



2007-2009

State of the forests report



agriculture,
forestry & fisheries

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DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES

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Message from the Minister

It is with a sense of pride that I present to Parliament and the people of South Africa this second edition of the State of the Forests report. The report so presented is in compliance with section 6(3) of the National Forests Act, 1998 (Act No. 84 of 1998). The legislation requires that a report on forestry facts and trends and any other matter of national interest be compiled and communicated to Parliament and the general public. The first edition of the *State of the forests* report covering the years 2004 to 2006 was published in 2007.

The reader will note that the new administration created twelve priority outcomes with measurable outputs and “optimal activities” to expedite and enhance government performance. It is against these outcomes that the performance of government will be monitored and evaluated. It is important that while reflecting on our forestry achievements for the past three years we also focus on our current and medium-term framework objectives and outcomes.

The departments contributes several outcomes of government, including skills development, but there are three outcomes that are particularly relevant to this department in relation to our forestry mandate, namely, Outcome 4: “*Decent employment through inclusive economic growth*”; Outcome 7: “*Vibrant, equitable, sustainable rural communities contributing towards food security for all*” and Outcome 10: “*Protect and enhance our environmental assets and natural resources*”.

Firstly, the forest timber growers subsector currently offers direct employment to about 77 000 people and about 30 000 additional indirect jobs. We will continue pushing back the frontiers of poverty, thereby contributing towards the government's overall outcome of “Creating decent employment and economic development” through the deployment of our forestry growth, development and transformation instrument, the Forest Sector Broad-Based Black Economic Empowerment Charter. A Charter Council has since been established and a Programme Manager for the Forest Charter Implementation Unit appointed to roll out the plan for transforming and growing the sector. Integral to the Charter, it is anticipated that 15 000 decent jobs will be created when the potential virgin land of 100 000 ha identified in the provinces of Eastern Cape and KwaZulu-Natal is afforested in the next ten years.

Implementation of the Charter will gradually deliver the necessary skills to emerging forestry enterprises through our strategic partners such as the Institutions of Higher Learning and the relevant Sector Education and Training Authorities. Afforestation is crucial for the creation of the more than 15 000 jobs mentioned and that are envisaged in the Eastern Cape and Kwazulu-Natal. To this end, my department has developed a strategy on afforestation and established a task team to oversee the processes to expedite the afforestation processes.



Tina Joemat-Pettersson (MP)

MINISTER OF AGRICULTURE, FORESTRY AND FISHERIES

Secondly, the next outcome relevant to us concerns the creation of “Vibrant, equitable, sustainable rural communities contributing towards food security for all”. On this front, the department will continue to support the formation and management of SMMEs to ensure their sustainability. I am proud to announce that the past two to three years have seen many forestry enterprise development projects benefiting from our interventions across the country. We will continue to seek to improve on this achievement. The continuous planting of trees through the department-directed One Million Trees project and the annual Arbor Week campaign fit into the mitigation strategies intended to reduce the effects of climate change, a new global phenomenon posing a threat to our developmental aspirations, including food security. The majority of our small forestry enterprises lack the necessary resources and knowledge to access both the domestic and export markets; and downstream processing activities. As a result, they technically remain trapped in the second economy. I am also proud to announce that since the restructuring of certain categories of state-owned commercial plantations, notably in the Eastern Cape and KwaZulu-Natal, the department has collected, over R200 million in revenues from lease rentals, which will be equitably disbursed to relevant beneficiaries as soon as the Department of Rural Development and Land Reform has concluded the process of verifying legitimate beneficiaries.

Thirdly, the need to “Protect and enhance our environmental assets and natural resources” because of the indispensable role our natural resources played and continue to play in improving the lives of our people, particularly the rural poor, cannot be over-emphasised. We will be moving faster in implementing forest protection- orientated strategies we developed and concluded recently. These include, amongst others the National Forest Protection Strategy aimed at combating the destruction of our forests through pests, diseases and fires; the Climate Change Strategy, which focuses on adaptation and mitigation approaches and the Fuelwood Strategy that deals with energy issues.

The Kathu forest, one of the only two unique camel thorns globally occurring in the Northern Cape and Namibia has become the first and the only woodland type of forest to date to be protected under the National Forests Act. My department will continue to seek and encourage protection of more forests and in so doing contributing towards meeting the obligations of the Millennium Development Goals.

Finally, we expect that reader will appreciate that, given the history of our country and the circumstances under which forestry operates, more work still needs to be done to ensure that the industry continues to contribute to the socio-economic upliftment of our people, particularly the rural poor. While the report serves to provide information on the current status of the forest resources and the trends thereof, I trust that it will also stimulate creative thinking among stakeholders and strategic partners to help steer the industry towards the achievement of the developmental agenda of our country, particularly towards government’s mission of creating a better life for all people of South Africa, the SADC region and the entire African continent.



Ms Tina Joemat-Pettersson, MP

MINISTER OF AGRICULTURE, FORESTRY AND FISHERIES



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Acronyms

AFIS	Advanced Fire Information System	MoU	memorandum of understanding
AFWC	African Forestry and Wildlife Commission	MTO	Mountain to Ocean
AsgiSA	Accelerated and Shared Growth Initiative for South Africa	MTSF	Medium Term Strategic Framework
BBBEE	Broad-Based Black Economic Empowerment	NACOR	National Committee for Nature Conservation (defunct)
BEE	Black Economic Empowerment	NCI	National Certification Initiative
CARA	Conservation of Agricultural Resources Act	NCT	Natal Cooperative Timber
CDM	Clean Development Mechanism	NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998)
C&I	criteria and indicators	NEPAD	New Partnership for Africa's Development
CI&M	criteria, indicators and measures	NFA	National Forests Act, 1998 (Act No. 84 of 1998)
CITES	Convention on International Trade in Endangered Species	NFAC	National Forests Advisory Council
COFO	Committee on Forestry	NFAP	National Forestry Action Programme (1997)
CSD	Commission for Sustainable Development	NFI	National Forest Inventory
CSIR	Council for Scientific and Industrial Research	NFDRS	National Fire Danger Rating System
DAFF	Department of Agriculture, Forestry and Fisheries	NLC	National Land Cover
DEA	Department of Environmental Affairs	NFP	National Forest Programme
DEAT	Department of Environmental Affairs and Tourism	NTFP	non-timber forest product
DFID	Department for International Development (UK)	NVFFA	National Veld and Forest Fire Act (Act No. 101 of 1998)
DG	Director-General	NVFIS	National Veldfire Information System
DRDLR	Department of Rural Development and Land Reform	PAMSA	Paper Manufacturers' Association of South Africa
dti	Department of Trade and Industry	PCI(s)	principles, criteria and indicator(s)
DWA	Department of Water Affairs	PCI&S	principles, criteria, indicators and standards
ECDC	Eastern Cape Development Corporation	PTC	Permanent Technical Committee
ECOSOC	Economic and Social Council (UN)	R&D	research and development
EIA	Environmental Impact Assessment	RoD	record of decision
FABI	Forestry and Agricultural Biotechnology Institute (University of Pretoria)	RSA	Republic of South Africa
FAO	Food and Agriculture Organization of the United Nations	SADC	Southern African Development Community
FED	Forestry Enterprise Development	SAFCA	South African Forestry Contractors' Association
FFA	Forest Fire Association	SAFCOL	South African Forestry Company Ltd
FIETA	Forest Industries Education and Training Authority	SLIMF	Small and Low Intensity Managed Forests
FPA	Fire protection association	SMMEs	small, medium and micro-enterprises
FSA	Forestry South Africa	SANBI	South African National Biodiversity Institute
FSC	Forest Stewardship Council	SAPS	South African Police Service
FTIS	Forest Technical and Information Services	SARS	South African Revenue Service
GDP	Gross Domestic Product	SAWS	South African Weather Service
GHG	greenhouse gas	SFM	Sustainable Forest Management
GIS	Geographical Information System	SoF	State of the Forests
ICFR	Institute for Commercial Forestry Research	SSA	Sawmilling South Africa
IDC	Industrial Development Corporation	ToR	terms of reference
IPAP	Industrial Policy and Action Plan	UK	United Kingdom
IFF	Intergovernmental Forum on Forests	USSA	United States
ITTO	Tropical Timber Organization	UNCBD	United Nations Convention on Biological Diversity
IUCN	International Union for Conservation of Nature (World Conservation Union)	UNCSD	United Nations Commission on Sustainable Development
JBCC	Joint Bilateral Commission for Cooperation	UNEP	United Nations Environment Programme
KLF	Komatiland Forest	UNFCCC	United Nations Framework Convention on Climate Change
KZN	KwaZulu-Natal	UNFF	United Nations Forum on Forests
LED	Local Economic Development	WESSA	Wildlife and Environment Society of South Africa
MDG	Millennium Development Goal	WoF	Working on Fire Programme
MODIS	Moderate Resolution Imaging Spectroradiometer	WfF	Working for Forests
MoA	memorandum of agreement	WfW	Working for Water Programme



Executive summary

The Department of Agriculture, Forestry and Fisheries, in consultation with a wide range of key stakeholders, is now presenting the second publication of the State of the Forests Report for the years 2007 to 2009. The White Paper on Sustainable Forest Development (1996), the relevance was reviewed during 2009, is a policy framework for sustainable forest management in South Africa. The mechanisms giving effect to the policy framework are twin legislation, namely, the National Forests Act (Act No. 84 of 1998) and the National Veld and Forest Fire Act (Act No. 101 of 1998) and their regulations and policies for their implementation. The State of the Forests Report is produced every three years as required by the National Forests Act of 1998, in particular section 6(3) of the legislation. This publication, which is a second edition of the State of the Forests Report, has been looking into the developments in the forest sector since the publication of the first edition in 2007. It gives an insight into the extent and distribution of the country's forestry resources and their management towards sustainability, as well as their socio-economic and environmental contribution towards people and the ecology.

South Africa's forest resources are primarily classified into three main forest types according to their use. We distinguish between natural or indigenous forests which are valued for biodiversity, ecotourism, small-scale timber production and non-timber forest products; the wooded savannah woodlands, commonly referred to as woodlands, provide essential resources such as non-timber forest products, building materials, fuel for energy, household utensils, fencing material and a variety of food and medicinal products for sustaining the livelihoods of the rural people; and commercial timber plantations which are man-made forests that provide for industrial timber products such as sawlogs and mining timber.

All forest types play an important environmental role in protecting soils and storing carbon, thereby mitigating the effects of the new global phenomenon, climate change, that threatens sustainable development. The South African forest resources are spread over some of the poorest areas in the country, covering a land surface area of over 40 million ha.

Natural forests—this forest type is too fragmented and covers a smaller area of nearly half a million ha (492 700 ha), about 0,4% of South Africa's land surface area. Although the forest biome is the smallest and the most fragmented of all the biomes, it has the highest plant diversity per hectare (0,418 species per ha). They predominantly occur in the provinces of the Eastern Cape and KwaZulu-Natal. All natural forests are protected under the National Forests Act, making it an offence for any person to tamper in any way or to transport an indigenous tree or the product thereof without an authorisation. The extent of natural forests area remains fairly stable, at least according to the National Land Cover (NLC) data sets, though there is evidence of insignificant decline in certain areas and expansion in others.

The benefits derived from natural forests are difficult to express in monetary terms. However, the specialist furniture industry in Knysna, Western Cape Province, based on 25 000 m³ of indigenous timber per year, contributes an annual amount of R20 million to the Gross Domestic Product (GDP). The rate at which natural forests are declining or expanding is unknown but property development and land invasions, noticeably in some parts of the country, seem to be the major threats to our natural forests.

Savannah woodlands—they form the bulk portion of South Africa's forest land, covering some 39 million ha. This is about one third of South Africa's total land surface area with about 5,7 million ha occurring in protected areas while the majority of this biome occurs in communal areas. Wooded savannah provides a great variety of forest goods and environmental services from which a large number of the country's population benefit directly and indirectly, predominantly serving as a significant safety net for the rural population. The wooded savannah is also inhabited by impressive wildlife that forms the cornerstone of game farming and eco-tourism.

In addition to its protective functions, woodlands supply in the basic needs of a large number of people, particularly the rural poor communities who depend on the forest resources for their livelihoods. These needs are fuel wood, building materials, medicinal plants and edible fruit, for example, over 80% of rural households use fuel wood as their main source of energy. Some 28 million people use traditional medicines in South Africa and they require a sustainable supply. These basic demands pose an unprecedented threat to the sustainability of woodlands, given the prediction that about 1,5 million rural households will remain without electricity for the next 20 years, therefore continuing to rely on fuel wood for their energy requirements. It is evident that forest degradation and deforestation is taking its toll in the woodland biome for various reasons but primarily owing to poverty and literacy levels in rural areas. There are uncertainties on the scale of deforestation and/or forest degradation of woodlands at this point in time.

With regard to biodiversity, forests and woodlands render protective functions to land, soil, water, climate and wildlife and contribute to aesthetics and outdoor recreational services. South Africa is rich in biological diversity and is ranked as the third most diverse country in the world. The Cape Floral Kingdom has the highest recorded species diversity of

any similar-sized temperate or tropical region worldwide, making it the world's "hottest hotspot," meaning the area where high levels of species richness, endemism and threat coincide. The Kathu forest in the Northern Cape consists mainly of camelthorn trees (*A. erioloba*), is known for its exceptional size and density of the tree cover and is one of the only two such woodlands in the world (the other one occurring in Namibia). However, literature reports indicate that biodiversity is under tremendous threat in South Africa, with a substantial proportion of natural habitat already having been totally transformed into other land uses.

The Red Data Book (list of threatened species) indicates the following as threatened: 15% of South Africa's plant species, 14% of its bird species, 24% of its reptile species, 18% of its amphibian species, 37% of its mammal and 22% of its butterfly species. However, 74% of plant, 92% of amphibian and reptile, 97% of bird and 93% of mammal species of South Africa are believed to be represented in the present protected area system.

Commercial timber plantations—commercial timber plantations cover approximately 1,3 million ha of the country, constituting about 1,1% of South Africa's forest land. Over 80% of timber plantations occur in the three provinces of Mpumalanga, the Eastern Cape and KwaZulu-Natal. Approximately 68% of the area covered by plantation estates in South Africa is planted with exotic tree species. The balance of these estates contains natural vegetation, including natural forests that have to be protected.

The applicable mechanisms for the protection of such natural forests occurring in man-made forests (plantations) are Forest Management Unit (FMU) forest protection plans. All commercial plantations in South Africa which have achieved FSC certification (82%) do have FMU plans. This means that currently, sustainable plantation management is practised on at least 82% of the total plantation area. This makes South Africa the country with highest percentage of certified plantations in the world.

