. Cape**: 4.4%
- **Limpopo**: 4.5%

**Total Investment**: R46.7 billion
Investment in Plantations – By Province 2018

Mpumalanga = highest investment (41.9% of total)
Investment in Mpumalanga Forestry 2018

- Pine Long: 50.5%
- Pine Short: 18.7%
- Gum Short: 27.2%
- Gum Long: 1.7%
- Wattle: 2.0%

Total Investment: R19.6 billion
Investment in KZN Forestry 2018

Total Investment
R16.6 billion
Investment in E. Cape Forestry 2018

- Pine Long: 80.9%
- Pine Short: 6.2%
- Gum Short: 5.3%
- Gum Long: 6.7%
- Wattle: 1.0%

Total Investment: R6.4 billion

FORESTRY SOUTH AFRICA
Investment in Limpopo Forestry 2018

Total Investment
R2.1 billion
Investment in W. Cape Forestry 2018

Total Investment
R2.0 billion
Investment in Forest Products Sector by Type of Processing Plant 2018

- **Pulp & Board**: 86.1%
- **Sawmills & Veneer**: 11.2%
- **Other**: 1.9%
- **Mng. Timber**: 0.7%
- **Other**: 0.1%

Total book value of investments: R22.1 billion
Investment in Forest Products Sector by Investment Category 2018

- Machinery & Equipment: 84.6%
- Land & Buildings: 12.2%
- Moveable Assets: 1.6%
- Other: 1.6%

Total book value of investments: R22.8 billion
Section 6

CONTRIBUTION TO GDP
Composition of RSA GDP 2018

Secondary
- Elec, gas & water
- Construction
- Transport

Tertiary
- Trade
- Personal services
- Govt. services
- Tax subsidies

Total GDP – R4 066 billion (R4.1 trillion)
Contribution to GDP 1980 to 2018

- Increase in Forestry to Ag GDP over period from 4.5% to 10.0%
- Decrease in For. Prod. to Mfg GDP over period from 6.3% to 5.0%
Forest Products vs. Other Manufacturing GGP per Region 2018

<table>
<thead>
<tr>
<th>Province</th>
<th>Forest Products</th>
<th>Other Manufacturing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limpopo</td>
<td>22.2%</td>
<td>77.8%</td>
</tr>
<tr>
<td>Mupumlanga</td>
<td>16.9%</td>
<td>83.1%</td>
</tr>
<tr>
<td>KZN</td>
<td>15.5%</td>
<td>84.5%</td>
</tr>
<tr>
<td>RSA</td>
<td>5.5%</td>
<td>94.5%</td>
</tr>
<tr>
<td>E. Cape</td>
<td>3.8%</td>
<td>96.2%</td>
</tr>
<tr>
<td>W. Cape</td>
<td>1.1%</td>
<td>98.9%</td>
</tr>
</tbody>
</table>
Gross Value of Output by Sector & Province 2018

- Forest Products: R26.6bn
- Forestry: R10.1bn

Western Cape:
- Forest Products: 835
- Forestry: 136

Eastern Cape:
- Forest Products: 1,842
- Forestry: 1,044

Mpumalanga:
- Forest Products: 6,402
- Forestry: 3,328

KZN:
- Forest Products: 16,209
- Forestry: 5,309

Million Rands
Gross Value of Output by Sector & Province 2018

<table>
<thead>
<tr>
<th>Province</th>
<th>Forestry</th>
<th>Forest Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>KZP</td>
<td>4,814</td>
<td>16,703</td>
</tr>
<tr>
<td>Mupumlanga</td>
<td>1,647</td>
<td>8,084</td>
</tr>
<tr>
<td>Eastern Cape</td>
<td>798</td>
<td>1,567</td>
</tr>
<tr>
<td>Limpopo</td>
<td>2,021</td>
<td>2,127</td>
</tr>
<tr>
<td>Western Cape</td>
<td>971</td>
<td>2,365</td>
</tr>
</tbody>
</table>
Forest Industry Contribution to Total GGP per Region - 2018

% of Regional GGP

- KZN: 2.50%
- Mpum: 2.10%
- RSA: 0.65%
- E. Cape: 0.42%
- Limpopo: 0.64%
- W. Cape: 0.15%

Forest Products and Forestry contributions by region.
Importance of forestry and forest products sector has been declining in all provinces in which it operates over a number of years.
CONTRIBUTION TO FOREIGN TRADE
Exports of Forest Products
2017 vs. 2018

Solid Wood & Other

Pulp

Paper

Billion Rand

2017 – R28.9bn
2018 – R29.7bn

Exports in 2018 R848 million or 2.9% more than in 2017
Imports of Forest Products
2017 vs. 2018

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper</td>
<td>0.000</td>
<td>12.100</td>
</tr>
<tr>
<td>Solid Wood &amp; Other</td>
<td>0.000</td>
<td>4.843</td>
</tr>
</tbody>
</table>

2017 - R18.3bn
2018 - R???

Imports in 2018 R???bn or ?.??% down on 2017
Trade balance in 2018 R1.251bn or 13.5% more than in 2017
Imports vs. Exports of Forest Products
Trade Balance 2016, 2017 & 2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Imports (Billion Rand)</th>
<th>Exports (Billion Rand)</th>
<th>Trade Balance (Billion Rand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>19.795</td>
<td>18.313</td>
<td>1.482</td>
</tr>
<tr>
<td>2017</td>
<td>29.085</td>
<td>28.854</td>
<td>0.231</td>
</tr>
<tr>
<td>2018</td>
<td>9.290</td>
<td>10.541</td>
<td>1.251</td>
</tr>
</tbody>
</table>
Imports vs. Exports of Forest Products 2018

Exports R28.9bn
Imports R18.3bn

Positive trade balance in 2018 = R?..?? billion
Forest Product Exports by Product 2018

- Pulp: 43.5% of total exports, valued at R28.9 billion
- Paper: 28.7%
- Solid Wood: 24.8%
- Other: 3.1%

Total exports: R28.9 billion

FORESTRY SOUTH AFRICA
Forest Product Imports by Product 2018

- Pulp: 7.5%
- Paper: 66.1%
- Solid Wood: 26.2%
- Other: 0.3%

Total: R18.3 billion
Trade Balance in Forest Products
1992 to 2018 (nominal)

Increase in imports - R16.9 billion (1193%)
Increase in exports - R26.5 billion (1133%)
Increase in trade balance - R9.6 billion (1042%)
Trade Balance in Forest Products
1992 to 2018 (real)

- Increase in imports: - R11.8 billion (179%)
- Increase in exports: - R18.0 billion (166%)
- Increase in trade balance: - R6.3 billion (147%)
Export Comparisons
2008, 2013 & 2018

<table>
<thead>
<tr>
<th>Product</th>
<th>2007</th>
<th>2012</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal</td>
<td>23.7</td>
<td>55.4</td>
<td>76.5</td>
</tr>
<tr>
<td>Fruit &amp; Veg</td>
<td>19.6</td>
<td>48.0</td>
<td></td>
</tr>
<tr>
<td>Forest Prods</td>
<td>13.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sugar</td>
<td>5.2</td>
<td>2.0</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Billion Rand

0 10 20 30 40 50 60 70 80 90
THANK YOU!

www.forestry.co.za | www.forestryexplained.co.za