Introduction

1.1 What this report is about, and who should read it

This report is about the changes taking place in South African forestry, the pros and cons of these changes and the prospects for a forest sector that can contribute to sustainable national development and local empowerment.

Across many sectors in South Africa, policies, institutional structures and economic priorities are being transformed in response to the imperatives of equitable social development. One of the central elements of this transformation is a comprehensive land reform programme which cuts across all land use sectors. Further powerful forces shaping these internal changes stem from the opportunities and pressures of the globalising world economy.

In the forest sector, new policy and laws have been introduced, and the government is in the process of privatising state-owned forest assets. Government is keen to afford entry into the forest sector for previously marginalised groups and small-scale entrepreneurs. The country’s large areas of woodlands are not commercially exploited for timber but are major sources of NTFPs and are beginning to receive more attention from government as a source of environmental security and inputs to improving people’s livelihoods. Having been under environmental pressure – particularly on water issues – the existing plantation forest industry has made considerable environmental improvements over the last ten years and is now responding to growing social pressures and changing markets.

Thus the relationships between the players in forestry – in government, civil society and the private sector – are changing, and new players are emerging. It is a good time to take stock of the situation, to put the spotlight on the private sector and its current and potential contribution to development in South Africa.

The aim of the study, on which this report is based, was: to understand how the private sector is involved in forestry; how this is changing; and, what it would take for the private sector to be economically, environmentally and socially sustainable in the future. A particular focus has been placed on three linked themes:

- Redistribution of forest assets – towards and within the private sector and communities, including investigation of the privatisation of publicly owned plantations, small-scale enterprise and contracting in forestry
Fuelwood is a vital resource for many households – up to 20% of South Africa’s total energy consumption is derived from biomass like this.

- **Certification** – its impact as a market access lever, a forest management tool, and a means to promote policy and institutional development.

- **Company-community partnerships** – the existing smallholder outgrower schemes, and the actual and potential development of community schemes.

These three themes are key features of current debates and challenges in South African forestry. They are also of strong contemporary relevance in other countries and contexts. Experience in South Africa is likely to have much to offer those grappling with similar issues elsewhere. This report therefore aims to tell the story in a way which will be useful to both a domestic and an international audience.

It is hoped that this report will be read by: those in the South African forestry private sector who recognise a challenge and see room for improvement; those working locally to become more engaged with private sector players or to enter the field as players themselves; those in a government busy re-thinking and reforming its roles; those in other sectors – agriculture, water, tourism, land affairs and the macro-economy – who are interested in the pros and cons of different mechanisms and the relative impacts of their sectors on forestry and vice versa; and those in other countries who are interested in the South African experience, the successes and challenges of which are at the cutting edge of contemporary forestry.
1.2 The partners and process involved in the study

This study is part of a wider international project coordinated by the International Institute for Environment and Development – IIED (see box describing this project on the inside front cover of this report). Funding support for the project has been provided by the UK Department for International Development (DFID) and the European Commission (EC). IIED has a track-record in collaborative policy research for good forest management and has made a particular focus on private sector issues in recent times. To help coordinate the work in South Africa, IIED teamed up with Environmentetek of the Council for Scientific and Industrial Research (CSIR), which has long been involved in research into various aspects of forestry in South Africa and beyond, and with the forestry adviser from the South Africa office of DFID.

Team members for the work came from the Department of Environmental Science at Rhodes University in Grahamstown, the Department of Sociology at the University of the Witwatersrand, the Centre for African Research and Transformation, Louis Heyl Associates, the government’s Department for Water Affairs and Forestry (DWAF), CSIR, several independent consultancies, and several members of certification inspection teams.

The bulk of the study was carried out over two years between early 1999 and early 2001. The South African private sector’s Forest Owners Association (FOA) engaged with the work at many stages throughout this period, as did DWAF. Initial widespread consultation led to identification of key issues which were then thrashed out at a workshop in May 1999, with a range of stakeholders and potential study participants. Members of a project advisory group comprising key stakeholders from government, the private sector and civil society were consulted and interviewed at several points through the research process, and a wider pool of stakeholders in different aspects of forestry were interviewed during the study. A number of research papers were commissioned under the three themes outlined above. When initial results were in, a second workshop was held to discuss findings in May 2000, attended by researchers and stakeholders from government and the private sector.

Some twenty-one sub-studies were carried out for this project – these are outlined in Box 1. All of these contributing studies are available separately from the addresses noted on the inside cover of this report. In this report we draw on all of these studies, referencing material only when a key portion of text, figure, box or table is used directly. We also draw on workshop findings, other background material and numerous notes from the interviews conducted over the course of the project.
1. Redistribution of opportunities and assets in forestry. South Africa is undergoing a number of changes in its commercial forest sector, as a result of an intense revision of forest policy and subsequent passing of new legislation. To trace the scope and impact of these changes, the following studies were prepared:

- Khosa, M. 2000. *Forestry contracting in South Africa.* This study of trends in outsourcing and contracting in the South African forest industry seeks to deepen understanding of the national context within which contracting is an increasing practice, and examines possible options for outsourcing.

- Foy, T. 2000. *Leasing of state-owned plantations: some recent experiences from South Africa.* Drawing on lessons recently learned from South Africa and elsewhere, this paper rationalises the use of forest leases as an instrument in the context of state forest restructuring.

- Heyl, L., von Maltitz, G., Evans, J. and Segoale, R. 2000. *Issues and opportunities for small-scale sawmilling in South Africa: an Eastern Cape case study.* This report describes the scale, structure and market niche of the small sawmilling subsector, with a focus on the Eastern Cape Province.

- Horn, J. 2000. *The role of small-scale sawmilling in household and community livelihoods: case studies in the Eastern Cape.* Using a case study approach, this study focuses on the livelihoods of small-scale sawmillers in the Eastern Cape.

- Bethlehem, L. 2001. *Bringing democracy to the forests: developments in South Africa’s forestry policy and legislation.* This paper describes the policy and legislative changes in the forest sector, and sets recent initiatives in the context of a drive towards sustainable and equitable forest management.

2. Forest certification in South Africa. The studies on the impacts of certification drew on the experience and expertise of three local Forest Stewardship Council certification assessors and on some further analysis of stakeholder and supply chain relationships.

- Roberts, S., Mayers, J., Evans, J. and Frost R. 2001. *Developing credibility: certification in South African forestry.* This is an overview of all the certification studies with additional supply chain analysis.

- Scott, D. 2000. *Environmental aspects of the forest management certification process.* This report by a regular member of FSC certification audit teams examines the audit inspection instrument and provides commentary on its effectiveness with respect to environmental issues in particular.

- Clarke, J. 2000. *Social and environmental aspects of the forest management certification process: a discussion of social assessment components in South Africa.* This report, drawing on audit experience, tackles the ability of FSC certification and the certification process to improve the wellbeing of workers and communities dependent on plantations.
- Hamman, J. 2000. *Forestry certification: social aspects*. Also by a member of FSC inspection teams, this report analyses the composition and focus of the audit teams and highlights legal and social issues which can compromise the positive impact of certification.

- Dunne, N 2000. *The Impact of Environmental Certification on the South African Forest Products Supply Chain*. Seeking to understand the impact of certification on traders and retailers in South Africa and the UK, this study traces the route of FSC certified timber from mill to market.

- von Maltitz, G. 2000. *The impacts of the ISO 14000 management system on sustainable forest management in South Africa*. This study focuses on one company’s decision to adopt ISO accreditation, comparing the impacts of the ISO system with those of FSC certification.


3. **Outgrower schemes and community-company partnerships.** Research into outgrowing and community-company partnerships concentrated on the two key provinces of KwaZulu-Natal and the Eastern Cape, the former containing the bulk of small grower development and the latter being the key area for both government and private sector activity aimed at building partnerships.

- Zingel, J. 2000. *Between the woods and the water: tree outgrower schemes in KwaZulu-Natal – the policy and legislative environment for outgrowing at the regional level*. This report discusses the environment surrounding trends in outgrower development, both past and future.

- Cairns, R. 2000. *Outgrower timber schemes in KwaZulu-Natal: do they build sustainable rural livelihoods and what interventions should be made?* Focussing on case studies of outgrower households, this examines the role played by schemes in rural livelihoods.

- Ojwang, A. 2000. *Community-company partnerships in forestry in South Africa: an examination of trends*. This is a broad overview of types of partnerships in Southern Africa, with comparisons between forestry and other sectors.


- Sisitka, L. 2000. *Private sector community forestry partnerships in the Eastern Cape: the Lambazi case study*. This case study examines the relationships between stakeholders and actors in a corporate-initiated scheme.

1.3 Structure of this report

Following this introductory section the report is structured in the following way.