More than 22 m³ of roundwood is produced annually from commercial plantations, generating about R6 billion for the economy each year. Commercial plantations and associated downstream processing plants contribute some R22 billion a year to the country's Gross Domestic Product. The forest industry currently employs just over 201 000 persons with about 77 000 directly employed by the forest subsector. The total number of people dependent on the forest industry for their livelihoods is estimated at 2,3 million with 1,7 million people being the dependants of those people working in the industry.

South Africa is steadily becoming a preferred destination for wood purchasing as its sawn timber quality is equivalent to grades in top countries such as New Zealand, Australia, Chile and Brazil. Moreover, the bulk of timber products from South Africa are from sources which are sustainably managed with over 82% of plantations having FSC certification, a brand that expedites entry into the global market. However, a challenge is expanding the network in such a way that small forestry enterprises can also do business and sustain themselves.

According to the South African Revenue Service, the export of forest products has more than doubled in the past ten years from R6,7 billion in 1999 to R14,8 billion in 2008. During the same period, the value of forest products imported was R62 billion, with R101 billion as value for exports. In 2008, forest product imports were R11,3 billion as opposed to the export value of R14,8 billion, thereby making South Africa a net exporter of forest goods.

However, pulp production in February 2009 was 30% less than the previous year and this reflects lower global demand, perhaps as a result of the recent global financial crises. The export value dropped in 2009 to R12,5 billion compared to the R14,8 billion reported in 2008.

Monitoring and evaluation reports indicate that the commercial forest areas are showing a slight decrease in area at an average rate of 0,9% a year. There are various factors attributed to the decrease in size of plantation area, including underreporting by landowners, compliance with environmental legislation, land-use change and improved technology used for mapping purposes.

Forest health and vitality in South Africa are threatened by pests, diseases, alien invasive vegetation and fires, particularly in plantations. The plantation area damaged by insects in 2007 was 2 691 ha and dropped to 1 086 ha in 2008. The Sirex wood wasp (*Sirex noctilio*) is currently the main threat in pine plantations and to spreading northwards at 80 km per annum. The front of the infestation has now reached Mbombela (Nelspruit). The tree mortality caused by the wasp was calculated to have resulted in a loss of R153 million to growers and R630 million to processors in terms of potential loss of product output. Efforts are underway to contain the spread of the wasp wherever it is reported. A steady increase in the incidences of pests and diseases has also been reported from native tree communities



Like in many vegetated ecosystems, veld and forest fires are a common feature of the South African landscape with unmanaged fires resulting in huge losses to the forest industry. Veldfires impact severely and negatively on the government's economic growth ambitions. Fires inevitably account for loss of property, job losses, environmental degradation, displacement of people and loss of biodiversity. Over the last 25 years, forest fires affected an

average of 13 437 ha of commercial timber plantations annually with 40% of the area as write-off. In the years 2007 and 2008, the plantation area burnt down was 70 000 ha (each year). Trees damaged by fires are prone to diseases.

The potential virgin land of approximately 100 000 ha identified in KwaZulu-Natal and the Eastern Cape province, for afforestation purpose (planting of new forests on land which historically has not been covered by forests) is likely to create 15 000 quality (permanent) jobs. Infrastructure development projects attached projects of this nature and other forestry enterprises are likely to boost the economy of South Africa in the long term while simultaneously improving the lives of poor communities.

South Africa, being a member to the Southern African Development Community (SADC), is playing a significant role in all the discussions pertaining to forestry growth and development in the region. The SADC region accounts for 9% of the world's forests. Although South Africa's forests account for only 2% of the SADC's forest area, the country dominates the production and trade of forest products in the region. South Africa produces almost 60% of the region's industrial roundwood, 65% of its sawn timber, more than 80% of both its panels and pulp paper and virtually all of its paper and paperboard.

The Southern African forests play an important role in carbon sequestration (absorption), particularly those of the Democratic Republic of the Congo as they spread over vast areas (38% of the SADC forest area). Their importance for biodiversity conservation and wildlife cannot be ignored.

The SADC region has developed the SADC Protocol on Forestry, which was ratified by a majority of members (10 countries) in the later part of 2009, effectively bringing it into operation. This is a framework for collaboration among members on issues relating to forestry, including capacity building, technology exchange and fire management. Subsequently, an SADC Forestry Strategy with its own mission, vision, values and strategic direction was developed and is currently under review. The collaboration is not only confined to the SADC region but extends to the entire continent and the international community.

Continentially South Africa has signed Memorandums of Agreement with Lesotho on "Cross-border fires and forestry matters" and Rwanda on general forestry issues. Negotiations towards signing of MoUs with adjacent countries such as Swaziland, Mozambique, Botswana, Namibia and Zimbabwe, are at different stages. The country has also concluded MoUs with notably the United States on collaboration with regard to forest fire prevention and fighting, China and Russia, while other MoUs will follow with Sri Lanka, Vietnam and strategic partners. South Africa is further a player in the global arena, having ratified several international agreements and conventions and participating in these. These include the United National Forum on Forests (UNFF), United Nations Commission for Sustainable Development (UNCSD), United Nations Framework Convention on Climate Change (with the Department of Environmental Affairs leading), The Food and Agriculture Organization of the United Nations (FAO), the African Forestry and Wildlife Commission (AFWC), Committee on Forestry (COFO), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and International Tropical Timber Organization (ITTO) and other bilaterals.

The report highlights in part 4 the challenges facing the forest sector in terms of protecting the environment and developing the sector to realise the maximum potential for South Africa's forests to provide goods and services (socio-economic and ecological) in a sustainable manner. The chapter further provides strategic policy interventions intended to mitigate the impact these challenges have on sustainable forest development in South Africa. These challenges include, *inter alia*, the following:

- Timber sawlog shortage;
- Land restitution;
- Forest protection;
- Skills shortage in technical forestry;
- Forest conservation and protection;
- Transformation and development of the sector;
- The threat of climate change;
- Research, development and innovation;
- Forest conservation and protection; and
- Forestry and the regulatory environment.

In conclusion, the report alludes to progress the forest sector that has been made since the first publication of the SoF report in the midst of the challenges. This progress places South Africa in an ideal position to move faster and implement the progressive policies and strategies developed to steadily transform and grow the sector within the parameters of the developmental state agenda, South Africa is pursuing. However, at the heart of the success of the forest industry and the Forestry Programme are adequate resources allocations, particularly funding. It is therefore important that the department mobilise and lobby for additional financial resources to bolster its current allocated budget to ensure speedy implementation of forestry projects.

PART 1

Background

The Forestry Programme aims to ensure the sustainable management of all forests, natural (indigenous), woodlands and plantations and their commercial and community use to achieve social and economic benefits and to advance rural development through policy development, regulation, facilitation, monitoring and evaluation. The vision for forestry is to create an enabling environment for economic and social development through sustainable forest management, especially at the local level, to ensure forests are managed for people. Forestry continues to be one of the important sectors in South Africa, contributing to the economy of the country, employment and improvement of livelihoods. As a result, forestry is included in the Industrial Policy and Action Plan (IPAP) and the Accelerated and Shared Growth Initiative for South Africa (AsgiSA). The forestry resource base, i.e. natural (indigenous) forests, commercial plantations and woodlands, is spread over some of the poorest areas in South Africa and therefore plays a significant role in terms of poverty eradication through job creation and the supply of basic needs and by acting as a safety net. Consequently, the forestry initiatives fit into the government's broader agenda of rural development and poverty reduction in many ways.

The National Forests Act of 1998 (NFA) provides for SFM. It encompasses principles to guide decisions affecting forests as well as the promotion of certification programmes that encourage SFM. Certification programmes as well as principles, criteria, indicators and standards (PCI&S) aim to achieve sustainable forest management but do this through different processes and are driven from different spheres of influence.

The purpose of PCI&S is to provide opportunities to generate accurate and essential information on the condition and trends of forests, and to evaluate the degree to which the forest sector contributes to the nation's economic, environmental and social aspirations. These informed perceptions could then provide a basis from which to set goals and make decisions, which are presented in policy and legislation, on a local, provincial or national scale. In South Africa, a PCI&S set was prepared in 2002, and then tested and refined. The department started doing audits in 2006. The first-party audits are done quarterly and the third-party audits are done annually.

From the recent audits, there is an indication that the estate managers of state forests are aligning their activities with the requirements of the PCI&S. The attitude towards the implementation at estate level is improving. However, the percentage in terms of compliance with PCI&S is still very low – between 40% and 60% – although some of the causes are factors beyond the estate manager's control, e.g. lack of resources. So far, the PCI&S implementation has focused on Department of Agriculture, Forestry and Fisheries (DAFF) estates. By August 2009, 1 572 568 ha of planted and non-planted areas were FSC-certified. Altogether 76,6% of this is privately owned land. In 2007, the department started a process of reviewing the PCI&S framework as informed by the audits. The process was concluded in 2009 with a new set approved in 2009. The refined set will be printed and made available during 2010. The PCIs were gazetted for comments in 2008. Those who commented required a standard but it was indicated that the National Certification Initiative (NCI) process would have to be finalised before such a standard is determined.

Although woodlands are included in the definition of "forest" in the NFA, PCI&S pertaining specifically to woodlands have not been mandated. The country therefore does not have a set of PCI&S for woodlands *per se*. However, the department is committed to the sustainable management of woodlands and progress is being made towards ensuring their sustainable use. This progress is discussed in detail later in this report.

Several countries around the world have adopted the practice of compiling regular reports on the state of the forests and the state of the environment. The objective of compiling regular *State of the forests* (SoF) reports is to provide an up-to-date overview of the current status of the forest industry, with specific reference to the sustainable management of forests. South Africa has followed this global trend. In terms of the NFA, the Minister is obliged to monitor South Africa's forests and to compile a report on the state of this resource at least once every three years. The first SoF report for South Africa covered the years 2004, 2005 and 2006. This second edition covers the years 2007, 2008 and 2009.



1.1 PURPOSE

The purpose of this report is fourfold:

- To provide the public with information with which to assess progress in achieving SFM
- To provide policy makers with a report as required under the NFA, Part 2, section 6(3)
- To report on forestry progress in translating the Manifesto, a solemn declaration by the government of its intentions and Medium Term Strategic Framework (MTSF), a framework to guide government's programme in the electoral mandate period into outcomes
- To recommend to policy makers certain proposals to create an enabling environment to help the Forestry branch to meet relevant outcomes as enshrined in government's policy of a developmental state

1.2 OBJECTIVES

The key objectives of the SoF report are:

- To present to Parliament, decision makers and the public the facts and trends revealed by the monitoring process
- To present the possible implications of the trends considering whether or not these are in the national interest
- To report on measures being implemented to address negative trends, and any other relevant issues relating to South African forests
- To make recommendations on specific actions and future directions required to advance South Africa's progress towards sustainable forest management

1.3 OUTLINE OF REPORT

The first part of the report sets the scene by providing the background to the report, as well as its purpose, aims and objectives.

The second part provides an overview of the extent and distribution of all types of forests in South Africa. The indicators used to assess sustainable forest management are derived from the legislative mandate and are grouped into three categories: environmental, economic and social. For each main category, the report assesses the states of the forests, trends, response measures to trends that are in the national interest, and adequacy of information:

- The SoF assessment looks at fair progress towards achieving sustainable forest management.
- Trends have to do with whether forest conditions are improving, deteriorating or remaining unchanged.
- Policy measures are interventions that the department is undertaking to address trends that are in the national interest.
- The adequacy of available information is assessed on an ongoing basis.

The third part looks at South Africa's participation and contribution with regard to forestry regionally and internationally. It further describes the institutional, forest policy and legislative framework that guides and informs decision making in forestry.

The fourth part of the report describes strategic policy responses and interventions towards protecting the environment and developing the forest sector and describes measures that the Forestry branch is undertaking to translate the Manifesto and MTSF into outcomes. Forestry makes a major contribution toward the following key outcomes:

- Protecting and enhancing South Africa's environmental assets and natural resources.
- Creating decent employment through inclusive economic growth.
- Developing a skilled and capable workforce to support inclusive growth.
- Strengthening relationships with regional and global partners to ensure that the principles of SFM are adhered to.

The fifth part of the report (the conclusion) provides recommendations towards ensuring sustainable forest management.

Profile of the South African forest sector

2.1 THE EXTENT AND DISTRIBUTION OF FORESTS IN SOUTH AFRICA

South Africa, as a dry country, is covered by dry savannah woodlands and bushveld. Most natural* evergreen forests are found in areas of higher rainfall, along the southern and eastern coastline and in the country's mountainous regions towards its eastern borders with Swaziland and Mozambique. Estimates of the area covered by indigenous (closed canopy) forests vary between 0,25% (Low & Rebelo 1996) and 0,59% of the land surface (DEAT 1997), with woodlands between 35% and 40% and plantations at about 1,4% (Grundy & Wynberg 2001).

Indigenous forests make up approximately 0,4% of the land surface in South Africa. However, this biome encompasses extensive areas and contains valuable resources. They are valued for biodiversity, ecotourism, timber production and non-timber forest products, particularly firewood, poles and medicine. They are predominantly located in the Eastern Cape and KwaZulu-Natal (KZN) provinces. According to National Land Cover (NLC) data sets, natural forests are stable but evidence on the ground shows that they are declining for various reasons in some areas, while in many other areas they are expanding. However, there are no concrete data to back up these claims at a national level or to quantify the loss or gain.

Savannah woodlands** also provide essential resources for sustaining the livelihoods of rural people, especially in the communal areas of South Africa. Products utilised from the woodlands include wood and non-wood products for, among others, fuel, building material, household utensils, traditional fencing and a variety of food and medicinal items. Woodlands are also characterised by their rich biodiversity, which often provides opportunities for tourism. Furthermore, woodlands serve valuable environmental purposes, which include soil protection and carbon storage. Maintenance of these ecosystem services, protection of the biodiversity in woodlands and ensuring the continued flow of wood and non-wood forest products are therefore important measures that would support the well-being of South African society, especially poor rural people living in close proximity of woodland areas.

However, the intensive use and consequent degradation as well as transformation of woodlands remain challenges that government should address, although there is no information to ascertain the severity of the threats. According to expert opinion, woodlands are increasing in some areas at the expense of grasslands and in other areas they are decreasing. However, it is not known whether the increase equals the decrease. No significant changes based on the two country NLC data sets have been noticed.

The distribution of indigenous forests in South Africa is presented in Table 1.

TABLE 1 Extent and distribution of indigenous forests and woodland area by forest type and class

Natural forest type ^a	Area (ha)	Woodland class ^b	Area (ha)
Albany Amatole Mistbelt Drakensberg Montane	22 046,37 64 221,09 1 926,39	High Altitude Acacia	18 442 443
Eastern Cape Dune Eastern Mistbelt	10 940,58 41,841,86	Low Altitude Acacia	4 092 504
Eastern Scarp KwaZulu-Natal Coastal	33 750,17 21 089,11	Ghaap Plateau	2 335 628
KwaZulu-Natal Dune Licuati Sand	12 395,89 24 275,67	Kuruman	1 294 580

* Natural forests are also referred to as indigenous forests in this report

** Savannah woodlands and woodlands are used interchangeably in this report



TABLE 1 Extent and distribution of indigenous forests and woodland area by forest type and class (cont.)

Natural forest type ^a	Area (ha)	Woodland class ^b	Area (ha)
Lowveld Riverine Mangrove	11 401,28 2 392,70	Southern Rhenosterveld	129 293
Mpumalanga Mistbelt Northern KwaZulu-Natal Mistbelt	32 772,36 5 323,42	Waterberg	967 868
Northern Mistbelt Pondoland Scarp	19 203,65 12 337,00	Combretum	8 390 374
Southern Cape Afrotropical Swamp	68 563,35 3 021,77	Soutpansberg	395 874
Transkei Coastal Platform Transkei Mistbelt	61 484,01 30 249,84	Spekboom	1 493 276
Western Cape Afrotropical Western Cape Milkwood	4 731,06 2 499,74	North Succulent	1 279 392
Total area^c	492 699,76	South Succulent Mopane Total area^d	920 317 1 230 299 40 971 848

^a Source: Berliner & Benn 2004; *Systematic conservation for forest biome of South Africa* (revised after data cleaning by Geoterrimage 2005)

^b Source: *Baseline study on woodlands in South Africa* 2003

^c The total area of natural forests is 497 101,23 ha according to the National Forest Inventory (NFI), including the patches noted by the Vegmap 2005

^d The Vegmap (2005) reports a total area of 39 957 209,55 ha for woodlands

Table 2 shows estimates of the extent of woodland degradation in the country. However, these figures may change once the land degradation project is finalised.

TABLE 2 Status of woodland by subcategories in South Africa

Woodland class	Degraded (ha)	Actual woodland (ha)	Total area ^a (ha)
High Altitude Acacia	1 858 908	10 234 306	12 093 214
Low Altitude Acacia	470 337	2 351 012	2 821 349
Ghaap Plateau	81 241	2 163 103	2 244 344
Kuruman	2 831	752 674	755 505
Southern Rhenosterveld	1 701	18 056	19 757
Waterberg	11 396	1 224 270	1 235 666
Combretum	1 139 426	7 929 347	9 068 773
Soutpansberg	49 657	429 213	478 870
Spekboom	57 331	801 883	859 214
North Succulent	202 028	521 366	723 394
South Succulent	82 827	552 637	635 464
Mopane	26 887	2 324 449	2 351 336
Total area	3 984 570	29 302 316	33 286 886

^a Source: *Baseline study on woodlands in South Africa*, 2003

Since there has been no comprehensive national forests assessment in the country, it is not possible to establish trends or the change rate in woodlands and indigenous forests.

TABLE 3 Extent and distribution of plantation areas (ha) in South Africa

Province	Area (ha)		
	2002	2005	2008
Eastern Cape	146 996	156 847	153 380
Free State	0	0	0
Gauteng	0	0	0
KwaZulu-Natal	529 433	539 909	486 020
Limpopo	66 840	51 987	47 982
Mpumalanga	545 747	525 140	510 263
North West	107	101	126
Northern Cape	0	0	0
Western Cape	62 279	59 577	59 570
Total	1 351 402	1 333 562	1 257 341

Source: DAFF, Commercial Timber Resources annual reports

Data indicate that both softwood and hardwood areas declined during the reporting years (Table 4).

TABLE 4 Trends in plantation area (ha) by species

Species	Year		
	2002	2005	2008
Softwood	705 217	721 358	660 265
Eucalyptus	525 130	496 521	491 934
Wattle	112 497	108 549	95 571
Other	8 558	7 134	9 570
Total area	1 351 402	1 333 562	1 257 340

Source: DAFF, Commercial Timber Resources annual reports

FIG. 1

Extent and distribution of all forest types in South Africa



2.2 TRENDS IN PLANTATION COVER AND DRIVERS OF CHANGE (1999–2009)

Because different methodologies were used in the past to assess natural resources in the country, trend analysis is impossible. Although forest cover in some indigenous forests is becoming thinner, there is no documentation to support this. The effect of land invasions has seriously affected the extent and cover of forests like Dukuduku in KZN but no proper assessment is done. This phenomenon also applies to woodlands. The area of woodlands transformed still needs to be verified and confirmed. Experts assert that the annual change rate for woodland is about 0,015%. Almost 5 million ha of woodlands are protected and it is estimated that the majority of woodlands that are in communal areas are degraded at an estimated annual rate of 0,015%. The DAFF LandCare Programme currently includes the rehabilitation of some of the degraded land.

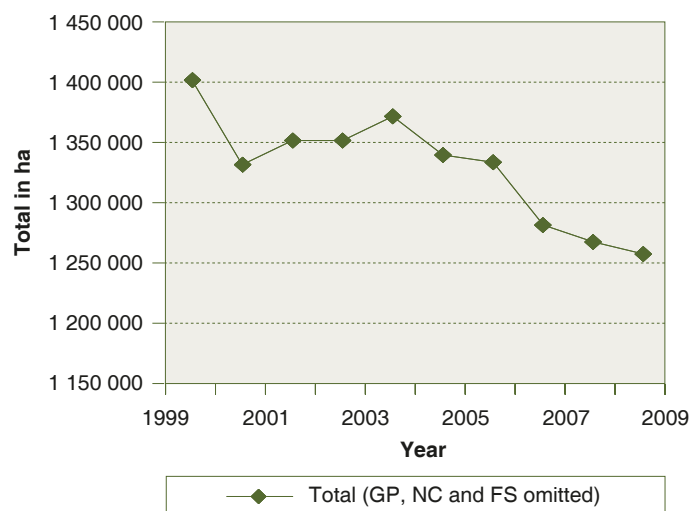


FIG. 2 Extend of plantations for ten years

Source: DAFF, Commercial Timber Resources annual reports

A study of the general trend in Tables 3 and 4 (left) and Fig. 2 (above) shows that the total timber plantation area started to decline sharply in 1999 and increased minimally in 2000 and then stabilised for two years. From 2003, the total timber plantation area started to decline almost constantly. Generally, the total timber plantation area has been declining for the past five to eight years. This decrease in total timber plantation area can be attributed to various factors. The key drivers include the following:

- More accurate mapping methods based on improved technology, such as GIS, are being utilised.
- Plantations that have been bought and given to communities under the land redistribution programme may have been left out.
- Some emerging growers are known not to be included in the timber survey distribution list, and some people sell their plantations but fail to advise DAFF of this development.
- With regard to the delineation of riparian zones, a large portion of the area converted from timber to agriculture and other uses relates to the introduction of environmental audits, FSC certification, etc., which ensures that riverine areas, river valleys and wetlands are restored to their natural vegetation.

The Mpumalanga and Limpopo regions (combined) had a larger plantation area than that of other regions; this was the case from 1979/80 to 2006/07. The average timber plantation area in Mpumalanga and Limpopo (combined) is estimated to be 607 173 ha. KwaZulu-Natal is the second highest timber plantation area, with an average of about 489 335 ha. The Cape region (Western and Eastern Cape combined) had the lowest total timber plantation area for the ten years in question of all the regions with an estimated annual average of 177 906 ha.

Table 3 shows that although the Mpumalanga and Limpopo regions constitute the largest total timber plantation area of all the regions, the total timber plantation area declined in the four years from 2004 to 2008. The total timber plantation area in KwaZulu-Natal declined very slowly in the same four-year period. The Cape region had a constant total plantation area for about 14 years and showed a remarkable increase from 1994.

From a national perspective, there is an insignificant decrease according to experts and as illustrated by the national land cover data sets. This may be attributed to the fact that there has been very little new afforestation over the past decade, hence the stability of the data. However, expansion is expected to be significant because of afforestation plans for the next ten years.

2.3 AFFORESTATION IN THE COUNTRY

(Afforestation is defined as planting of new forests on land which historically has not been covered by forest.)

The National Industrial Policy Framework has identified *forestry* as a high-potential growth sector of the economy. Economic growth can be realised in the forest sector only if new plantations are established.

Table 5 (below) shows that in KZN, softwood areas have decreased significantly from 2005 to 2008 (37% over three years). This decline could be attributed to the fact that forestry companies changed from planting softwoods to other products. It must also be noted that softwood areas increased from 2002 to 2005. During this time, there was a net shortage of sawlogs. The decline in softwood in KZN is attributed to the fact that the eastern and western shores (St. Lucia and Nyalazi) were excised and rehabilitated.

TABLE 5 Afforestation by type of species and province

Species	Province/year	Area ('000 ha)			Annual change rate	Annual change rate
		2002	2005	2008	2002–2005	2005–2008
Softwood species	Mpumalanga and Limpopo	352	345	341	–2,1	–1,2
	KwaZulu-Natal	165	183	134	10,3	–37,3
	Western and Eastern Cape	188	193	185	2,3	–3,9
<i>Eucalyptus grandis</i>	Mpumalanga and Limpopo	112	122	99	8,4	–23,3
	KwaZulu-Natal	172	181	178	5,0	–1,9
	Western and Eastern Cape	12	14	13	15,3	–5,9
Other eucalyptus species	Mpumalanga and Limpopo	126	92	100	–36,7	7,7
	KwaZulu-Natal	97	80	93	–20,9	13,2
	Western and Eastern Cape	6	6,8	9,5	8,6	28,1
Wattle species	Mpumalanga and Limpopo	19	15	14	–26,3	–7,7
	KwaZulu-Natal	92	91	79	–0,6	–15,5
	Western and Eastern Cape	1,5	2	2	26,1	14,8
Other species	Mpumalanga and Limpopo	3,6	2,8	4	–27,9	36,1
	KwaZulu-Natal	3	3	2	–1,8	–29,3
	Western and Eastern Cape	1,7	1	2,7	–49,5	56,9
Total		1 351	1 334	1 257	–1,3%	–6,1%

Source: DAFF, Commercial Timber Resources annual reports

Mpumalanga and Limpopo show a sharper decline in eucalyptus (–23% change) from 2005 to 2008 than that of KwaZulu-Natal (–1,9%). KwaZulu-Natal is dominant in eucalyptus distribution as big companies focus on pulp and paper. The Western Cape and Eastern Cape combined produced the least with an average of only 12 842 ha in the three years, that is 5% of the total eucalyptus distribution. Both the Cape and northern regions have high softwood distributions and low hardwood distributions.

Mpumalanga and Limpopo combined had 125 880 ha of other eucalyptus species in 2002. However, the three-year average totalled 105 888 ha because of decreases in distribution from 2005 to 2008. Mpumalanga and Limpopo combined as well as KwaZulu-Natal showed relatively little change compared to the Western and Eastern Cape. KZN accounted for 83% of the wattle species in the three years. Mpumalanga and Limpopo combined accounted for 15%, while the Western and Eastern Cape accounted for the remaining 1,9%. Mpumalanga and Limpopo accounted for 43% of the other species, while KZN accounted for 35%. The remaining 22% was accounted for by the Western and Eastern Cape combined.



2.3.1 Net new afforestation by species

Net new afforestation measures the change in the plantation area by subtracting those areas that were taken out of forestry production from “new” afforestation. Fig. 3 (below) shows that, from 1980 to 1985, net new afforestation was dominated by pine species while net new afforestation of all species dropped substantially from 1992 onwards and even more from 1998 onwards when the National Water Act (Act No. 36 of 1998) (NWA) was implemented. The planting of pine species decreased from 1985, but gained momentum to reach a peak of 24 000 ha in 1991. Afforestation of eucalyptus species began to increase from 1985 to 1988 when it reached an all-time high of just below 17 000 ha. The reasons are climatic, economic, environmental and, above all, regulatory as discussed earlier (see species distribution analysis). Both pine and eucalyptus afforestation decreased sharply from 1992 until the 2000s when the afforestation of all species was stable but at very low levels. Indeed, over the entire period from 1980 to 1999, the average annual net new afforestation was 14 153 ha. The comparable figure for the period 2000 to 2008 was a mere 1 283 ha with negative net new afforestation (i.e. more taken out than planted) being recorded in three of those years. This is of great concern but it is hoped that the trend will be reversed.

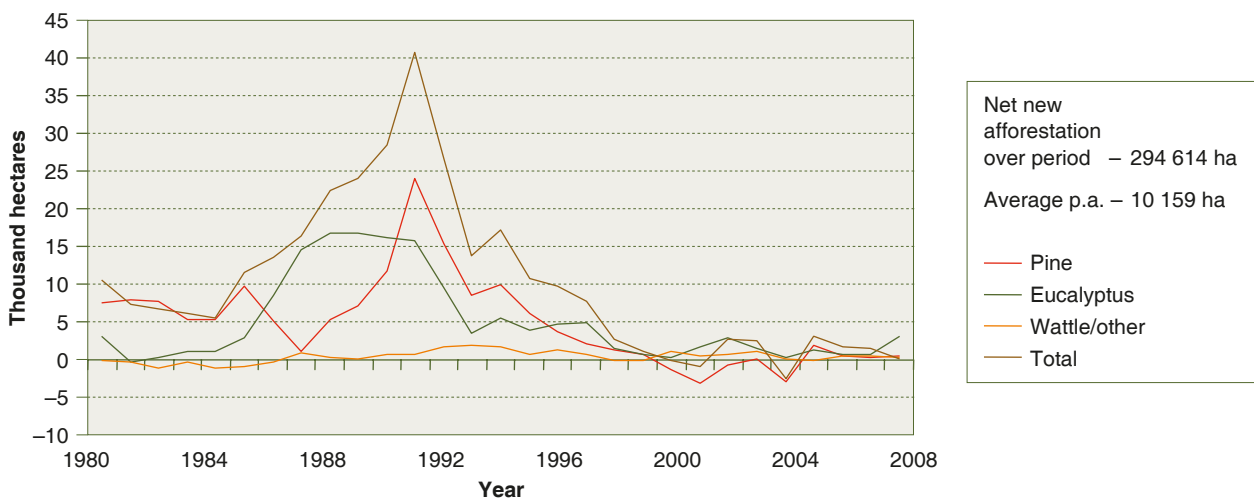


FIG. 3 Net new afforestation by species for the period 1980 to 2008

Source: Forestry South Africa (FSA) 2009

2.3.2 Afforestation challenges in the country

As mentioned in the previous section, there has been very little afforestation over the decade under review. Fig. 4 below illustrates new afforestation by region for the past ten years.