- **Section 2 Setting the scene** – a profile of private sector forestry in South Africa – outlines the history, current status, contribution to the national economy, and developing policy context of forestry enterprise in South Africa.

- **Section 3 Privatisation of publicly owned plantations** – highlights the main mechanisms involved in the redistribution of forest assets and their impacts to date.

- **Section 4 Impacts of forest certification** – describes the spread and effects of certification on forests, stakeholders, supply chains and policies to date.

- **Section 5 Company-community deals** – examines outgrower schemes and community-oriented partnerships, aiming to understand the evolution and impacts for each of the main types of partnership.

- **Sections 6 and 7 respectively highlight key challenges** for the future of sustainable private sector forest development in South Africa, and posit options for achieving it.
2.1 South Africa’s forest sector – a brief overview

South Africa’s forests play important economic, social and environmental roles. The sector can for analytical purposes be divided into two distinct components. Firstly, the formal commercial forestry sector, comprising industrial forestry plantations and the industries these support. Secondly, an informal sector relating to forest goods and services generally used at the household level, but which are rarely bought and sold.

Considering the informal sector first, a wide range of important forest goods and services are derived from South Africa’s limited closed canopy indigenous forest and far more extensive woodlands. The current extent of closed canopy indigenous forest is estimated in the region of 350,000 and 500,000 hectares – about 0.3% of South Africa’s surface area of 122 million ha. The original extent of this forest type, which is essentially confined to the wetter coastal fringes of an essentially dry and un forested country, is the subject of conjecture and debate. However, it is unlikely that the area ever represented more than a tiny fraction of South Africa’s total land mass given the limitations set by climate and naturally occurring fire in a landscape where climax grasslands predominate. Nevertheless, these forests provide significant environmental and social values. Many of them are formally designated as protected areas, and all indigenous forest is protected by law.

Far more extensive in area, and important in terms of their economic, environmental and social value, are South Africa’s woodlands. Definitional issues around woodlands are complex and contentious such that significant discrepancies in the estimated area exist. But it is likely that woodlands currently cover some 23 million hectares of the country. This is about half of the original estimated extent reflecting a long history of conversion to agriculture, in part at least accelerated and facilitated by agricultural policies. While definitive information is limited, it is believed that about 12% of the arid and maybe 5% of South Africa’s moist savanna woodlands are in protected areas – mostly areas conserved for wildlife and other ecological purposes rather than for the protection of the woodland itself.

The contribution of woodlands to South Africa’s national economy is poorly understood and, as in many countries, their real contribution fails to be recognised by traditional approaches to national income accounting. However,
from the perspective of energy use alone, estimates suggest that up to 20% of South Africa’s total energy consumption is derived from biomass mostly derived from the woodland resource. Biomass energy and other resources derived by households are of great importance to the poor in rural areas.

South Africa’s commercial forest sector is essentially based upon a plantation resource created in a little over 100 years. Some controlled harvesting of indigenous forests does occur, but on a very small scale. The total industrial plantation estate currently extends over 1.5 million hectares, or around 1.2% of South Africa’s surface area, but as will be discussed below, plantations are concentrated in areas providing favourable climatic conditions. By international standards, South Africa’s plantation area is small, making up just 1% of the estimated global plantation estate of 127 million hectares, but it contains some of the most productive plantations in the world. Consequently, although limited in size, these plantations support a large wood processing and value adding manufacturing sector, which makes a very significant contribution to South Africa’s economy.

Figure 1 Percentage of land area under plantations, woodlands and indigenous forest cover in South Africa

The development of South Africa’s forest industry reflects a number of factors and influences, both local and international in their origin. The need to respond to changing market, economic, social and policy influences has shaped the industry structure and will continue to do so. It is in this context of change and dynamism that instruments and mechanisms to achieve better forestry must be seen. This chapter seeks to briefly set this context by:

- outlining the industry’s historical development, focusing on identifying the important and changing influences on the industry over time;
- describing the industry as it currently exists, looking in particular at emerging key trends;
- reviewing recent significant policy changes which impact upon the forest industry; and,
- considering the likely future direction the industry will take considering the impact of important policy and market influences.
2.2 Development of South Africa’s forest industry – a brief history

In a little over 100 years South Africa’s forest industry has emerged as a major component of the economy involving industry players of international scale and significance active both locally and internationally. Five broad phases of development can be defined.

1876 – 1914: Initial state sponsored afforestation
Purposeful afforestation efforts in South Africa began in the late 19th century in order to provide an alternative to fast disappearing (and in any event limited) natural local forest resources, and costly imported timber. The first state-owned plantation was established in 1876, with high demand for construction timber and mining supports providing a rationale for the state to establish timber plantations in order to meet demand which, if unmet, could have significantly impeded the development of South Africa’s nascent mining and industrial sectors. By 1910 the afforested area in South Africa had risen to an estimated 120,000 hectares, mostly in what is now the Western Cape, and almost all of it under state control.

1914 – 1939: Rapid afforestation led by the state
During this period, the South African government, as in many other countries, assumed a major role in creating forest resources through plantation establishment. Initially in response to a policy of self-sufficiency, and encouraged by wartime interruptions to imports, the state embarked upon a major programme of afforestation. As elsewhere, government assumed responsibility for creating forest resources, in the national interest, when the private sector was unwilling to do so given the cost, risk and length of investment required. The additional, more immediate benefits of employment creation in the depression years (although only for unemployed whites) added a further impetus to the state’s efforts, which continued to dominate the industry’s development. This period also saw the expansion of processing facilities, again primarily under state ownership.

1939 – 1972: Continued rapid afforestation with increased private sector participation
Throughout the Second World War, and the immediate post war years, government continued to extend it, plantation estate and to establish processing facilities. These efforts were boosted in the post war years, by the implementation of the recommendations of a 1956 Government Commission into Socio-Economic Development. This Commission recommended the use of forestry for regional economic development in remote disadvantaged areas, essentially the areas that subsequently became South Africa’s homelands. The commission identified an area of around 250,000 hectares – roughly equal in scale to the plantation area managed by the state in 1959 (257,000 hectares) – suitable for afforestation. Large-scale plantings began in
the Transkei, Ciskei, KwaZulu, Kangwane, Lebowa and Venda around this time and continued with a varying degree of pace under the respective Homeland administrations to which responsibility for these plantations passed. In total around 150,000 hectares of forest – of differing levels of quality and economic viability – were established.

The period also saw the emergence of significant private sector interest in the industry. Private sector processors established saw mills (often using material from state owned and managed plantations) and the area of plantation under private sector management began to steadily increase during a period of continued rapid afforestation. The area of plantation forest reached 693,000 hectares by 1950, of which 73% was in private hands by 1955. A system of incentives and guaranteed prices (fixed by the state) provided ideal conditions for the industry’s development.

Significantly, this period also saw the emergence of pulp and paper as a rapidly growing element of South Africa’s forest industry. While previous afforestation efforts were focused on sawn timber and mining supports much of the new afforestation in this period was focused on the increasingly important pulp and paper industry. Major industry players – such as Sappi and Mondi – also began to establish themselves during this phase of development.

Although much of the pace and initiative for plantation development during this period came from the private sector, the state continued to play a central role in the industry’s development in several ways. Firstly, sawmilers enjoyed the dual benefits of low cost raw material provided from state run plantations and guaranteed minimum prices for their products ensured through a government approved timber pricing mechanism. Secondly, government through its various arms, provided significant incentives to investment in processing facilities in the form of subsidized and guaranteed loans.

1972 – 1994: Rapid development of private sector forestry within the context of controlled afforestation

By 1972, South Africa’s plantation area had reached 1.025 million hectares. Of this, two thirds was in private sector hands (684,000 hectares) with the balance in public ownership (341,200 hectares). The private sector had emerged as the industry’s dominant and dynamic force with an increasing focus towards a rapidly expanding pulp and paper industry.

In 1972 however, in response to long held concerns regarding the impact of uncontrolled afforestation on South Africa’s stressed water resources, controls on new afforestation in critical river catchments were introduced through an Afforestation Permit System (APS). The APS established the areas and permissible extent of new afforestation in a particular catchment, based upon an acceptable estimated reduction in river flows. It also prohibited afforestation in wetlands and close to watercourses. These conditions essentially remain in force today.
Significant new afforestation however continued throughout this period. By 1994 the plantation estate had risen to an estimated 1.4 million hectares with nearly all of this additional planting undertaken by the private sector, primarily in response to increasing demand, including that from new overseas markets. Rapid expansion of the plantation estate permitted significant development of new pulp and paper capacity, supported in part by a range of government assistance aimed at developing the sector, and in particular stimulating its export potential. These measures included tax incentives and a General Export Incentive Scheme under which government made payments to industry up to the value of 5% of export values. This in effect provided South African exporters with an immediate 5% cost advantage. Import tariffs were also in place, ranging from 10% to 30% on various pulp, paper and board products.