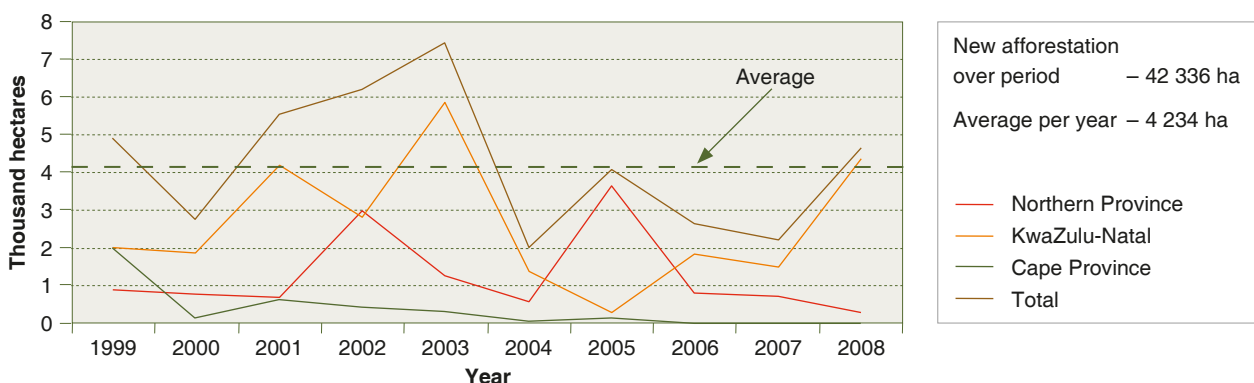


FIG. 4 New afforestation by region for the ten-year period 1999 to 2008

Source: Forestry South Africa (FSA) 2009

Generally, relatively more significant new afforestation took place in KZN during the observed period than in the northern regions and the Cape regions. The northern regions are second in new afforestation in the ten-year period, followed by the Cape regions. From 2002, new afforestation in KZN started to increase above the total yearly average of 4 234 ha

to peak below 6 000 ha in 2003 but gradually decreased until 2007 when it started to show an upward trend. There seems to be a change every second year with KZN's afforestation. The northern regions and the Cape regions have always been below the 4 234 ha yearly average. No new afforestation was reported in the Cape region for the period 2005/06 to 2006/07. Compared to the annual average new afforestation of over 21 000 ha over the ten-year period immediately prior to the above period, the 4 234 ha annual average recorded between 1999 and 2008 is disconcerting.

The primary reasons for this trend are as follows:

- Afforestation is regulated under the NWA, the National Environmental Management Act (NEMA) and the Conservation of Agricultural Resources Act (CARA). As a result of the regulatory requirements, the authorisation process, especially licensing processes for afforestation, is onerous, complex, lengthy and costly. The key government departments mandated by legislation to regulate and support the authorisation of afforestation are unable to do so because of a lack of capacity.
- There is a scarcity of freehold land where the rainfall is high enough to support plantation forestry.
- The little suitable land available is communal; afforestation can only take place if the communities are willing to release this land and this is not always the case.
- There is also a lack of knowledge among rural people of what forestry offers.
- There is little water available in a number of catchments to allow further afforestation.
- There is uncertainty and non-resolution with regard to land claims.
- Risks associated with forestry, such as fires, pests, diseases, affect financial returns.
- The costs and risks associated with community forestry projects are daunting for most private investors.

Owing in part to these challenges, the timber companies have resorted to focusing on “vertical expansion” through improved genetic material and other technical innovations aimed at increasing yields from their existing timber areas.

2.3.3 Steps taken to address afforestation challenges

The department has developed a strategy on afforestation and established a task team to oversee the process of facilitating afforestation. Furthermore, a draft memorandum of understanding (MoU) to formalise working relationships, especially on afforestation, between DWA, DEA and DAFF is awaiting approval from higher authorities. Even though the MoU is not yet signed, its principles are being applied to streamline the afforestation licence application processes. The department has also established a Forestry and Water Liaising Committee, chaired by Forestry Development. In this forum, afforestation backlogs are identified and resolved. This also helps in fast-tracking the issuing of water-use licences. Furthermore, the government has undertaken to carry the costs of doing EIAs for community applications. It is therefore of the utmost importance that funds for the EIA process are made available.

Since the signing of the Forest Sector Charter, water-use licences have been issued for about 2 000 ha of afforestation. However, about 30 000 ha are waiting for EIAs to be undertaken and these are within the charter commitment of increasing the net afforested area by 10 000 ha a year in 2009.

It must be noted that South Africa's afforestation potential is very limited compared to that of its trading partners and neighbours. The reason for this is that the country has a scarcity of water and the regulatory environment for afforestation is very stringent. Close analysis of forestry expansion in other regions and export figures also show that some companies are exporting raw materials for their investments abroad. This trend raises some policy conflicts.

2.4 FOREST PROTECTION IN SOUTH AFRICA

In terms of the NFA, all indigenous forests are protected. Only about five million ha of woodlands are thought to have some form of protection status. The forests outside protected areas are usually overexploited by neighbouring communities for fuelwood consumption and for other community needs.

DAFF and the South African National Biodiversity Institute (SANBI) are involved in a process to identify threatened forest ecosystems. The list of threatened ecosystems that was published for comment on 6 November 2009 in terms of the National Environmental Management Biodiversity Act (Act No. 10 of 2004) includes three forest types as endangered and six as vulnerable. Several individual threatened forest patches of high conservation value were also listed for protection under this Act, which gives such listed ecosystems enhanced status in the Integrated Development Plans of local and regional authorities.



TABLE 6 Protection status of woodlands in South Africa

Woodland class	Actual woodland (ha)	Protected area (ha)	Protected (%)
High Altitude Acacia	10 234 306	1 205 132	12
Low Altitude Acacia	2 351 012	751 712	32
Ghaap Plateau	2 163 103	3 496	0
Kuruman	752 674	9 410	1
Southern Rhenosterveld	18 056	4 582	25
Waterberg	1 224 270	267 798	22
Combretum	7 929 347	1 404 760	18
Soutpansberg	429 213	82 996	19
Spekboom	801 883	84 379	11
North Succulent	521 366	11 652	2
South Succulent	552 637	39 160	7
Mopane	2 324 449	1 121 037	48
Other	4 700 000 ^a	Unknown	
Total area (ha)	34 002 316^b	4 986 114	17

^a Within the remaining parts of SA there are scattered patches of woodlands (including thickets) totalling approximately 4,7 million ha.

^b This total excludes 3 984 570 ha of degraded woodlands.

The following mechanisms are in place to ensure the protection of unique species:

2.4.1 Protected trees and the braaiwood market

DAFF declared a list of 47 tree species as protected three years ago under section 12 of the NFA and republishes this list each year. These include species such as the camel thorn (*Acacia erioloba*) and leadwood (*Combretum imberbe*), which are currently under pressure in some areas owing to harvesting for the braaiwood and charcoal markets, rare species such as the Barberton mountain sugarbush (*Protea comptonii*), keystone species important to the functioning of ecosystems such as the black mangrove (*Bruguiera gymnorhiza*), and species of great cultural and use value like the marula (*Sclerocarya birrea* subsp. *caffra*). In terms of section 7 of the NFA, all trees in a natural forest are also protected. No protected trees or forest trees may be cut down or damaged nor may their products be transported, sold or exported without a licence.

- Licences to cut down protected trees or collect their products are currently issued only for the harvesting of dead trees or tree litter and have to be renewed each year. Should the conditions specified in licences be violated or harvesting be found not to be sustainable, a licence can be revoked. No harvesting of rare tree species is allowed and harvesting is allowed only for limited quantities of dead wood of the more common protected species.
- A study was undertaken into the firewood market in Gauteng in 2007 to assess the volumes of wood and charcoal sold, the species involved, whether retailers are aware of the protected species, and to what extent retailers have licences for trading in protected tree wood products. The results of the survey revealed that the firewood market is huge. One of the largest retailers in the Tshwane metropolitan area, who sells from street outlets and supplies a whole chain of other retailers, sells more than 16 000 bags of firewood (7 to 9 kg bags) per month during the winter, which includes wood from invader species such as black wattle (*Acacia mearnsii*), but the bulk is hardwood from the Bushveld.

2.4.2 The champion tree project

The champion tree project is aimed at identifying and protecting individual trees of national conservation importance under the NFA. In terms of section 12 of this Act the Minister can declare individual trees or groups of trees as protected, apart from the protection of tree species. Trees can be nominated on the basis of their size, age, aesthetic value, cultural-historic value or importance for tourism. Only trees of national importance will be protected. In the long run, provincial and local authorities will be encouraged to develop their own local champion tree lists. So far, 44 champion trees have been declared as protected by notice in the *Government Gazette* and in national newspapers. Once listed as protected by notice, champion trees have special protected status in terms of the NFA. No such trees may be cut, disturbed or damaged without a licence. A strict approach will be taken to their protection, and licences will be issued only under exceptional circumstances, for example if a tree poses a danger to life or property.

2.4.3 Conservation of minimum area of each woodland type

The process to implement section 3(b) of the NFA is very slow because of a lack of information on woodlands. The departmental conservation plan project, which has the potential to identify unique woodlands, is progressing at a very slow pace because of budget constraints. The department is also embarking on a process to do an integrated land-use assessment with a view to assessing the extent and distribution of all woodland types in the country. So far only one woodland type has been provided protected status in accordance with the NFA's requirements (see Box 1).

BOX 1 Case study—Kathu Forest

Kathu Forest in the Northern Cape was recognised as unique as early as 1912, when it was declared a State Forest. In 1956 this State Forest was deproclaimed to allow for the establishment of the town of Kathu near the site where the Sishen mine was about to start operations. Despite being deproclaimed, the development of the residential town did not impact on Kathu Forest. The forest remained largely intact and untouched because of its uniqueness and the pro-conservation attitude of the surrounding community and municipality at the time.

The town developed in the southern portion of Kathu Forest and the result was a unique landscape that earned it the nickname "the town under the trees". Kathu Forest was also included by the National Committee for Nature Conservation (NACOR) in 1973 on a list of conservation-worthy sites. This list no longer exists. Kathu Forest was listed as a Natural Heritage Site in 1995 and this is still effective, but the Natural Heritage programme does not provide strong legal protection of the forest. This woodland is about 4 000 ha in extent and consists mainly of camel thorn trees (*A. erioloba*), is known for its exceptional size and density of the tree cover and is one of only two such woodlands in the world, the other one occurring in Namibia.

In terms of section 12(1)(d) of the NFA, camel thorn trees are listed as nationally protected trees and thus already regulated by the Act. Anyone who wants to remove or destroy a camel thorn tree is required to apply for a licence from the department. The Forestry Office in Upington is inundated with such licence applications owing to the growing development drive in the area.

Currently, Kathu is the fastest-growing town in the Northern Cape and it is expected to grow to three times its present size within a decade or two. In April 2006 the Wildlife and Environment Society of South Africa (WESSA) asked the department to consider declaring the forest north of the town of Kathu as protected in terms of section 12(1)(c) of the Act, which stipulates that the Minister may declare a particular tree, a particular group of trees, a particular woodland or trees belonging to a particular species to be protected.

Kathu Forest is now officially the first protected woodland, having been gazetted as such. The initiative to protect Kathu Forest is a unique example of cooperation between government, at all levels, and non-government bodies and the private sector to achieve a conservation aim. As a result, the community of Kathu will reap the benefits of a very important conservation area being created on its doorstep that will hopefully bring further benefits from a growing tourism industry. Kathu is a tourist attraction, and therefore there is potential to create ecotourism which will create jobs for the surrounding communities. There is also a special attachment to the forest by the people of Kathu owing to its uniqueness and its special landscape.

2.4.4 Woodland rehabilitation

DAFF's Forestry branch adopted a woodland strategy framework for woodlands in 2005 that provides for the rehabilitation of woodlands but it must still be rolled out. The work done by the Working for Woodlands Programme in rehabilitating some woodlands is noteworthy. This initiative endeavours to draw a diversity of funding streams towards an investment into the rehabilitation of degraded and transformed woodlands. The Forestry branch is currently considering the options of establishing a focused programme for woodland rehabilitation or possibly linking up with the existing LandCare Programme. Some piloting has been done on woodland rehabilitation that includes a Forestry branch project and some Working for Woodland projects.

2.5 FOREST OWNERSHIP IN SOUTH AFRICA

2.5.1 Plantation ownership

The ownership of plantations is mainly in the hands of corporate growers and individual commercial timber farmers, as can be seen in Fig. 5 on page 15.

According to the department, in 2005 altogether 25 314 ha were leased to Amathole Forests (Pty) Ltd and 111 899,5 ha were leased to Mountain to Ocean (MTO) Forestry (Pty) Ltd. In 2000, a total of 76 567 ha were leased to Singisi Forest Products (Pty) Ltd and 35 520 ha were leased to Siyaqhubeka (Pty) Ltd. This means that private corporations managed 112 087 ha of public forests



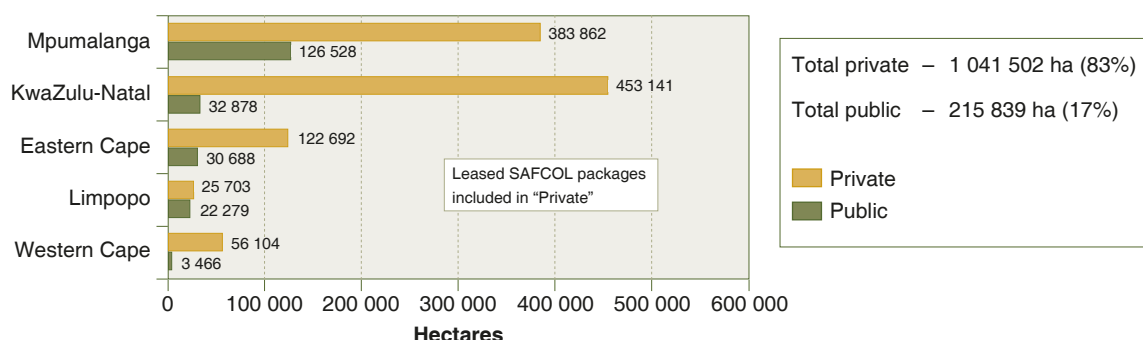


FIG. 5 Plantation area by province and ownership 2008

Source: Forestry South Africa (FSA) 2009

in 2000 and an additional 137 213 ha in 2000 (i.e. a total gross estate area of 249 301 ha or 143 300 ha of planted forest area). Only the Komatiland Forest (KLF) package remains unleased.