These incentives contributed significantly to the rapid expansion of the pulp and paper industry during the 70’s and 80’s. All have now been removed leaving the industry to compete on level terms with international processors.

Two other themes also characterize this phase of the industry’s development. Firstly, in common with wider international trends, this period saw an increasing level of concentration and vertical integration within the industry, particularly pulp and paper. Both trends reflected the enormous capital requirements of new pulp and paper investments and the investors’ desire to ensure adequate throughput into newly commissioned processing facilities in order to realise a return on investments made.

Secondly, this period saw the industry emerge as a significant international player looking increasingly outside of South Africa for its future. Throughout this period export markets became more important to the industry such that by 1994 around 40% of its output in value terms was exported. The industry’s increasing international focus was further consolidated by the significant acquisition of overseas assets by South African companies who invested heavily in forest resources and processing capacity, particularly during the late 1980s when pulp and paper prices were buoyant and producers’ confidence high.

1994 – present: A mature industry facing new policy and market pressures

By the time of South Africa’s first democratic elections in 1994, the forest industry had emerged, in a comparatively short time span, as a successful sector making a significant contribution to the national economy. This success was underpinned by a number of key factors, specifically:

- Strong local demand for forest products combined with limited overseas competition due to early protection (essentially of the saw-milling industry) and the distance from competitors.

- Availability of suitable land to permit the rapid expansion of plantations yielding high-quality wood at internationally competitive cost.
Supportive government policy which had emphasised self-sufficiency and industrial development through import controls and export incentives.

The initial direct role played by the state in creating forest resources, which had formed a basis for the subsequent development of processing industries.

The industry has however now entered a new phase: one of new opportunities and challenges. These changes partly reflect recent political change, but they also reflect changes in South Africa’s economy and the industry’s increasing exposure to international markets. The industry’s future success, and the direction it takes, will thus be fundamentally determined by its ability to respond to:

- International market trends – recognising that increasing participation in the international market place increases exposure to its volatility.
- Domestic economic factors – relating partly to demand conditions but also to key supply conditions which will affect the ‘cost of doing business’ for an increasingly internationally-focused industry.
- Forest policy changes – including the decision by government to divest itself of its plantation holdings considered in section 3.
- Policy changes in other areas – these are key to the industry’s success, including: land, water resources, environment, trade and labour policies.

It is in this context that any review of the relevance and practicality of private sector instruments to achieve sustainable forest management must be set.

2.3 South Africa’s forest industry today

2.3.1 The current extent of the plantation estate

In 1999 plantations extended over 1.5 million hectares of South Africa. While this represents just 1.2% of South Africa’s total landmass, this must be seen in the context of a country where biophysical conditions conducive to commercial afforestation occur in just 15% of its total area. These are also areas of high alternative land use potential, where competition with other land uses is high. Plantations are therefore concentrated in a relatively small area of the country – essentially in provinces where rainfall exceeds 800 mm per annum – specifically in: Mpumalanga, KwaZulu-Natal, Eastern Cape, Western Cape and the Northern Province (Table 1). In terms of species: 52% of the total plantation estate is under pines; 39% is under eucalypts; just over 7% under wattle, with the balance comprising other species such as poplar for match manufacture. Plantation companies also manage an estimated further 500,000 ha of unplanted land consisting of wetlands, indigenous forests, grasslands and infrastructure which they are obliged to manage for biodiversity, watershed protection and a range of social benefits.
South Africa's plantation area continues to increase. The pace of afforestation in recent years has however decreased from the late 1980s and early 1990s when it reached a peak of 45,000 hectares in 1991. Since 1996, new afforestation has proceeded at a level of around 11,000 hectares per year. Poor market conditions and the relatively slow granting of new afforestation permits largely account for the slowdown in new plantings in more recent years. This pattern of growth also varies across regions – for example the Eastern Cape has seen some recent growth while Mpumalanga's afforested area has decreased a little as a consequence of withdrawing from some areas planted inappropriately before the permit system introduced in 1972.

By early 1999, nearly 70% of the total plantation area had been certified through either the Forest Stewardship Council and/or the International Organisation for Standardisation (ISO) 14,000 series. The percentage has increased since then, with the adoption of certification by members of timber cooperatives. Demands from export markets have provided a major stimulus to certification (see section 4.2).

From the above plantation resource an estimated 19 million m³ of roundwood is supplied annually. A breakdown of this total annual log supply by main end-use application is given in Figure 2. It should be noted however, that increasingly large amounts of mining timber are being used for pulp production given diminishing demand for mining supports.

**Figure 2 End-uses of roundwood**
2.3.2 Ownership of the plantation resource

Geographical concentration of plantation resources is matched by a concentrated pattern of ownership – as shown in Figure 2. Of the current area of 1.5 million hectares: the state continues to own approximately 30%; two large companies together own 47%; 22% is owned by other, smaller private companies and individuals; and approximately 1% is owned by several thousand micro growers often established under outgrower and other small-scale grower schemes (see section 4.4).

Figure 3  Plantation Ownership in South Africa

This concentration partly reflects the dominant role played by the state in the early phases of afforestation. The high degree of concentration within the private sector reflects a process of industry concentration and vertical integration seen in many countries as companies investing heavily in processing facilities seek to secure the necessary throughput to run those mills at high levels of utilization. Each of these industry constituents is discussed in some detail below.

The government

South Africa’s publicly owned plantations comprise two – at least in terms of history – distinct elements. Firstly, the plantations of the former Republic of South Africa (RSA) established and managed by the RSA’s Forestry Department. These operations were transferred from the Forestry Department in 1992 to a specially created company (SAFCOL) as a prelude to privatisation. SAFCOL is a wholly government owned corporation with its shareholding held by the Department of Public Enterprises (DPE) and a Board of Directors appointed by that Ministry. These plantations comprise about 262,000 hectares. In addition to these direct plantation activities, SAFCOL operates 5 sawmills and 2 telegraph pole manufacturing plants. Its main business is the production of softwood sawlogs for the domestic market with the majority of its output sold under contract to independent processors.
Secondly, the plantations of the former Homelands. Some of these were established by the former RSA Forestry Department prior to the creation of the respective Homeland to which their management was subsequently transferred. Other areas were established by the Homeland administrations themselves. With the Homeland’s re-incorporation into South Africa in 1994, responsibility for these plantations reverted back to the national Department of Water Affairs and Forestry (DWAF). These plantations comprise around 143,400 hectares.

In combination, these plantations represent approximately 30% of South Africa’s plantation estate, and around 66% of the softwood resource. Annually they produce about 4 million cubic metres (25% of total annual production) and support a significant value-adding processing industry. It is government’s intended policy to privatise these plantations, a process which began in 1998 and is discussed in greater detail in section 3.

The large international private sector players

South Africa’s two largest private sector players – Sappi and Mondi – are themselves subsidiaries of much larger industrial conglomerates and, in one case (Mondi), a multinational company. They are also increasingly significant players on the international scene.

Sappi Forest Products owns and manages 490,000 ha of plantation forests in southern Africa. In 1998, these plantations supplied about 50% of the fibre requirements for its mills, which have the capacity to produce 1.8 million tonnes of bleached and unbleached pulp and dissolving pulp. Sappi’s South African activities are however only a part of its total operations. A series of significant acquisitions in the 1980s and 1990s have made Sappi a world player, currently manufacturing 5 million tonnes of paper and 3 million tonnes of pulp in plants on three continents. It has customers in 150 countries and over 85% of its sales, and 70% of its US$6 billion assets, are outside South Africa.

Sappi’s corporate strategy has been to develop the value added side of its business. Particularly following its 1997 acquisition of the European company, KNP Leykam, Sappi has become the world leader in the coated ‘woodfree’ paper market with 26% of market share in North America, 22% in Europe and 60% in Africa.

Mondi is jointly owned by Anglo American, De Beers and AMIC and manufactures pulp, paper, board and solid wood products. Mondi Ltd has an annual turnover of about US$ 2 billion; it manages 440,000 ha of timber.

---

1 A central element of South Africa’s apartheid system, was the creation of black Homelands from the 1950s onwards. These territories, essentially based upon the so called Black Areas identified in the 1913 Black Land Act, were set aside for occupation by members of a particular language group. Originally known as reserves, they were given a measure of self-government by apartheid theorists intent on removing all Africans from white South Africa, and to use the Homelands simply as pools of migrant labour. Four of these areas later chose independence (recognised only by South Africa) while six others became self administering territories within the RSA. The system was scrapped in 1994.
resources and employs 22,000 people.\(^2\) In South Africa, Mondi produces chips, carton board, kraftliner, corrugating papers, newsprint, supercalendered paper as well as bagasse (sugarcane residue) fibre fluting. Some 40% of its production is exported.