It is also envisaged that the ownership of the industry will change dramatically – more than 50% of the current plantation area could be under land claim, so ownership will shift towards communities. It is also recognised that all Category B (plantation packages that have the potential to become commercially viable subject to significant capital investment) and C (plantations with little commercial value, but valuable as community woodlots) plantations are on land held in trust for communities by the state and that plantation land has to be transferred to the rightful owners in terms of the provisions of the Communal Land Rights Act or the Restitution of Land Rights Act. In view of this the department transferred 982,5 ha to the Thabakgolo community and a further 2 245 ha to the Sethlare community in Mpumalanga in 2008.

TABLE 7 Trends in plantation ownership structure

Institution/Organisation	Plantation ownership		
	2002 Extent (ha)	2005 Extent (ha)	2008 Extent (ha)
<i>Public ownership of which owned by:</i>	322 525 ha (24%)	312 175 ha (14%)	215 838 ha (17%)
• State/municipalities	0,3%	4,2%	6,9%
• SAFCOL/KLF	23,6%	9,7%	10,2%
<i>Private ownership of which owned by:</i>	1 028 877 ha (76%)	1 021 387 ha (86%)	1 041 501 ha (83%)
• Private commercial farmers	13,8%	27,8%	22,8%
• Corporate	62,3%	48,8%	48,7%
• Ex-SAFCOL	–	9,5%	11,4%
Total	1 351 402 ha	1 333 563 ha	1 257 341 ha

Source: DAFF, Commercial Timber Resources annual reports

The process of restructuring assets has seen forestry public ownership decreasing from 24% to 17% over the past nine years.

2.5.2 Landownership of natural forest areas and woodlands

The extent of landownership of natural forests in South Africa is not known with certainty. Based on the National Forest Inventory (Department of Water Affairs and Forestry 2002), public ownership accounts for 219 922 ha of the 497 101 ha in total. It is assumed that this figure remains constant for the different years under review. This will mean that the balance of 277 179 ha can be attributed to private ownership. In many areas, natural forests form part of private land managed as commercial forestry or agricultural estates, private nature reserves or ecotourism areas. Another inference can be made by taking note of the level of protection. It can be assumed that forests that do not have some form of protection are either communally or privately owned. As in the case of natural forests, the extent of ownership of woodland areas in the country is unknown. However, according to the national protected area expansion strategy, 9% of woodlands are formally protected.

2.6 THE STATE OF BIODIVERSITY IN THE COUNTRY

2.6.1 Status of biodiversity protection

Forests and woodlands in South Africa are regarded as the protectors of land, soil, vegetation, water, climate, wildlife, landscape, aesthetics and outdoor recreation. The forest policy emphasis is on protecting and maintaining forests for the benefit of all South Africans. It must be noted that as far as biological diversity is concerned, South Africa is ranked the third most diverse in the world. The country has between 250 000 and 1 000 000 species, many of which are endemic to the country. Some 18 000 vascular plant species occur in the country and 80% of these are said to be endemic (Grundy & Wynberg 2001). Grundy *et al.* (2001) further argue that in terms of the number of endemic mammal, bird and amphibian species, South Africa is the 24th richest country in the world and the fifth richest in Africa.

The Cape Floral Kingdom has the highest recorded species diversity of any similar-sized temperate or tropical region in the world and is the world's "hottest hotspot", or the area where high levels of species richness, endemism and threat coincide. It has been reported that the country has one third of the world's succulent plant species and the Succulent Karoo is recognised as a major centre of endemism (Grundy & Wynberg 2001). Seven major terrestrial biomes, or habitat types, exist in South Africa: forest, fynbos, grassland, Nama Karoo, Succulent Karoo, savannah and thicket. According to the DEA, 403 formally protected areas (national parks, provincial reserves or equivalents) constitute some 6% of the land surface area, placed under the control of 13 different management agencies, and falling under some 11 pieces of national legislation (DEAT 2001). The extent to which viable populations are conserved in such areas is not known but 74% of plant, 92% of amphibian and reptile, 97% of bird, and 93% of mammal species of South Africa are estimated to be represented in the present protected area system (Siegfried 1989).

2.6.2 Rate of change of biodiversity protection

Literature reports indicate that biodiversity is under considerable threat in South Africa and a substantial proportion of natural habitat has already been transformed into other land uses. According to the Red Data Book, threatened species (as listed in the book) include 3 435 (15%) of South Africa's plant species, 102 (14%) of its bird species, 72 (24%) of its reptile species, 17 (18%) of its amphibian species, 90 (37%) of its mammal species and 142 (22%) of its butterfly species. Comparisons between the number of threatened plants in 1980 (a total of 1 915 threatened taxa), 1984 (2 373) and 1995 (3 435) indicate increases of 24% and 79% respectively (Hilton-Taylor 1996). The extent to which different biomes are threatened depends upon the fertility of the soil, human population pressures, the economic value derived from the area, and the extent to which the biome is conserved in protected areas. It is reported that the existing reserve system in Southern Africa is estimated to protect 74% of all vascular plants (Siegfried 1989) (Grundy *et al.* 2001). Three of the seven described biomes (desert, fynbos and savannah) have more than 10% of their area conserved, with the forest biome approaching 9%, and 14 of the 70 vegetation types have more than 10% of their area conserved (Rebello 1997). The Nama Karoo, grassland and Succulent Karoo biomes have less than 3% of their area conserved. Of the nine forest vegetation types, only three fall below the recommended 10% conservation target. However, one of these, the Ngongoni Veld, has been identified as a top priority for conservation in South Africa (Grundy & Wynberg 2001).

2.7 THREATS TO FOREST HEALTH AND VITALITY

2.7.1 Pests, diseases and invaders in plantations

Pests and diseases were first recognised as threats to South African forestry in the late 1950s. Although losses at that time were not great, the South African government contributed substantially to funding research work and the education of scientists to deal with the problem. The threats and the losses caused by pests and diseases in the industry are in some cases difficult to quantify and therefore the impact of pest and diseases is not always well understood and realised. During the period under review, comprehensive information regarding the impact of a specific pest or disease was compiled only for the invasive Sirex wood wasp (*Sirex noctilio*).

There has been a noticeable increase in the reports of new or previously unreported pests and diseases in South Africa. This could be due to an increase in human and institutional capacity focusing on forest pests and diseases over recent years. It could also be due to globalisation, which has led to an increase in the movement of humans, germplasm and goods between countries and continents. As humans, germplasm or goods move on a global scale, pests and diseases are moved with them and are thus introduced to new areas where they did not previously occur. Recent introductions into South Africa that have adversely impacted on the sector include the Sirex wood wasp, Pitch canker of pines and the sap-sucking *Thaumastocoris peregrinus*.



Not only has the number of newly reported pests and diseases grown, but the areas affected by pests and diseases have also increased (Table 8).

TABLE 8 Summary of plantation area (ha) damaged

Year	Cause of damage	
	Disease	Insects
2003/2004	72	3 619
2004/2005	70	17 135
2005/2006	67	17 114
2006/2007	164	2 691
2007/2008	142	1 086

Source: DAFF Commercial Timber Resources annual reports

A matter of concern is the impact that climate change could have on the spread and introduction of new pests and diseases into South Africa. There have been numerous examples where climate change has resulted in the expansion of the range of insect pests. These expansions have had a major impact on plant communities that previously had not been confronted by the threat of these insect pests. The effect climate change could have on plantation health and vitality in South Africa has not been studied and deserves the necessary attention.

Currently, DAFF enforces quarantine measures on borders and ports of entry to curb the introduction of new pests and diseases. In order to combat the threat that pests and pathogens pose to the South African forest resources, DAFF has initiated the process of compiling a National Forest Protection Strategy that will guide processes and procedures to prevent, combat and mitigate the impact of the following pests and diseases.

2.7.1.1 *The eucalyptus gall wasp*

The eucalyptus gall wasp, *Leptocybe invasa*, is a new genus and species that was first identified in the Middle East in 2000. It was reported in South Africa in June 2007 and poses a serious threat to eucalyptus plantations. Monitoring is of critical importance to determine the distribution of the pest now. The insect forms galls on the mid-ribs, petioles and stems of new growth on young trees as well as nursery seedlings, subsequently stunting growth. The impact of the wasp on the development of an adult tree is not yet clear and needs further investigation. At present, the wasp is reported from a number of susceptible *Eucalyptus* spp. including *E. camaldulensis*, *E. globulus*, *E. gunni*, *E. grandis*, *E. botryoides*, *E. saligna*, *E. robusta*, *E. bridgesiana*, *E. viminalis* and *E. tereticornis*.

2.7.1.2 *Sap-sucking Thaumastocoris*

Since December 2003, *T. peregrinus* has become one of South Africa's most significant eucalyptus pests. It is currently distributed throughout South Africa and has moved northwards in Africa. To date the insect has been reported to be affecting 26 *Eucalyptus* species, including all commercially grown eucalyptus. Regardless of extensive studies, no definite factors influencing the occurrence or severity of infection by *T. peregrinus* have been identified. A study into the application of a possible biological control organism has been initiated, but to date no conclusive results have been produced.

2.7.1.3 *Fusarium pitch canker on mature trees*

In 2008, the first report of pitch canker on mature *Pinus radiata* in the Tokai plantation in the Western Cape was confirmed. This disease was previously known to affect only seedling stock in nurseries and transplants in the field. The affected trees were between five and nine years of age, although affected trees as old as 12 to 15 years were reported from the Eastern Cape. Similarly, mature *P. greggii* (southern provenance) in the Ugie area also tested positive for the presence of the pitch canker fungus. The origin of the new outbreaks is not yet known, but insect transmission is suspected. The occurrence of pitch canker on mature pine trees is of great concern. Not only does it threaten the productivity of plantations, but it also has implications for seed production in seed orchards. With the first outbreaks of full-blown pitch canker in South Africa it has become more crucial for all forestry companies to prioritise the screening and selection of trees that are tolerant of/ resistant to infection by this pathogen. This will be the only sure means to avoid dramatic losses in the longer term.

2.7.1.4 *The Sirex wood wasp*

The Sirex wood wasp remains a serious threat to *Pinus* plantations in South Africa. The South African Sirex Control Programme has worked towards the control of this pest and has shown positive developments. In 2008, inoculations

were continued with nematodes. Over 38 000 trees were inoculated in 156 compartments on 25 tree farms, ranging from the Eastern Cape to the areas around Vryheid and Ngome in KZN where *Sirex* was first detected in 2007. In 2009, another 8 300 trees were inoculated with nematodes. This was a significant decline from previous years and it was due to lower levels of infestation being recorded by the monitoring teams, as well as the reduction of epidemic levels in KZN.

In 2007, it was calculated that in the areas infested with the *Sirex* wood wasp, tree mortality has resulted in a loss of R153 million to growers and R630 million to processors in terms of potential loss of product output. In addition, growers were spending in excess of R60 million annually on *Sirex* control operations expenditure.

The results from the 2008 inoculations were encouraging. The levels of nematode parasitism from emerging wasps averaged 27% (ranging from 0% to 53%). This was a significant improvement over previous years, although not yet near the ideal levels of 80%. Similarly, samples were collected from trees that had not been inoculated (to give an estimate of the natural spread of the nematodes through the wasp population). A mean level of parasitism of over 20% was recorded. This is good evidence that the nematode biological control is establishing in the *Sirex* population and is being spread as *Sirex* moves through the landscape.

Philip Croft, with assistance from Mountain to Ocean Forests, set up two portable insectaries at the Tokai and Jonkershoek plantations for the collection and release of *Ibalia* wasp parasitoids. In 2007, 201 *Ibalia* were collected from earlier releases in KZN and rereleased in the area. In 2008, only 74 *Ibalia* were collected in KZN (some may have been affected by the devastating forest fires in 2008). From these early data it appears that *Ibalia* has established in KZN.

The current extent of *Sirex* infestation in South Africa has been gradually spreading northwards by approximately 80 km a year with the front now having reached Mbombela (Nelspruit) in Mpumalanga. In 2008, a trap network was again established prior to the *Sirex* flight season (October to December). These traps were placed in areas where *Sirex* is known to be present and also in areas where *Sirex* was not present. The chemical traps worked very well as an early detection mechanism and a large number of *Sirex* females were caught. Largely thanks to the co-funding by the former Department of Water Affairs and Forestry, the trap network was extended to 426 traps located on 142 sites.

The Department is contributing to the national initiative, the South African *Sirex* Control Programme through significant funding to the value of R2 742 000. Furthermore, DAFF serves on the *Sirex* Control Programme Steering Committee. A number of plantations under the management of the department participate in the monitoring programme to evaluate the spread of the pests as well as the success of the biological control measures currently in use. Regarding research and development funding, the Department currently contributes R4 950 000 annually towards this initiative.

2.7.2 Pests and diseases of natural forests

There has been a steady increase in the incidence of pests and diseases being reported from native tree communities in recent years. Two of these are the mortality of *A. erioloba* (camel thorn) and *Euphorbia ingens* (common tree euphorbia). In 2008, research was initiated into the cause of death of camel thorn trees in Kathu Forest in the Northern Cape. Trees in this iconic forest have been observed dying since the early 1990s but to date no cause of mortality has been identified. Symptoms of attack by cerambycid beetles were common on dying trees, while signs of fungal infection were observed on all dying trees.

The trees near the town of Kathu are of special importance as they form part of only two natural forests of these trees. This forest was declared a Natural Heritage Site in 1998 and is one of only two unique camel thorn forests in the world as discussed in Box 1.

In recent times, *E. ingens* has been observed dying in several areas in southern Africa. In a number of areas more than 90% of the trees have shown signs of disease or were in the process of dying. Preliminary investigations have identified several insects and fungi infesting affected trees although their roles as primary or secondary agents of mortality are undetermined as yet. There has also been a hypothesis that climate change might have had an influence.

2.7.3 Veld and forest fires in the country

Veld and forest fires are a common feature of the South African landscape and an inevitable consequence of the country's fire-prone vegetation and warm, dry climate. Unmanaged veldfires are among the main contributors to socio-economic threats and environmental degradation in South Africa. Veldfires impact severely on the economy of the country through the effect they have on the agricultural and forestry sectors (as shown in Fig. 6 on page 19). They account for the loss of property and life, job losses, displacement of people, habitat loss and biodiversity loss, to mention but a few. It can therefore be concluded that veldfires are generally among the greatest impediments of socio-economic development in the country.



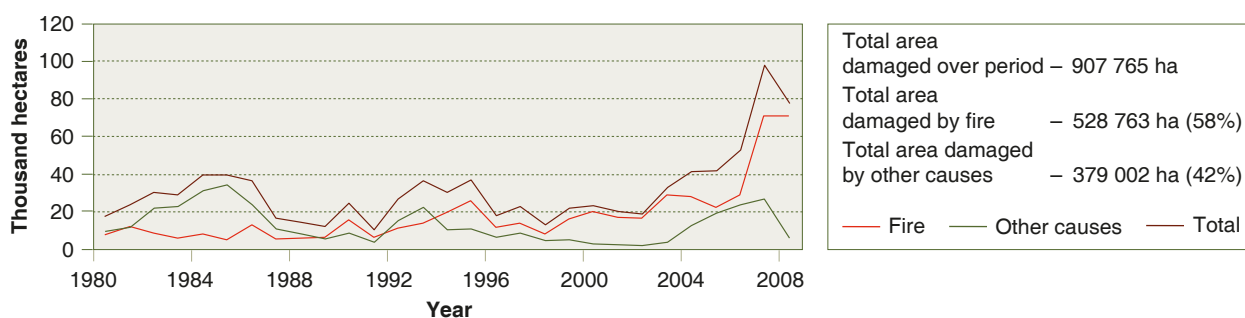


FIG. 6 Damage to plantations by fires 1980 to 2008

Source: Forestry South Africa (FSA) 2009

Fire losses experienced by the forestry industry have escalated dramatically in more recent years. Over the last 25 years, forest fires have affected an average of 13 437 ha of timber plantations annually. Of the total, 40% falls into the category of total write-offs. Fig. 6 indicates the damage to plantations by fires for the period 1980 to 2008.

It can be seen from Fig. 6 above that fires are a major cause of damage to plantations and that over the period there has been a steady increase in the damage caused. Although the number of fires and hectares affected increased markedly from 2004, significant plantation areas of over 70 000 ha were damaged in both 2007 and 2008.

Damage caused by fire leads to the outbreak of diseases and a timber shortage. It is also clear that rural communities and their livelihoods are increasingly exposed to the risk of veldfires. Table 9 below, which illustrates the occurrence of fires across the country, indicates that there was an increase in the number of fires from 2007 to 2008 but that the number decreased by 1% in 2009.

The vulnerability of various communities varies from one area to the next as a result of vegetation types, fuel load, land-use patterns, etc. DAFF is responsible for the administration and implementation of the National Veld and Forest Fire Act (NVFFA) of 1998 which governs integrated fire management in the country.

TABLE 9 Illustration of fire incidents per province for the period 2007–2009

Province	Number of fires		
	2007	2008	2009
Northern Cape	661	552	1 004
Western Cape	1 789	1 830	2 837
Eastern Cape	5 338	3 871	3 590
KwaZulu-Natal	9 979	9 487	7 684
Mpumalanga	8 928	7 252	6 021
Limpopo	2 865	6 123	3 112
Gauteng	1 445	1 954	1 539
North West	1 994	3 429	2 825
Free State	1 685	1 706	1 226
Total	34 684	36 150	29 838

Source: DAFF, AFIS report

The map shown in Fig. 7 on the following page depicts the information contained in the above table in a spatial format.

2.8 MEASURES FOR BIODIVERSITY PROTECTION AND PROTECTION OF NATURAL FOREST RESOURCES

The department has made strides in ensuring the protection of biodiversity and the natural forest resources in the country and these will now be discussed.

2.8.1 Forest biodiversity conservation planning process in the country

Following the completion of the national forest type classification in 2002, a continuous project was initiated to develop a systematic protected area planning framework for the forest biome in 2004. Such a decision-support tool would help DAFF to select and design a protected area network that is representative of forest biodiversity (including the protection of representative samples of the national forest types). This would enable DAFF and the relevant conservation agencies

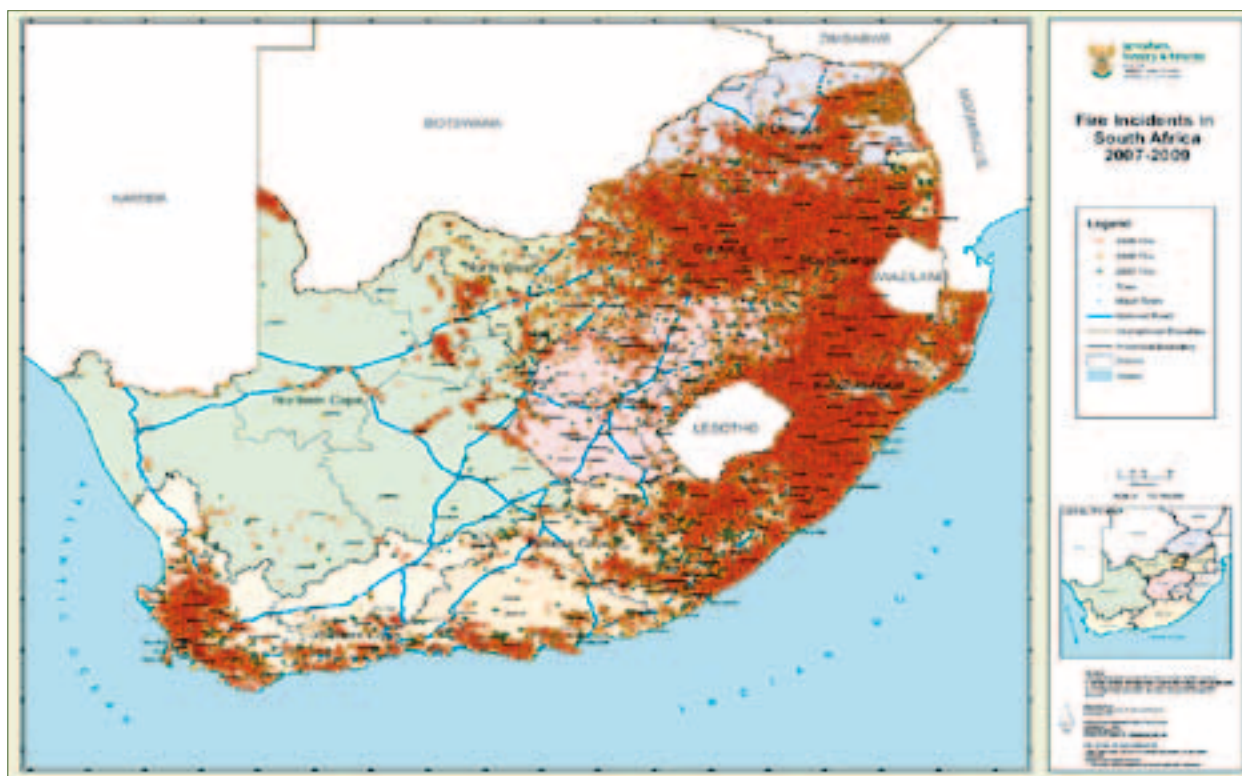


FIG. 7 Fire incidents in South Africa, 2007–2009

(national and provincial) to follow a more objective and systematic approach to forest protected area planning. The main objectives of this process were to determine the forest conservation targets (percentage of each forest type to be included in protected areas to conserve 75% of biodiversity), to determine relative conservation values (irreplaceability ratings) of forest patches, to assess the relative socio-economic values of forest patches and threats to these forests, to identify priority forests for protection and to propose appropriate *International Union for Conservation of Nature* (IUCN) protection categories for the various forest patches.

Experts developed the decision-support system with the aid of GIS-based and expert data analysis computerised systems, with funding support from the UK's *Department for International Development* (DFID). This process followed the well-tried C-plan model applied to other biomes such as the Cape Floral Kingdom and the Succulent Karoo. Biodiversity data on the forest biome were collected as a first step (the forest patches of the National Forest Inventory were used as units of analysis) and were supplemented with other data to fill in some gaps of the NFI.

Conservation targets were determined for forest groups through the species-area curve methodology. This methodology could not be used for the refined 26 national forest types, because some types lacked floristic data. A more rudimentary method was used to determine base biodiversity targets at this level, and the targets were increased by the use of multiple criteria such as relative rarity or historic loss of forest types. These outcomes were included in the National Protected Area Expansion Strategy and an overall national target of 23% was set for all natural rainforests. However, certain forest types are under-represented in protected areas and will receive priority in future protected area network planning.

2.8.2 Veld and forest fire prevention in the country

DAFF is currently using various systems to collect veldfire statistics. These include the National Veldfire Information System (NVFIS) that is currently manually populated, the satellite Advanced Fire Information System (AFIS) and reports received from various key stakeholders including the fire protection associations (FPAs), WoF and disaster management centres. The decrease in the number of fire occurrences in 2009 can be partly attributed to the work being done by the department in partnership with the WoF programme, the FPAs and other partners.

The establishment of FPAs, the development and maintenance of the National Fire Danger Rating System (NFDRS), cooperation with stakeholders as well as ensuring compliance with and enforcement



of the Act are some of the ways by which fires are managed in South Africa. The private sector has also played a major part in improving its readiness to combat fires through the installation of sophisticated electronic monitoring equipment and the deployment of far more human resources and firefighting equipment.

2.8.2.1 Fire protection associations

Chapter 2 of the NVFFA provides for the establishment and registration of FPAs as voluntary, community-based natural resource management organisations for the collective management of veldfires that will collaborate in preventing and controlling veldfires at the local level, using local knowledge within the framework provided by the Act. The Act provides for the establishment of FPAs because:

- Veldfires often become emergencies when they pose a threat to life and assets on the property where they have started or when they spread or threaten to spread beyond the boundaries of any one property.
- It requires cooperation to manage the conditions that determine their occurrence.

FPAs need to meet certain requirements in order to be recognised and registered by the Minister in terms of section 4(1) of the Act. Since its promulgation in 1998 and the passing of Chapter 2 Regulations in 2003, the department has managed to recognise and register 169 FPAs countrywide, covering an area of 39 472 802 ha. Altogether 88 of these FPAs have been operational for a period exceeding 12 months thus making them eligible to submit annual reports to the Minister in terms of section 5(1)(i) of the Act. See Table 10 below for the distribution of FPAs.

TABLE 10 Distribution of fire protection associations (FPAs) countrywide

Province	Number of FPAs	Fire risk profile	Area size (ha)
Limpopo	20	High-extreme	6 364 093
Mpumalanga	10	High-extreme	5 657 454
Gauteng	15	High-extreme	1 266 100
Free State	47	High-extreme	7 966 731
North West	11	High-extreme	6 385 845
Northern Cape	11	Low-medium	2 579 676
Western Cape	13	High-extreme	1 825 194
Eastern Cape	30	High-extreme	3 877 090
KwaZulu-Natal	12	High-extreme	3 555 619
Total number of FPAs in RSA	169		39 472 802

2.8.2.2 The National Fire Danger Rating System

The department is responsible for the preparation and maintenance of an NFDRS. At present, the department, in conjunction with the South African Weather Service (SAWS), the Department of Cooperative Governance and Traditional Affairs and the Council for Scientific and Industrial Research (CSIR), is in the process of developing such a system. In addition, the department is responsible for ensuring that the country has an updated veldfire risk classification (profile) map. The previous profile was developed in 2004 to serve as a national framework for the implementation of the Act. The first approximation of the veldfire risk classification for South Africa drew upon the scientific ecological literature available at the time and used vegetation maps to project ecological information in a spatial manner. These maps did not show the current land-use patterns. Since the first classification, scientific research has substantially improved the knowledge of veldfires in South Africa. In addition to these, land-use patterns are changing rapidly under the influence of diverse factors, including the expansion of towns and cities, causing an expanding urban-rural interface and exposing more assets to the hazard of veldfires. Furthermore, better data sets are now available; for example, a very detailed vegetation map has recently been released for South Africa and this, together with land cover information showing the extent of transformed land as well as other spatial information, will provide the basis for a more accurate assessment of veldfire risk in the country.

In view of the fact that veldfire risks are dynamic and owing to the above factors and the growing concerns raised by stakeholders for the need to revise the current risk profile, the department appointed the CSIR in August 2009 to revise the national veldfire risk (profile) classification. This profile will facilitate strategic planning aimed at mitigating the veldfire risk in South Africa and specifically support a bioregional approach for regional specific veldfire management. It will also be utilised as a tool to guide veldfire risk reduction by various stakeholders as it will clearly characterise the veldfire risk in terms of low, medium, high and extreme categories.

Cooperation among stakeholders is one of the key elements in integrated fire management and the WoF programme is one of the means used by government and its strategic partners to ensure better cooperation among stakeholders. The WoF programme is a South African government-funded, multi-partner programme established and officially launched in September 2003 to focus on integrated fire management and veld and forest firefighting. The project combines sound land management principles and best practice veld and forest firefighting expertise with the aim to create jobs and develop skills. Firefighting teams are trained and allocated to different areas of the country, especially where the fire risk is between high and extreme. The programme is co-funded by DAFF and its sister departments, the DWA and the Department of Cooperative Governance and Traditional Affairs, as well as the Forest Fire Association (FFA). For the 2009/10 financial year, WoF had 15 dispatch and six coordination centres across the country and recorded a total of 595 fires where an estimated 430 479 ha were burnt.

In an attempt to deal with issues of veldfires in the country and across the borders, South Africa also embarked on a process of entering into bilateral agreements on mechanisms for the management of cross-border fires with the countries bordering the Republic (see African Agenda for more on bilateral agreements).

2.8.2.3 Future prospects

Technological developments in the field of veldfire research have advanced in recent years and various tools are now available to assist decision makers in the management of veldfires and the associated risks. Satellites have a role to play in detecting, monitoring and characterising fires. The MODIS active fire and burned area products contain information that is crucial for understanding the timing and spatial distribution of fires and their characteristics. The availability of this information will enhance the collection of fire occurrence data in the future. Furthermore, the data can be compared to actual field data of fire occurrences to enhance the product.

BOX 2 Fire damage in the Eastern Cape Province

The Eastern Cape, like many other provinces, experienced devastating veldfires between June and September 2009 which destroyed livelihoods, properties and resulted in injuries. A municipality was one of the most severely affected areas: an estimated 600 households were affected, 54 families lost lives during these fires. Various role players from government mobilised disaster relief supplies to assist the affected people destroyed by the veldfires in the Ngquba area.