Since the late 1980s, Mondi has been following a strategy of acquiring shares in foreign companies through its international arm, Mondi Minorco Paper (MMP), in order to develop a global presence. MMP is a partnership between Anglo American, Minorco and Mondi. The partnership currently has assets of approximately US$1 billion and earnings of around $100 million per annum. MMP owns 49% of Neusiedler, a leading Austrian manufacturer of copy and business papers, and has interests in European packaging and merchandising firms, pulp mills in Eastern Europe as well as a 50% stake in the UK based Aylesford recycled newsprint mill and a 12% stake in Aracruz, the Brazilian pulp manufacturer. Mondi’s stated aim is to concentrate on A4 copy paper, pulp, newsprint and paper packaging.

**Medium-size private sector players**

There is a significant ‘drop’ in scale from the large concerns described above to the more medium-sized players in the forest industry. Nevertheless, there are an estimated 1,800 (primarily white) private commercial growers, who collectively own around 364,000 ha (24% of the total commercial timber resource base) making them collectively a significant group.

This grouping comprises some companies growing timber to support their own processing facilities, including a number of significant players such as:

- Masonite, with an estimated plantation holding of around 18,000 hectares feeding a hardboard mill.

- Hans Merensky Holdings, with a current plantation estate of 11,000 hectares (soon to include 60,000 of state owned plantation acquired through the privatisation process).

Other notable companies include: H.L. Hall & Sons, Thesens and Co., Crocodile Valley (Nelspruit), Yellowstone Timbers (Piet Retief), Rance Timbers (Eastern Cape) and Urbans Industries (George). These companies focus in the main on sawmilling and production of mining timber; they have some dependence on bigger forestry companies, principally SAFCOL as a timber supplier.

**Small or micro growers**

There are nearly 19,000 small or micro growers in South Africa, holding woodlots averaging around two hectares, and totalling around 43,000 hectares.

\(^2\) In January 2001, Mondi entered into a joint venture agreement with the US-based investment management company Global Environment Fund and launched Global Forest Products, a proprietary company growing softwood sawlogs on 67,000 ha and processing these through three sawmills (http://www.globalenvironmentfund.com/GlobalForest.htm)
in extent. Just over twelve thousand of these growers are participating in company-sponsored outgrower schemes, falling under Sappi (Project Grow), Mondi (Kulanathi) and SAWGU, and these growers cover a total recorded planted area of at least 24,000 hectares (see section 5).

Small grower plantings occur mainly in the Zululand region of the KwaZulu-Natal province (two thirds of small growers, only 50% of which belong to schemes), and forty five percent elsewhere in the same province. Less than one percent is located in the Eastern Cape (and these latter have much larger holdings on average).

Private sector associations and industry representation

There are a number of growers and processors associations (and one umbrella association emerging for growers). These cluster around the central Forest Industries Association (FIA) – a loose federation which serves as the central channel of communication from the industry to government and other stakeholders. The links between the main associations are illustrated in Figure 4.

Figure 4 South African forestry private sector associations
As of 2002, Forestry South Africa becomes the umbrella association for the industry’s growers. It effectively merges the operations of the South African Timber Growers Association (SATGA) and the Forest Owners Association (FOA). The South African Wattle Growers Union (SAWGU) remains separate although most of its members also belong to SATGA. Forestry South Africa plans to provide small emerging timber farmers an opportunity to be represented: 50% of the executive committee will represent large growers, 30% will represent medium-sized growers and 20% small farmers. It is to be headquartered in Johannesburg, with an office in Pietermartizburg to service the interests and needs of smaller growers in particular (see section 5).

In addition to these sectoral representation associations, an important institution for the sector is the Forest Industries Training Authority (FITA). This is the forest sector’s version of a Skills Education and Training Authority (SETA), which are in existence or under development for all industrial sectors. FITA draws a levy of 1% of companies’ total payrolls for programmes of skills development and training.

2.3.3 The processing industry

Pulp and Paper Industry

From its earliest beginnings, but particularly during the last three decades, South Africa’s pulp and paper industry has grown rapidly. Since 1970 the industry’s capacity has expanded at an average annual rate of 5.2% – a growth
rate continuously outstripping the 3% per annum increase in world pulp and paper capacity recorded over the same period. Today, capacity is three and a half times its 1970 level.

The industry currently produces around 2.1 million tons of pulp from wood fibre and bagasse (sugar cane residue) of which over 30% is exported. The remaining 1.4 million tons of pulp are combined with 670,000 tons of waste paper to produce just over 2 million tons of paper and board. This ranks South Africa as the 12th largest producer of pulp in the world and 24th in terms of paper and (paper) board production. The industry produces a comprehensive range of pulp, paper and board products and supplies the bulk of local demand.

The value of output of the pulp and paper industry in 2000 was estimated at around R10 billion per annum (US$ 1.4 billion). Exports of pulp, paper and board products R4.4 billion (US$ 600 million) during that year, represented 44% of the total value of production. The industry directly employs 13,000 people in its various pulp and paper mills. In addition to this an estimated 17,000 forestry workers and transport contractors are employed directly by the industry for the growing and supply of fibre raw materials. Details regarding production, imports and exports are presented in Table 2.

### Table 2 South African paper and board production trade, and apparent consumption (1999)

<table>
<thead>
<tr>
<th>Product</th>
<th>Production (tons)</th>
<th>Exports (tons)</th>
<th>Imports (tons)</th>
<th>Apparent Consumption (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Printing and writing papers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uncoated Paper</td>
<td>339 000</td>
<td>105 000</td>
<td>35 000</td>
<td>269 000</td>
</tr>
<tr>
<td>Coated Paper</td>
<td>75 000</td>
<td>4 000</td>
<td>28 000</td>
<td>99 000</td>
</tr>
<tr>
<td>Newsprint</td>
<td>328 000</td>
<td>106 000</td>
<td>5 000</td>
<td>227 000</td>
</tr>
<tr>
<td>SC Mechanicals</td>
<td>92 000</td>
<td>42 000</td>
<td>52 000</td>
<td>102 000</td>
</tr>
<tr>
<td><strong>Packaging papers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linerboard</td>
<td>646 000</td>
<td>287 000</td>
<td>16 000</td>
<td>375 000</td>
</tr>
<tr>
<td>Fluting</td>
<td>213 000</td>
<td>31 000</td>
<td>8 000</td>
<td>190 000</td>
</tr>
<tr>
<td>Other Kraft Paperboard and Fibreboard</td>
<td>203 000</td>
<td>19 000</td>
<td>147 000</td>
<td>331 000</td>
</tr>
<tr>
<td><strong>Tissue</strong></td>
<td>145 000</td>
<td>18 000</td>
<td>5 000</td>
<td>132 000</td>
</tr>
<tr>
<td><strong>Total Paper &amp; Board</strong></td>
<td>2 041 000</td>
<td>612 000</td>
<td>296 000</td>
<td>1 725 000</td>
</tr>
<tr>
<td><strong>Pulp</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paper Pulp</td>
<td>1 642 000</td>
<td>280 000</td>
<td>63 000</td>
<td>1 425 000</td>
</tr>
<tr>
<td>Dissolving Pulp</td>
<td>476 000</td>
<td>448 000</td>
<td>–</td>
<td>28 000</td>
</tr>
<tr>
<td><strong>Total Pulp</strong></td>
<td>2 118 000</td>
<td>728 000</td>
<td>63 000</td>
<td>1 453 000</td>
</tr>
</tbody>
</table>

**Source:** LHA consultants 2001 pers.comm.
South Africa’s pulp and paper exports – as discussed below – make a significant contribution to the national economy, but tend to the lower value added range of pulp and paper products. Most notable perhaps is dissolving pulp, used in the manufacture of viscose fibre. Sappi’s Saiccor mill is the world’s single largest producer of dissolving pulp with an annual capacity of 600,000 tons. Imports largely consist of low volume and specialty papers and board products, that cannot be economically manufactured locally, and high quality hardwood pulp for which South Africa lacks the raw material resources.

The industry is highly concentrated with four main groups of companies namely Mondi, Sappi, Nampak and Kimberly-Clark and a handful of smaller producers. These four groups combined produce almost 98% of national pulp, paper and board production. Mondi and Sappi are both fully integrated being actively involved in the forestry industry as well as pulp and paper production. Nampak and Kimberly-Clark are not linked upstream to fibre production, but are integrated downstream into paper and board product manufacture.