Source: O.R. Tambo District Management



2.9 THE SOCIO-ECONOMIC BENEFITS OF SOUTH AFRICA'S FORESTS

South Africa's forests are among the nation's most important natural assets. They embody a range of economic, social, subsistence and cultural values for all citizens. Government and industry are working to manage forests in a way that protects these values while also balancing other demands for forest products and services, now and into the future.

2.9.1 Sites of significant value

South African forestry companies have registered sites of conservation significance with provincial nature conservation authorities. Heritage sites, such as caves and Afro-Indian ruins, have also been registered with the DEAT. These registers are kept at the relevant forest management units, which are certified as being managed sustainably by FSC agents or ISO-registered consultants. The list of cultural and historical sites on state forest land (including natural forests and plantations) still consists of more than 1 000 entries. These sites are managed by various institutions and generate revenue. Citizens use forested areas for a wealth of outdoor activities, including hiking trails, bridle trails, viewpoints, mountain biking, horse riding, orienteering, bushwalking, bird watching, camping, ecotourism, chalets, guided walks, canopy slides, burial sites (e.g. the site of the Zulu Chief Dingane in the Hlatikulu Forest), Khoi rock paintings, old historic houses, big tree viewpoints, the remains of an historic fort and old friezes recovered from demolished buildings, Southern Cape Treetop Chalets and sacred forests (of note is the sacred Thate Vondo Forest in Limpopo). Visitors regularly express their appreciation for the



conditions and services at such sites. The significant sites listed in Table 11 are from plantation areas, open areas or indigenous areas on all forestry land for the period 2006 to 2009.

TABLE 11 Sites of significant value

Region/ zone	Burial sites	Archaeological sites	Recreational sites	Conservation sites	Other sites	Total
	No. of sites	No. of sites	No. of sites	No. of sites	No. of sites	No. of sites
2006/2007	1 913	563	273	441	13	3 203
2007/2008	894	261	437	468	68	2 128
2008/2009	1 184	353	177	677	39	2 430

Source: Draft report on criteria and indicators for sustainable forestry management in South Africa 2009

It can be observed from the table above that there are changes at other sites. These changes can be attributed to the low number of returns received in the years under review.

2.9.2 Forestry's contribution to poverty alleviation

There are general inequalities in South Africa owing to the past apartheid system. Rural areas were neglected for a very long time and forestry continued to serve as a safety net for the rural poor. It is only recently that the democratic government introduced a comprehensive programme to alleviate poverty in rural areas in an integrated manner.

2.9.2.1 Contribution to employment

In 2008, the industry provided employment for about 107 000 employees (Godsmark 2009). This is illustrated in Table 12.

TABLE 12 Forest sector and related employment in South Africa, 2008

Subsector	No. of employees		Total employment
	Direct	Indirect	
Forestry	76 844	30 000	106 844
Pulp and paper	13 200	10 781	23 981
Sawmilling	20 000	20 000	40 000
Timber board	6 000	3 000	9 000
Mining timber	2 200	2 000	4 200
Other	11 000	6 000	17 000
Total	129 244	71 781	201 025

Source: Sawmilling South Africa (SSA) 2010

The recent global economic crisis posed a threat to employment in the sector. The lower income groups/rural communities have been more sensitive to the pressures brought on by the crisis. As a large portion of the South African forest sector is located in rural areas and serves the rural community, the impact on the industry has been directly experienced by these rural communities. However, employment has decreased by as much as 21% in rural areas that are reliant on the forest sector (Tomaselli 2009). Leading South African economists predicted job losses of between 207 000 and 304 000 and suggested that, although the crisis was felt across the board, elementary workers were the hardest hit (Mail & Guardian 2009). In contrast, from anecdotal evidence gathered from its members, FSA maintains that very few jobs were lost in the forestry sector. A survey conducted by FSA indicated that about 800 people had lost their jobs. Furthermore, the South African Forestry Contractors' Association (SAFCA) has reported that 70 contractors closed their doors in the last year. Fortunately, however, SAFCA also reported that the total number of people employed by contractors remained stable at 32 000. This indicates that the forestry contractors sector has been able to absorb the employees of those contractors that had closed shop.

However, the forest sector could be utilised to curb an increase in unemployment and create opportunities in rural areas. The *Genesis report* (2005) states that there are great opportunities for plantation expansion through small grower and

community schemes in KZN and the Eastern Cape. The bulk of development will be on communally owned land, based on community or small grower schemes, creating an estimated 43 000 jobs in low-income areas in these provinces. This will add an estimated R739 million to the annual output of these provinces.

Although forestry will not be able to take households completely out of poverty, it could contribute substantially to household income and reduce the impact of the economic crisis on low-income rural communities. Fig. 8 below indicates the total number of people dependent on the forestry sector. They include directly and indirectly employed persons and the dependants of these workers.

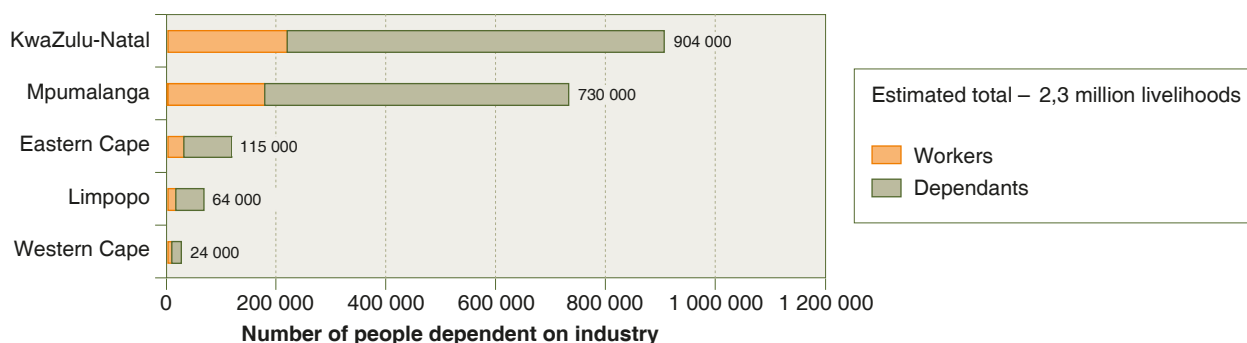


FIG. 8 Total number of people dependent on forestry industry by region 2008

Source: Forestry South Africa (FSA) 2009

In KZN, areas identified for afforestation are in close proximity to pulp processors and wood chipping plants. It is expected that all the plantations established will be short-rotation hardwood for pulping. This is an added advantage as the pulping sector is currently affected at a lower level than are a number of the other sectors in the industry. The creation of employment through afforestation in this province will significantly help in combating the jobs lost in this province because of the current economic crisis. In the Eastern Cape, the pole production sector has been identified as a possible market. This is also advantageous as this sector has been minimally influenced by the current economic crisis.

The department endorses a combination of measures for public and private sector employment and training to help avoid massive job losses in the period ahead. Under the auspices of the Expanded Public Works Programme, the department will accelerate the implementation of labour-intensive programmes such as Working for Woodlands (to rehabilitate degraded woodlands), WfW (a programme for removing invasive species) and WoF. Through these programmes, appropriate training courses are offered and accredited by the relevant authorities. In these identified forestry projects, the equitable representation of unemployed youth, women and disabled people will be sought to satisfy social as well as environmental needs. These fields of training are structured in such a manner that the chances of post-training employment are good. In August 2009 South Africa announced a major public investment programme of approximately R787 billion over the three financial years to March 2012 to assist in these processes.

Retaining and increasing employment will be at the centre of our coordination and efforts in the period ahead. The government believes that a combination of measures in respect of public employment, private sector initiatives and training can complement the other elements of this joint commitment and can ensure that massive job losses are avoided. However, it is important to note that training and education must be focused in areas that will ensure future employment or the initiative will be misdirected and wasted. Organised business and its affiliates should urge and encourage companies to do everything in their power to avoid retrenchments as a result of the global economic crisis and, instead, to invest in their people and modernise their productive capacity in order to avoid job losses in anticipation of the opportunities that will emerge after the global economic recovery. The government has to focus on opportunities to create stable employment through the forest sector by employing people for certain tasks that are currently outsourced or casual. The government also has to encourage and explore alternatives to retrenchments. Finally, training and skills development have to be prioritised, quality has to be improved, and learnership programmes have to be enhanced and structured to ensure optimum results with a view to employment creation and retention.

2.9.2.2 Forestry's contribution to people's welfare

Supplying basic needs is a function that forest resources perform for a large number of poor people. Firewood, building poles, medicinal plants and edible fruit are all critical to the livelihoods of the rural poor. Over 80% of rural households use fuelwood as their primary source of energy. Nearly all of this fuelwood, some 13 million m³ annually, is taken from savannahs, in-



indigenous forests and plantation off-cuts. This fuelwood use has a gross national value of approximately R3 billion annually, or just under R2 000 per user household per annum. The unsustainable use of fuelwood resources is therefore a threat not only to the resource base, but also to rural livelihoods. With a predicted 1,5 million rural households remaining without electricity for the next 20 years, continuing reliance on fuelwood can be expected.

Primary health care for the poor is also heavily dependent on forest resources. Some 28 million people use traditional plant medicine in South Africa and they need to be assured of a continuing supply. Over 65% of the plant material in urban markets comes from forest or savannah species and the most favoured species come from forests. Approximately one-third of medicinal plant material is tree bark. Forests also make an important contribution to the nutritional well-being of many poor people, with edible fruit and other forest foods being important sources of nutrition at various times of the year. User households extract considerable volumes of these woodland resources on an annual basis. There are also clear indications that it is the poorer and more isolated communities, as well as households that are less well off or headed by women, which are more dependent on these resources.

Without a doubt the eradication of poverty and underdevelopment are still the biggest challenges facing the country. The government was mandated in 2004 through the Millennium Development Goals (MDGs) to halve poverty and unemployment by 2014. Informed by the election manifesto, government in 2009 adopted policies such as the Medium Term Strategic Framework (MTSF) to tackle this challenge and is now developing programmes aimed at the following:

- Encouraging the growth and development of the first economy, thereby increasing its possibility to create jobs
- Implementing a programme to address the challenges of the second economy
- Building a social security net to meet the objective of poverty alleviation
- Ensuring sustainable resource management and use

DAFF must dovetail directly with this larger agenda, and the work of forestry in the department needs to focus on facilitating the early realisation of these goals. The department, as well as other government departments, therefore has a role to play in availing these services to fast-track access to opportunities in the entire value chain for emerging entrepreneurs and for those growers who do not wish to be linked to a market but want to establish themselves independently.

2.9.3 The contribution of the forest sector to the economy

The forest industry is a significant contributor to the economy of the country, both through the supply of renewable raw materials and through value addition in a range of primary and secondary processing operations. The forest resources represent a considerable natural asset for economic growth, based upon enterprise and employment opportunities. At the same time, significant constraints that hinder the poor from benefiting from forestry have been noted. If these were diminished there is the prospect that significant gains in national poverty reduction could be achieved. It is important to recognise that these forest resources are not uniform and therefore there is considerable differentiation within the sector. Natural forests also contribute to the national economy in ways that are more difficult to measure in monetary terms. The small area of natural forests of South Africa certainly makes a positive economic contribution. For example, the specialist furniture industry in the Knysna area, based on only 2 500 m³ of indigenous timber per annum, contributes an annual amount of R20 million to the Gross Domestic Product (GDP).

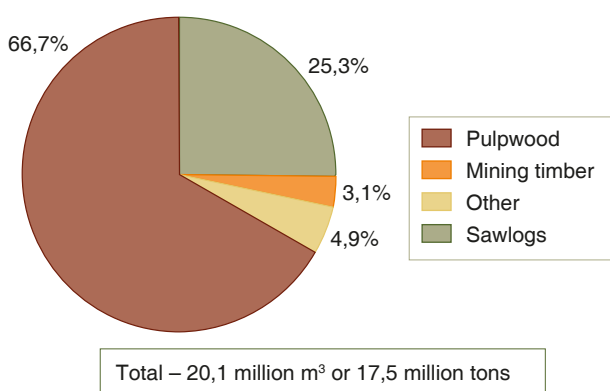


FIG. 9 Total roundwood production from plantations by province 2008

Source: Forestry South Africa (FSA) 2009

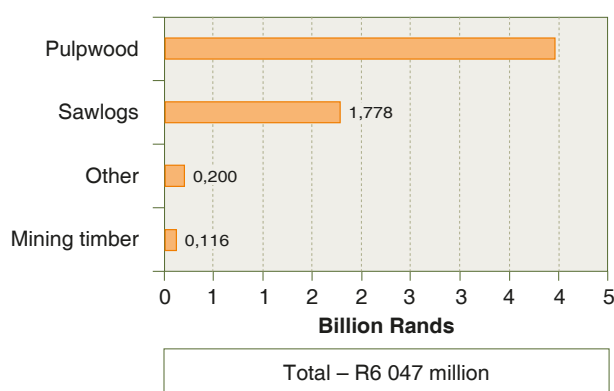


FIG. 10 Value of roundwood production from plantations by product 2008

Source: Forestry South Africa (FSA) 2009

2.9.3.1 Contribution to GDP

Commercial (exotic) plantations and associated processing plants are major contributors to the economy. Despite covering a relatively small share of the land, South Africa's forestry sector contributes R22 billion per annum to the GDP. In 2008, the commercial plantations produced 20,1 million m³ of roundwood worth R6 billion (8,8 million m³ of softwood and 11,3 million m³ of hardwood). By value, pulpwood (65,4% of the total) was the biggest contributor, followed by sawlogs (29,4%). There has been an increase of R1 billion from the R5 billion average in the previous three years.

2.9.3.2 Contribution to foreign trade

• EXPORTS AND IMPORTS

According to the South African Revenue Service (SARS), the export of forest products has more than doubled in the last ten years from R6,7 billion in 1999 to R14,8 billion in 2008. During this period, SARS recorded the total value of forest product imports as being R62 billion with total exports at R101 billion. The trend shows that the country continues to be a net exporter as exports of forest products significantly exceed imports (see Fig. 11). International trade in forest products showed a positive trade balance in 2008 of R3,5 billion, exports having been R14,8 billion as opposed to imports of R11,3 billion. Pulp and paper products were the main contributors to the positive balance of trade, accounting for 73% of exports. Paper products alone make up almost 45% of the total value of the world forest product trade. The volume of paper trade worldwide has also risen fivefold since 1960.

However, it must be noted that pulp production in February 2009 was 30% lower than in the previous year, which reflects the decreased global demand. Nonetheless, there has been a considerable increase in the value of exports from R9,9 billion in 2006 to R12,2 billion in 2007 to R14,8 billion in 2008. However, export values did drop in 2009 to R12,5 billion as a result of the global economic crisis.