The four main companies operate a total of seventeen pulp, paper and board mills in South Africa. Pulp production is even more concentrated given the high costs of investment in the industry. It is undertaken exclusively by Sappi and Mondi in nine mills (Table 3).

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>MILL</th>
<th>PRODUCT</th>
<th>CAPACITY (tons per annum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MONDI</td>
<td>Merebank</td>
<td>Thermal Mechanical Pulp</td>
<td>150 000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Groundwood Pulp</td>
<td>120 000</td>
</tr>
<tr>
<td></td>
<td>Felixton</td>
<td>RCF (Recycled Fibre)</td>
<td>85 000</td>
</tr>
<tr>
<td></td>
<td>Richards Bay</td>
<td>Bagasse Pulp</td>
<td>70 000</td>
</tr>
<tr>
<td></td>
<td>Piet Retief</td>
<td>Hardwood and Softwood Pulp</td>
<td>575 000</td>
</tr>
<tr>
<td>SAPPI</td>
<td>Enstra</td>
<td>NSSC Pulp</td>
<td>80 000</td>
</tr>
<tr>
<td></td>
<td>Ngodwana</td>
<td>Bleached Hardwood Pulp</td>
<td>72 000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hardwood and Softwood Pulp</td>
<td>388 000</td>
</tr>
<tr>
<td></td>
<td>Stanger</td>
<td>Groundwood Pulp</td>
<td>100 000</td>
</tr>
<tr>
<td></td>
<td>Tugela</td>
<td>Bleached Bagasse Pulp</td>
<td>55 000</td>
</tr>
<tr>
<td></td>
<td>Saiccor</td>
<td>Bleached Softwood</td>
<td>220 000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kraft Pulp</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hardwood NSSC Pulp</td>
<td>110 000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dissolving Pulp</td>
<td>600 000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>–</td>
<td>All Grades</td>
<td>2 625 000</td>
</tr>
</tbody>
</table>

Source: LHA consultants 2001 pers.comm.
All these mills have primary pulp production capacity. They take in raw material such as pulp logs, woodchips and in two instances bagasse. With the exception of Saiccor all the mills utilise a large percentage of their pulp output to produce a range of paper and board products. Saiccor is the only mill that produces only pulp and almost the total output of this facility is exported.

In terms of paper and board products, while the industry has slightly more participants than pulp manufacture, capacity remains essentially concentrated in a limited number of hands. Table 4 illustrates current capacity and main products produced.

### Table 4  South African paper and board production capacity

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>MILL</th>
<th>PRODUCT</th>
<th>CAPACITY (tons per annum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIMBERLY-CLARK</td>
<td>Enstra</td>
<td>Crepe Tissue</td>
<td>50 000</td>
</tr>
<tr>
<td>MONDI</td>
<td>Merebank</td>
<td>Newsprint and Telephone Directory</td>
<td>230 000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supercalender Mechanical Papers</td>
<td>120 000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Uncoated Fine Papers</td>
<td>210 000</td>
</tr>
<tr>
<td></td>
<td>Felixton</td>
<td>Fluting Medium</td>
<td>100 000</td>
</tr>
<tr>
<td></td>
<td>Richards Bay</td>
<td>White Top &amp; Unbleached Kraft Liner</td>
<td>235 000</td>
</tr>
<tr>
<td></td>
<td>Piet Retief</td>
<td>Unbleached Kraft liner, Testliner and Fluting</td>
<td>126 000</td>
</tr>
<tr>
<td></td>
<td>Springs</td>
<td>Paperboard</td>
<td>130 000</td>
</tr>
<tr>
<td>NAMPAK</td>
<td>Bellville</td>
<td>Crepe and Flat Tissue</td>
<td>32 000</td>
</tr>
<tr>
<td></td>
<td>Kliprivier</td>
<td>Crepe Tissue</td>
<td>24 000</td>
</tr>
<tr>
<td></td>
<td>Rosslyn</td>
<td>Fluting and Test Liner</td>
<td>50 000</td>
</tr>
<tr>
<td></td>
<td>Riverview</td>
<td>Crepe and Flat Tissue</td>
<td>10 000</td>
</tr>
<tr>
<td>SAPPI</td>
<td>Adamas</td>
<td>Uncoated, Industrial &amp; Packaging Paper</td>
<td>36 000</td>
</tr>
<tr>
<td></td>
<td>Cape Kraft</td>
<td>Test Liner, Fluting and Ceiling Board Paper</td>
<td>55 000</td>
</tr>
<tr>
<td></td>
<td>Enstra</td>
<td>Uncoated Printing and Writing Paper</td>
<td>163 000</td>
</tr>
<tr>
<td></td>
<td>Ngodwana</td>
<td>Kraft Liner and White Top Liner</td>
<td>235 000</td>
</tr>
<tr>
<td></td>
<td>Stanger</td>
<td>Newsprint</td>
<td>140 000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coated Fine Paper</td>
<td>62 000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tissue paper</td>
<td>29 000</td>
</tr>
<tr>
<td></td>
<td>Tugela</td>
<td>Kraft Liner, Fluting and other Kraft</td>
<td>377 000</td>
</tr>
<tr>
<td>Other</td>
<td>*</td>
<td>Crepe and Flat Tissue</td>
<td>45 000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>–</td>
<td>All Grades</td>
<td>2 459 000</td>
</tr>
</tbody>
</table>

*Note* Swazi Paper, Vanessa, Bophuthatswana Tissue, Paarl Paper and Crystal Paper

*Source:* LHA consultants 2001 pers.comm.
Boards and panels

South Africa currently produces an estimated 800,000 m³ of a range of board products described in Table 5. These products are used in the furniture, joinery and packaging sectors, the building industry (consisting of the cladding, partitioning and ceiling sectors) and the home-improvement or DIY market.

South Africa is essentially self-sufficient with regard to board product. Available information indicates that imports and exports of board products are limited and more or less balanced, with total imports less than 5% of estimated national consumption.

As shown in Table 6, a number of companies are active in the board manufacturing sector, but three of them – Bisonboard, Sonae and Masonite – are dominant comprising 88% of production.

Most companies are strongly integrated with their raw material suppliers as well as their marketing channels, as shown in Table 7.

### Table 5 South African board and panel production

<table>
<thead>
<tr>
<th>Product</th>
<th>Quantity (000 m³)</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chip/particle board</td>
<td>650</td>
<td>74</td>
</tr>
<tr>
<td>Hard/fibreboard</td>
<td>137</td>
<td>16</td>
</tr>
<tr>
<td>Plywood</td>
<td>33</td>
<td>4</td>
</tr>
<tr>
<td>Medium density fibreboard (MDF)</td>
<td>22</td>
<td>3</td>
</tr>
<tr>
<td>Ultraboard</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>Blockboard</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>880</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Source: LHA consultants 2001 pers.comm.*

### Table 6 South African board and panel industry structure

<table>
<thead>
<tr>
<th>Company</th>
<th>Most important shareholders</th>
<th>Annual production (000 m³)</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisonbord</td>
<td>Mondi, PG Bison</td>
<td>400</td>
<td>46</td>
</tr>
<tr>
<td>Sonae Novobord1)</td>
<td>Sonae Portugal</td>
<td>230</td>
<td>26</td>
</tr>
<tr>
<td>Masonite</td>
<td>Masonite USA</td>
<td>137</td>
<td>16</td>
</tr>
<tr>
<td>Mondi Timber Products</td>
<td>Mondi</td>
<td>24</td>
<td>3</td>
</tr>
<tr>
<td>Chipboard Industries</td>
<td>Italian Mother Co.</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>Ultraboard</td>
<td>HL&amp;H, Rembrandt</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>Uniply</td>
<td>Thesens, Barlows</td>
<td>49</td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>880</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Note: 1) Previously Sappi Novobord  Source: LHA consultants 2001 pers.comm.*
Sawmilling

South Africa’s saw mills process both hardwood (predominantly eucalypts) and more significantly softwood into a range of sawn timber products. The industry currently utilises around 4.36 million m$^3$ of logs, which at an average industry yield of 43% provide an output of around 1.870 million m$^3$ of timber. A breakdown of sawn timber by major end-use application is presented schematically in Figure 5.

Figure 5 Supply and demand of locally produced sawn timber 1) in South Africa (1999)

Table 7 Integration in the South African board and panel industry

<table>
<thead>
<tr>
<th>Backward Integration (Raw materials)</th>
<th>Board Product Manufacturer</th>
<th>Forward integration (Marketing)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mondi</td>
<td>Bisonbord</td>
<td>PG Wood</td>
</tr>
<tr>
<td>Various sources</td>
<td>Sonae Novobord</td>
<td>Novo Homes, imports</td>
</tr>
<tr>
<td>Own Plantations</td>
<td>Chipboard Industries</td>
<td>None</td>
</tr>
<tr>
<td>Own Plantations</td>
<td>Masonite</td>
<td>Ezebilt</td>
</tr>
<tr>
<td>Saw Mills/Plantations</td>
<td>Mondi Timbers</td>
<td>Low-cost Housing Division</td>
</tr>
<tr>
<td>Thesen’s Saw Mills</td>
<td>Uniply</td>
<td>Afcol</td>
</tr>
<tr>
<td>Transvaal Sugar Limited</td>
<td>Ultrabord</td>
<td></td>
</tr>
</tbody>
</table>

Source: LHA consultants 2001 pers.comm.

Note 1) The above excludes imported sawn timber. Imported sawn hardwoods are used for:
- Joinery 120 000m$^3$ pa
- Furniture 60 000m$^3$ pa
- Mouldings 30 000m$^3$ pa
- Other 10 000m$^3$ pa
About 60% of sawn timber production is further processed into a range of final products; 4% of sawn timber production is exported with the balance finding application as structural timber in the building and construction industry. Industrial timber is supplied to downstream manufacturers which produce furniture, pallets, packaging materials and value added building materials. Structural timber is mostly supplied to building merchants, which supply the builders’ market. Some of the major merchant groups add further value by producing pre-fabricated roof trusses, mouldings, laminated products, etc.

In terms of softwood sawmilling, the average log intake in the late 1990s amounted to about 4.1 million m³ per annum. Softwood sawlogs supply is significantly concentrated with government remaining a major supplier (Figure 6).

**Figure 6 Softwood sawlog supply in South Africa**

The output of the local softwood sawmilling industry is estimated at 1.75 million m³ per annum from an estimated 330 active sawmillers. Sawmills range in size from large operations with a log intake in excess of 200,000 m³ p.a. to small-scale mills (including numerous small so called ‘bushmills’) with an intake of less than 5,000 m³ p.a.

The local hardwood sawn timber industry consumes an average of 260,000 m³ of hardwood logs to produce a range of sawn hardwood products. Local production of hardwood sawn timber is estimated at 120,000 m³ of which about half is used in mining applications. The market is dominated by Hans Merensky Holdings (HMH) which produces about 70% of all hardwood timber. Mondi is the second largest supplier with an estimated market share of 20%. The bulk of hardwoods used for the furniture and joinery industries is imported with total imports amounting to about 220,000 m³ per annum.

In overall terms the sawmilling industry has many more participants than the more capital intensive pulp and board industries where the scale of necessary
investment acts as an effective barrier to entry. Capacity however, remains significantly concentrated: while small-scale mills account for almost 65% of the total number of establishments, they only process about 10% of the sawlogs. In contrast, the ten largest sawmills account for an estimated 31% of total production throughput (Table 8). As a consequence market share is also concentrated (Figure 7).

Table 8 South Africa’s sawmills

<table>
<thead>
<tr>
<th>Log intake (m³ pa)</th>
<th>Number of mills</th>
<th>Estimated total log intake (m³ pa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5000</td>
<td>220</td>
<td>450 000</td>
</tr>
<tr>
<td>5 000 – 20 000</td>
<td>50</td>
<td>610 000</td>
</tr>
<tr>
<td>20 000 – 50 000</td>
<td>45</td>
<td>1 050 000</td>
</tr>
<tr>
<td>50 000 – 100 000</td>
<td>15</td>
<td>900 000</td>
</tr>
<tr>
<td>&gt; 100 000</td>
<td>10</td>
<td>1 350 000</td>
</tr>
<tr>
<td>Total</td>
<td>340</td>
<td>4 360 000</td>
</tr>
</tbody>
</table>

Source: LHA consultants 2001 pers.comm.

Figure 7 Estimated market shares of South Africa’s sawmilling (late 1990’s)

Over the past decades there has been a continuous shift away from structural applications to value adding applications for sawn timber. It should be noted, however, that some of the manufactured products such as ceilings and flooring, shelving and doors finally find application in the building sector. The building and construction sector therefore accounts for about 50% of the final demand for all softwood sawn timber produced in South Africa.
The sawmilling sector has remained comparatively static showing very little growth over the past 20 to 30 years. Key in this regard has been the relatively slow growth in demand from traditional applications (building and construction and mining) combined with active substitution in most of the markets where sawn timber used to dominate such as in certain building applications, packaging applications, mining supports etc. This tends to further restrict the growth potential for sawn timber. Based on historic trends and likely future developments, the longer term growth in demand for sawn timber is forecast to be between 1% and 2% per annum – thus it is likely to remain a low growth market.

2.3.4 Recent trends in doing business – outsourcing fibre production and contracting out

There is a clear trend within the large companies to focus on their core business – in the main, producing pulp and turning it into paper products – and to withdraw from activities that are not essential or peripheral (but nonetheless still vital) to this core. This is important in two key areas: outsourcing of wood fibre and contracting out of intermediate forest services. In both areas, significant changes are taking place in the way companies are doing their business, in response to changing circumstances.

Outsourcing of wood fibre for processing

Large processing companies – particularly those manufacturing pulp and paper – simply require wood fibre to process into value added products. It is essentially immaterial to that business process whether they grow it for themselves, or contract others to produce it on their behalf. While ensuring adequate security of throughput into capital intensive mills, which must be run at high levels of utilization to return profits is significant, this needs to be seen in the context of the costs and risks to the companies of maintaining large land holdings.

Recent changes in legislation and policy described below, along with the general international trend to concentrate on core business, provide an increasingly powerful rationale for companies to outsource the timber they process rather than to hold land and grow it themselves. The possible imposition of a land tax through an upcoming Act governing rates on properties, and concerns regarding the processes of land claims and redistribution of land through the national land reform programme, represent serious concerns to companies. In addition, holding extensive areas of land and forest involves tying up large amounts of capital in the low value-added end of the process.

The balance of these different forces in South Africa appears to be changing. In South Africa, both large pulp and paper companies are increasingly utilising wood fibre sourced through contractor growers – both large and small. Although precise figures are difficult to determine industry’s own figures indicate that Mondi supplies about 60% of their own requirements in-house and Sappi about 50% of their own requirements with the balance being
'bought-in'. It is interesting to note however that so far at least, no companies have yet dispensed of any of their land holdings.

**Contracting out of forestry functions**

Contracting out aspects of forestry operations has become a significant feature within South Africa’s forest industry, especially over the past ten years. Contractors are now engaged by companies in transport operations, harvesting and, more recently, plantation maintenance. There are currently between 160 to 200 forestry contractors in South Africa employing between 25,000 and 35,000 workers of the approximately 60,000 people directly employed in the forest industry.

From the companies’ perspective the move to contracting out reflects a number of opportunities, including:

- Cost and efficiency savings – on average contractors use about 75% of the labour complement used by the corporate forestry sector per unit area worked. Further to this they employ more lower-skilled people and pay lower wages and salaries than those paid by the corporate sector; on average the contracting sector pays about 60% the rate paid by the corporate sector.
- Decreased exposure to labour unions.
- Reduced direct exposure to labour legislation.
- Reduced costs of some of the services associated with employment such as schools, crèches, clinics and the provision of utilities (water and electricity). All this is expensive, but companies are obliged to continue their worker support programmes in terms of occupational health requirement and other legislation.

The use of contractors by the different companies is however unequal. Sappi has embraced outsourcing in many of its operations, whilst Mondi has gone some way, but appears to have halted for the time being. SAFCOL has refrained from following the trend, given that the prospect of state forest restructuring caused this sort of medium-to long-term business strategy to be put on hold.

Contracting out offers an important opportunity for greater participation in the industry, particularly by entrepreneurs from the previously disadvantaged community a significant proportion of whom are contractors. While this is a welcome trend, particularly in terms of increasing industry representivity, the inescapable fact is that many people employed by contracting firms usually earn less than their counterparts directly employed by the big companies, although there are contractors who pay better than the companies. The majority of contractor employees are non-unionised. Poor conditions in the contracting industry are seen by many as a concern, and one which has, for example, emerged as a consideration in certification processes (see section 4).
In the future, the use of contractors is likely to increase. It is highly unlikely that trend will be reversed and that these services will again be provided in-house. Large companies may place whole districts under ‘management contractors’, who will in turn hire smaller contractors.

2.4 The forest industry’s contribution to South Africa’s economy

South Africa’s forest products industries – particularly its pulp and paper component – has grown rapidly over recent years, based largely on South Africa’s ability to produce wood fibre at competitive prices. From an effective base of zero in the 1940s, the pulp and paper industry now produces around 2.8 million tons of the global pulp production of 171.5 million tons (i.e. 1.63%), 2 millions tons of paper (0.76% of world production) and 1.3 million m$^3$ of sawn timber (0.3% of world production). Again on the basis of its rapidly developing pulp and paper sector, South Africa has made the transition from a net importer to a net exporter of forest products with an industry of international size and competitiveness.

In terms of its contribution to South Africa’s economy, with a GDP of around US$ 110 billion, the industry currently generates in excess of US$1 billion, and in overall terms:
- meets about 90% of domestic demand for forest products
- contributes around 1.5% to GDP
- contributes approximately 5.5% to the manufacturing sector’s contribution to GDP.
- provides 4.7% of total export earnings and about 10% of manufactured exports
- employs approximately 110,000 people.

The major exports of South African forest products include:
- pulp, especially dissolving pulp
- packaging, paper and board
- printing and writing papers, especially newsprint
- wood chips; an estimated 1,5 million tons is exported annually.

<table>
<thead>
<tr>
<th>Table 9  South African imports and exports of forest products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
</tr>
<tr>
<td>Wood and paper products</td>
</tr>
<tr>
<td>Pulp</td>
</tr>
<tr>
<td>Paper and paperboard</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Total average per annum</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Exports of other forest products such as sawn timber, manufactured items from sawn timber and wood based panel products are small, accounting for less than 10% of total exports. Table 9 provides average import/export figures for the last two years as reported by the Department of Customs and Excise.

2.5 The developing policy context of the forest industry in South Africa

Any meaningful review of important policy changes influencing the forest sector cannot simply be confined to forest specific policy. Many other policies outside of the narrow definition of the forest sector have a potent and maybe more influential impact upon the industry. This is true for some broad national macro-policies and some sectoral policies for land, water resources, environmental management and labour. Following a discussion of forest policy, each of these other important policy areas is considered below.

2.5.1 Forest policy

Like all sectors in South Africa, democratisation following the ending of Apartheid has required a fundamental reinterpretation and redefinition of the sector’s role through the preparation of a new forest policy. Much of the debate surrounding policy development in South Africa has inevitably reflected domestic considerations. However, many of the major themes and principles providing the policy’s overall direction are common to other countries and new directions in forest policy. In particular, those relating to, and resulting from, a widening of the forest policy remit away from the narrow concept of sustained yield of wood based products derived from the industrial forest sector, and towards a more embracing concept of managing all forests for the sustained yield of multiple goods and services for the benefit of multiple stakeholders.

In a society such as South Africa where social and, to some extent, environmental and resource use issues, consistently received scant and certainly secondary consideration relative to meeting the economic objectives of a minority, the development of a new forest policy along these lines is particularly significant. A clear coincidence exists between changing international perspectives on forest policy and South Africa’s need to develop a policy for its forest sector, which embraces far-reaching economic and political changes.


The policy’s overall objective is to promote a thriving and sustainable forest sector. This definition of policy encompasses all components of the forest sector, not just commercial industrial forestry. Achieving it requires a fundamental
change in the way that forests are viewed, valued and managed in the national interest. The new policy has a very clear emphasis on redefining the respective roles and obligations of key sector players – specifically redefining the role of the private and public sectors and their relationship to each other.

In terms of the forest industry a number of objectives were set, of which the following are particularly relevant to this discussion, specifically that government would:

- Seek to encourage the industry’s further development – within the context of wider national policies and objectives – so increasing the industry’s contribution to the national economy for the benefit of all South Africans.
- Seek to ensure that the industry moves rapidly towards sustainable forest management to ensure its long-term viability.
- Seek to encourage increased competition within the industry and the development of further value addition to South Africa’s raw material base.
- Identify means to widen the representivity of participation in the forest industry in which ownership, as noted above, remains concentrated in a limited number of hands.
- Withdraw from the ownership and management of plantation forests under its control so allowing government to assume a smaller but vital role as a regulator rather than a participant in the forest industry. As will be seen below this provides government a very powerful tool with which to shape the forest industry.

In pursuit of these objectives Government has introduced new forest sector legislation – the National Forests Act – which has as its central purpose the sustainable and equitable development of South Africa’s forests for the national benefit. Sustainable forest management (SFM) lies at the centre of this legislation, which provides for the identification of a set of criteria and indicators of SFM and the establishment of minimum management standards based upon these.

2.5.2 Macro-policy
The main macro-policy framework relevant to the role of the forest sector in the development of South Africa can be highlighted through the following five elements:

- The Constitution has a clear commitment to goals of achieving equity, redress and increasing access to wealth by previously disadvantaged communities.
- The Reconstruction and Development Programme (RDP) commits government to meeting basic needs and alleviating poverty within the context of promoting sustainable development.
• The *Growth, Equity and Redistribution Strategy (GEAR)* provides the macro-economic implementation framework within which policies like the RDP now operate. It is premised on the need to reduce debt repayments, grow the economy (by creating jobs and increasing investments) and use surplus revenue for redistribution. It argues that redistribution without growth is unsustainable, and therefore cannot be pursued without aggressively addressing the issues of a stagnant economy. However, the 2001 Budget speech acknowledged that GEAR had not met its intended job creation or investment targets and that rural communities had been disadvantaged by the urban bias of GEAR initiatives. The Rural Development Framework was developed to address these shortfalls.

• The *Rural Development Strategy*, developed on the base provided by the *Rural Development Framework*, is directed to the provision of infrastructure and services, and to the creation of an enabling framework for the expansion of rural livelihoods with emphasis on the role of local government. The RDS defines the role of government in supporting rural development, showing where inter-sectoral planning and co-ordination are needed, and describing the assistance which can be made available to rural people.

• The *Local Government: Municipal Structures Act (1998)* and *Municipal Systems Act (2000)* allocate responsibilities to local governments follow an Integrated Development Plan process. Municipalities are the only institutions of government with the potential ability to engage in development and management of woodlands. As has been described in section 2.1, these woodlands cover a much larger area than that under plantation forestry, and represent a key livelihoods resource for large numbers of poor people, yet to date have not been the focus of much attention in the forest sector.

Through such macro-policy directives, the forest sector is called upon both to play its part in sustainable development at national level, and to contribute to better living conditions and economic opportunity for previously disadvantaged sections of society.

2.5.3 Land policy

Formal recognition and reversal of past wrongs are central to South Africa’s new democracy and are enshrined in its Constitution. This is perhaps most significant in respect of land issues, where past policies and actions epitomised the abuse of legal power to alienate intrinsic rights, so reinforcing poverty and inequality. South Africa’s democratic land policy (Government of South Africa, 1997), supported by a body of legislation, consequently requires that where land acquisition can be shown to have been initiated, or effected through discriminatory legislation, or other unjust means, such land is subject to possible restitution. In addition, where land is held in trust by the state (as in the case of the former Homelands) underlying, even if unidentified land rights, are deemed to exist and any long-term occupants must be treated in law as its owners pending the eventual transfer of the land and title to them. In both
cases, legislation introduced to further protect rights, prohibits the sale or transfer of land where claims are possible, or pending, until that claim has been adequately researched and either validated or rejected by an independent Land Claims Commission.

The objectives of the three components of the land reform programme are:

- **Land Redistribution**: poor and disadvantaged people assisted to buy land with the help of a Settlement/Land Acquisition Grant.

- **Land Restitution**: returning land, or compensating victims for land rights, lost because of racially discriminatory laws, passed since 19 June 1913.

- **Land Tenure Reform**: aims to bring all people occupying land under a unitary legally validated system of landholding. It will provide for secure forms of land tenure and help resolve tenure disputes.

The Integrated Programme for Land Redistribution and Agricultural Development Policy focuses on the establishment of commercial farmers of various scales. The objectives of the programme are largely to increase access to agricultural land by previously disadvantaged people, and to facilitate transfer of ownership of 15m ha in five years and approximately 30% of the country’s agricultural land over the duration of the programme. It is anticipated that this reform initiative will improve nutrition and incomes of the rural poor; overcome the legacy of past, and facilitate structural change by assisting previously-disadvantaged people to establish small and medium-size farms. However, the budget allocated to the programme may be insufficient to have major impact. Furthermore, because beneficiaries are required to make a cash contribution to access the Grants, this presents an obstacle to poor rural communities who have little access to credit facilities.

The land reform programme affords both opportunities and threats to the commercial forest sector. Opportunities exist in that companies interested in investing in forestry can approach communities with land title. Potential threats to companies stem from the complicated land restitution claims process. Capacity within the national Department of Land Affairs to
process land claims is limited. As an example, the Board of Mondi agreed
to an expropriation of 7,000 ha of land to be given to labour tenants in one
area, but the process of land transfer from owner to claimant has been slow
to get underway.

2.5.4 Water resources policy

South Africa is a water-scarce country, and the government estimates that the
limits of economically usable, land-based fresh water resources will be reached
in the first half of this century. In response, a national water and sanitation
programme is being developed and the government is restructuring water
charges and establishing catchment management authorities. Addressing
inequality is a major objective – ‘water security for all’ is the cry.

This drive to improved and equitable water management reached a milestone in
1998 with the passing of the National Water Act (36 of 1998), arguably the
most important piece of environmental legislation to have been developed in
South Africa. In terms of the Act, the Government has overall responsibility for,
and authority over, water resource management, including the equitable
allocation and beneficial use of water in the public interest. The Act guides
responsible authorities in the exercise of their discretion to issue, and to attach
conditions to, general authorisations and water use licences. Forestry falls under
the requirements of the Act, in that companies have to obtain registration as
water users and apply for water use licences for new afforestation development
(existing plantations do not necessarily have to be licensed in this way provided
they were established legally).

The licensing system largely revolves around the projected stream-flow
reduction impacts of new forests. New afforestation above ten hectares can only
occur after a license for stream-flow reduction activities has been granted by
DWAF. The granting of the license is decided by a panel in each province made
up of the department of environmental affairs and conservation representatives,
DWAF representatives and the forestry industry.

Understanding how different land uses impact on water resources is vital, and
has received considerable attention. Plantation forestry consumes more water
than the natural vegetation it replaces – a series of long term studies of
afforested whole catchments in South Africa shows this. The total amount of
water used by the forestry industry is approximately 1.4 billion m³ annually
which is about 7% of total water use in South Africa and about twice that of
the sugar-cane industry.

The main water management intervention practised in the forestry sector is to
leave unplanted buffer zones along rivers, wetlands and other water bodies – to
reduce the risk of soil erosion close to stream channels and to avoid any increase
in water use by riparian vegetation. However, alien species – chiefly wattles and
pines – often spread rapidly into these riparian areas and it has been
demonstrated that these self-established riparian trees can have significant effects
on stream flow. The government has pursued a ‘Working for Water’ programme to remove many alien trees, citing the economic and socio-economic (job creation) benefits of the programme in addition to the benefits for water resources. Of course, from a livelihoods perspective, some poor people may derive greater value from, or be in greater need of access to, forest products than water. Getting the right balance between forest products and water resources, and between different stakeholder groups, is thus a major challenge.

Catchment management authorities are beginning to be set up, and will be responsible for allocating water under their purview to three categories with different purposes: strategic reserve, basic human needs and trade-able. Trade-able water is to be allocated to ‘most beneficial use’ and a key challenge is to develop systems that define and negotiate this within each catchment (and systems for making the resulting changes, e.g. re-allocation away from irrigated sugar cane towards rain fed agriculture, etc). Equity considerations and the precedents and legacy of previous distribution patterns will be key in this process.

2.5.5 Environmental policy

South Africa is signatory to a number of multilateral environmental agreements which have major implications for commercial forestry. These include the Convention on Biological Diversity, the Wetlands Convention (Ramsar) and CITES. Drawing on elements of these, the White Paper on the Conservation and Sustainable use of South Africa’s Biological Diversity (July 1997) issued by the Department of Environmental Affairs and Tourism (DEAT) emphasises strict management of invasive alien plant species, and minimisation of impacts on biodiversity caused by various land use developments.

The National Environmental Management Act (107 of 1998) paves the way for the preparation of a national environmental management system. Sound environmental management is required to place people and their needs at the forefront of its concern, and serve their physical, developmental, cultural and social interests equitably. The Act requires that environmental impacts are considered before any development is undertaken, and DEAT have developed protocols and regulations pertaining to environmental impact assessments and other related checks.

The Conservation of Agricultural Resources Act, contains various provisions affecting the forestry sector. Regulations to the Act specify the weed status of various alien species and actions that must be taken for each class of weed. All plantation forestry species are declared weeds under this Act and various measures are to be taken to ensure that these species do not spread and contaminate adjoining natural areas. It is mandatory, by virtue of their declared status, to remove a number of weeds that occur in the indigenous forests and woodlands, although the magnitude of the task of doing so is beyond the budgetary resources of all the management authorities currently managing forests.
2.5.6 Labour policy

Labour issues are critically important concerns in the forest industry, and have been a major factor shaping the process of privatisation of publicly owned forests (see section 3). Since 1994 there has been a major revision of State policies and legislation designed to promote equity in labour issues. There are currently six relevant Acts – the majority of which have been passed since 1994, governing labour relations and practices in the Industry. These include the Labour Relations Act, the Basic Conditions of Employment Act, and the Employment Equity Act. In addition there are four new Acts which apply to tenure rights of employees and residents on forest land. These include the Labour Tenants Act and Extension of Security of Tenure Act which allow some workers to claim tenure on privately held forest land.

Some of this recent legislation – aimed at enhancing workers’ rights and establishing the security of tenure of both farm and plantation workers – seems to have had the unanticipated consequence of hastening the rush of both farmers and plantation forest management towards the outsourcing of labour to private and competing contractors (see section 2.3.4). Policy and law is yet to gain effective influence on contractors. Often these contractors do not have written employment contracts, they may be in breach of statutes on conditions of employment, flout health and safety standards and fail to make required payments to the Workmen’s Compensation Commissioner and the Unemployment Insurance Fund. The stresses and strains of contracting-out in the forest industry are returned to in our discussions of the impacts of certification (section 4) and company-community partnerships (section 5).

2.6 Summary

From a comparatively small beginning, South Africa’s forest industry has grown rapidly through a number of distinctive but connected phases into an internationally significant industry of great importance to the national economy. The historical development of the industry reveals a number of key themes central to understanding the context of the industry and the role of private sector instruments in achieving better forestry. Three themes stand out: Firstly, the influential, but changing role of the state over time. The state has been central to the development of South Africa’s forest industry. In response to a perceived national interest, the state filled the gap left when private investors were unwilling to develop plantation resources. Over time, as the private sector proved more willing and able to assume the role, the state has become a less significant player in relative terms. There is little doubt though that continuous support to the industry, either indirectly through subsided raw material prices, or more directly through the provision of investment incentives certainly enabled a fledgling industry to develop.

Secondly, there has been recent, but rapid, development of pulp and paper as a dynamic component of the industry. Thirdly, there has been a related rise in importance of international markets and international trends to South Africa’s
industry. Over a very short period of time, South Africa has emerged as an international player. While not a large player in absolute terms, it is however relatively more dependent upon international markets than other larger producers, and is therefore more vulnerable to changes in prices and market sentiment.

Today, from South Africa’s 1.5 million ha of plantations some 19 million m$^3$ of roundwood is produced each year, half of it pulpwood, making the country the 12$^{th}$ largest producer of pulp in the world. Sappi and Mondi – both global industry leaders in their respective paper product sectors – together own 47% of the plantations, the State owns 30%, smaller private enterprise and individuals own 22%, and the remaining 1% is shared by some 19,000 small or micro-growers. This high concentration reflects a process of vertical integration of the big companies, with the pulp and paper industry dominated by four main groups – Mondi, Sappi, Nampak and Kimberly – who produce 98% of the country’s pulp, paper and board. The sawmilling industry is less concentrated although the five largest owners – Mondi, HansMerensky, Sappi, Safcol and Yorkcor (each with several mills) – account for 70% of total production (1.87 million m$^3$ per annum), whilst some 220 small-scale mills account for only 10% of sawlogs. The sawn timber market is likely to remain low growth.

Recent changes in legislation and policy, along with the general international trend to concentrate on core business, provide the incentive for companies to outsource the timber they process rather than to hold land and grow it themselves. Contracting out offers an important opportunity for greater participation in the industry, particularly by entrepreneurs from the previously disadvantaged community. However, poor conditions in the contracting industry are a concern, especially since this trend looks likely to increase.

Forest sector policy seeks to encourage the management of forests for the sustained yield of multiple goods and services for the benefit of multiple stakeholders. Macro policy in South Africa generally backs this up – putting a major emphasis on sustainable development and improving the lives and wealth creation opportunities for previously disadvantaged sections of society. Other key sectoral policy influences on forestry include water policy which will put increasing checks on the spread of plantation forestry, and challenges to such forestry as an appropriate land use in some existing plantation areas. Land reform policy, although rather slow to gather momentum, presents opportunities for new players and also presents some threats to existing plantation ownership through the land restitution process.

In conclusion, the next few years will bring a period of considerable change in private sector forestry in South Africa – with the big industry players increasingly focused on the imperatives of the global economy, while the newer, smaller players face stiff challenges and competition at home.