The value of imported forest products was R11,3 billion in 2008. There was an increase in the value of imports from previous years. For example, in 2006 the value was R8,0 billion and in 2007 it was R9,8 billion.

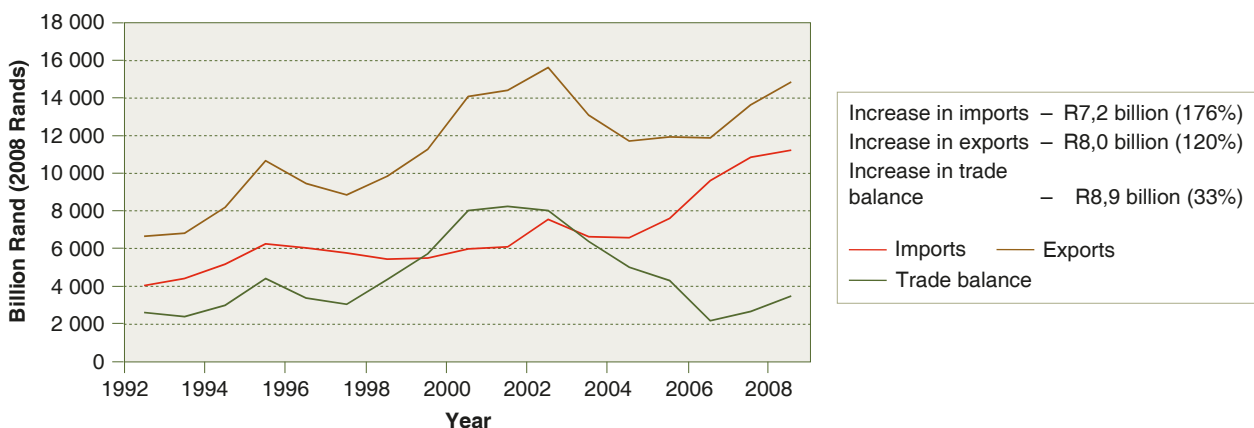


FIG. 11 Trade balance in forest products, 1992 to 2008 (real)

Source: Forestry South Africa (FSA) 2009

Worldwide, there are many pressures on forests, but one of the greatest threats is the growing production and trade of forest products fuelled by rising consumption, especially in the wealthier countries. According to the FAO, the top ten exporters of forest products in terms of value are Canada, the US, Finland, Sweden, Germany, France, Indonesia, Malaysia, Russia and Brazil. Together, these countries account for 70% of world exports. Exports from many developing countries have also grown rapidly, but Canada and the US still dominate, accounting for one third of the world total.

As mentioned, paper is the major export product in South Africa. It is followed by pulp and then solid wood. The country's main imported products are paper followed by solid wood. Although an aggregated positive trade balance of R5,3 billion was recorded for paper,



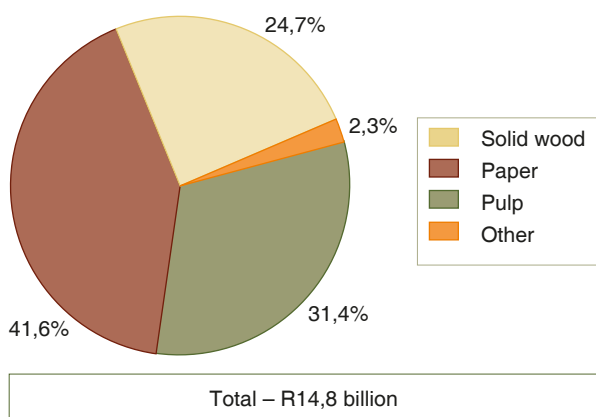


FIG. 12 Forest product exports, 2008

Source: Forestry South Africa (FSA) 2009

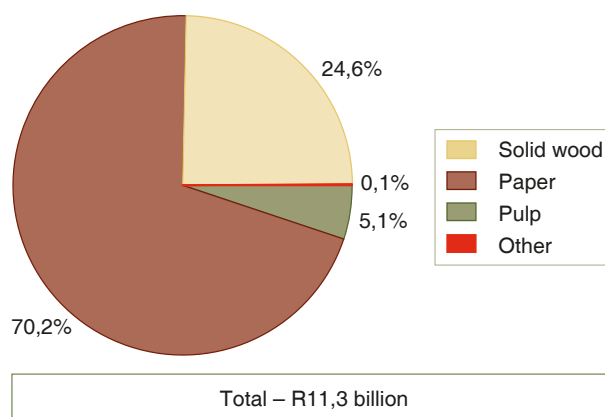


FIG. 13 Forest product imports, 2008

Source: Forestry South Africa (FSA) 2009

solid wood and other products. This was offset to some extent by a R1,8 billion deficit in paper products. The country also continues to trade with neighbouring countries, especially Zimbabwe and Mozambique.

Regarding imports, the three main products are sawn boards or chipped lengthwise, semi-chemical pulp board and paper and paperboard coated in kaolin.

• SOUTH AFRICAN FOREST COMPANIES TRADE AND INVESTMENTS WORLDWIDE

South Africa is increasingly seen as an attractive place to source timber. This is mainly because the quality of South Africa's sawn timber is generally on a par with equivalent grades in New Zealand, Australia, Chile and Brazil. South African sawlog prices are also the lowest in the world, with the exception of Brazil. It is estimated that over 80% of the plantations are FSC-certified, one of the highest proportions of accredited plantations in the world. For this reason it is advantageous to buy from SA. However, virtually no sawn timber or sawlogs are exported from SA because of local supply and demand constraints (we cannot even meet our own demand so there is nothing available for export).

A significant portion of SA's pulp is exported to Asian countries, with Indonesia leading at 16,4%, followed by China at 8,5%, Thailand at 4,4% and South Korea at 3%. Other exports are distributed among Germany, Taiwan, the United States, India and the rest of the world. Pulps of fibres derived from recovered (waste and scrap) paper or paperboard are mainly exported to Singapore, India and China. Fig. 14 below shows the distribution of pulp exports.

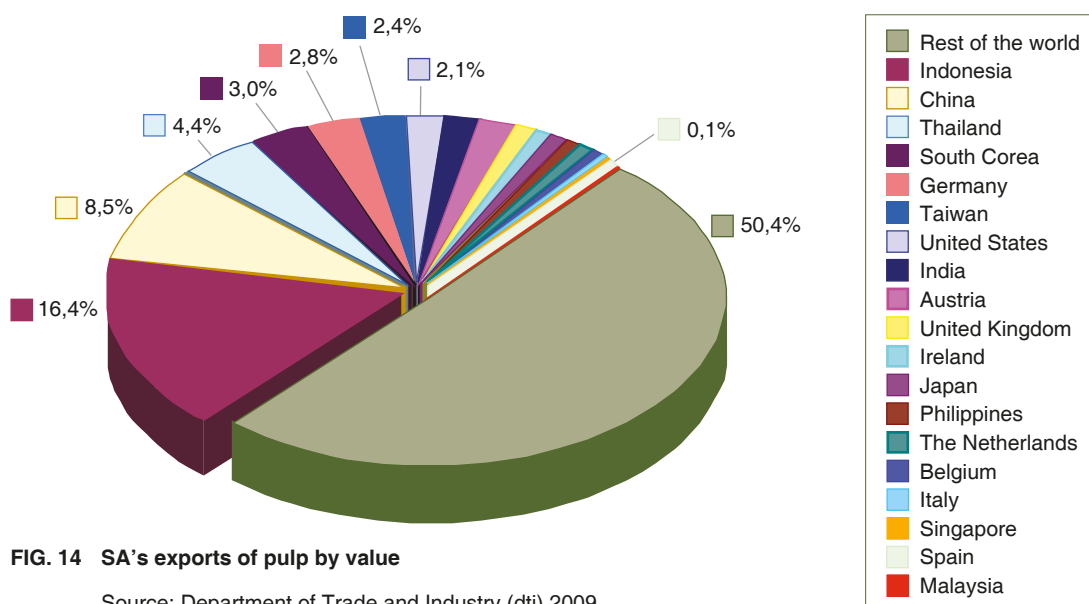


FIG. 14 SA's exports of pulp by value

Source: Department of Trade and Industry (dti) 2009

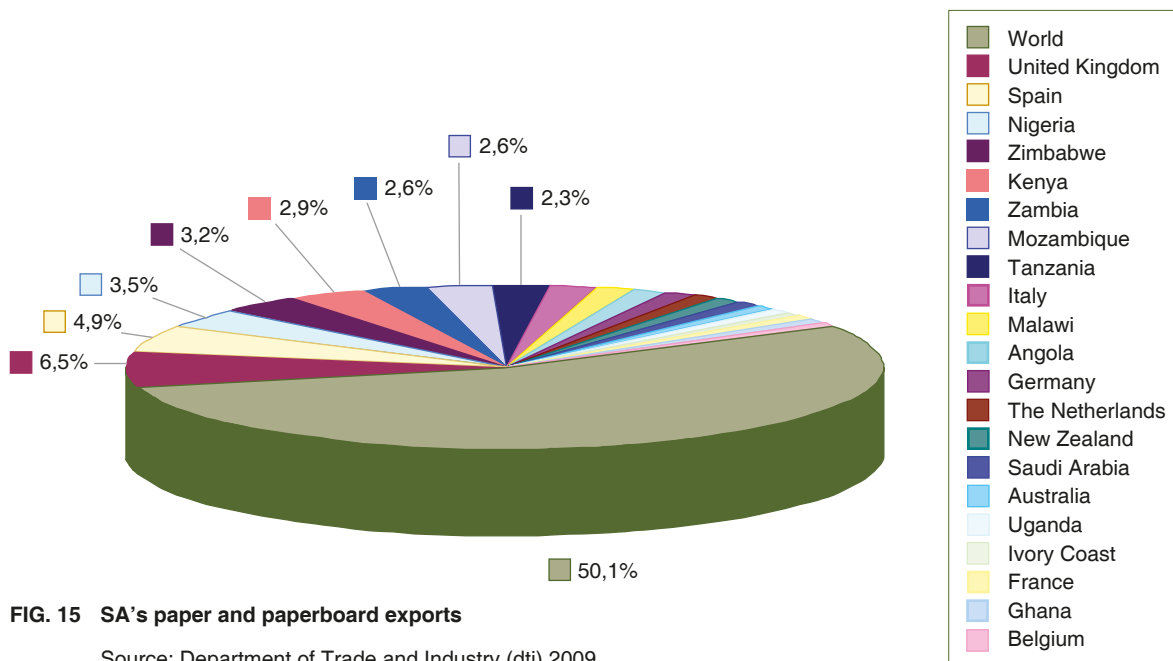


FIG. 15 SA's paper and paperboard exports

Source: Department of Trade and Industry (dti) 2009

South Africa also exports paper and paperboard to numerous countries as shown in Fig. 15. In 2009, the UK received 6,5%, followed by Spain at 4,9%. As for Africa, Nigeria, Zimbabwe and Kenya received 3,5%, 3,2% and 2,9% respectively.

• EXPANSION OF SOUTH AFRICAN PAPER COMPANIES IN EUROPE

Table 13 below illustrates that, apart from local investment, the highest investment by South African companies in paper manufacturing is in Poland, the Russian Federation, Austria and Slovakia. This may be as a result of the availability of raw materials.

TABLE 13 SA investment in pulp and paper in 2009 per country

Country	Paper	
	Paper (t)	Pulp (t)
Austria	657 000	328 000
Hungary	—	—
Israel	145 000	—
Slovakia	595 000	472 000
Russian Federation	852 000	755 000
Poland	1 355 000	545 000
Czech Republic	370 000	440 000
Germany	210 000	—
Turkey	140 000	—
Sweden	250 000	258 000
United Kingdom	405 000	—
Bulgaria	80 000	90 000
Finland	65 000	—
South Africa	1 160 000	980 000

Source: Paper Manufacturers' Association of South Africa (PAMSA) 2010

Table 14 on the following page shows that the highest investment in fine paper is by Germany, followed by Austria and Finland. Investment in South Africa is minimal.

There are several factors that may have contributed to this. These include the economies of scale needed to venture into this business, and a lack of skills.

TABLE 14 Investments of South African companies in fine paper in Europe in 2009

Country	Fine paper (capacity in ktons)			
	Mondi: paper	Sappi: paper	Mondi: pulp	Sappi: pulp
The Netherlands	–	520	–	
Belgium	–	500	–	180
Austria	387	950	50	255
Germany	–	1 010	–	410
Finland	–	730	–	330
Switzerland		500		
United Kingdom				
Russian Federation	642		755	
Slovakia	545		472	
Israel	145		–	
South Africa	250		760	
South Africa (newsprint)	220	350		1 025
South Africa (packaging)	690	830	55	

Source: PAMSA 2010

• POLICY IMPLICATIONS

The forestry sector is undergoing dramatic transitions because of market shifts since the end of the colonial era. Some structural changes as a result of this are:

- Negative trends in the real prices for wood and industrial products
- Volatility in softwood/hardwood spread
- Booming of emerging economies
- Shift in the pulp and paper industry from North to South

In order for the forestry sector to develop further, measures identified in the Forestry 2030 Roadmap (a long-term strategy for the forestry sector) need to be implemented. Most important is the need to address timber shortages while at the same time ensuring that the industry complies with environmental legislation. In order to introduce technological improvements and to meet the increasing demands placed upon the sector for better standards of management and harvesting, the level of skills in the sector will have to be increased dramatically. The following need to be taken into consideration:

- There is a need to have an efficient infrastructure.
- As South Africa is a water-scarce country, expansion and development will primarily come from existing afforested areas through improved tree breeding and silvicultural management.
- Improved protection of the forestry assets is crucial. The country is currently developing a Forest Protection Strategy.
- There is a need to encourage the increased recovery and use of waste paper.
- Restructuring of the sawmilling industry has to be fast-tracked.

PART 3

The international and regional context of forestry in South Africa

3.1 INTERNATIONAL CONVENTIONS, AGREEMENTS AND PROCESSES

Recent decades have seen the establishment of a number of international agreements aimed at safeguarding the world's natural resources. These agreements have a direct bearing on forest management and place obligations on individual states. As part of the global village, South Africa has ratified some international agreements and conventions. The impact of these agreements and conventions on member states is not limited to the obligations they impose in terms of the sustainable use of resources. In most cases, they also open the door to new opportunities for strengthening national and regional economies. Some of them are administered not by DAFF but by the Department of Environmental Affairs (DEA) even though they might have a bearing on forest management. A summary of these conventions is as follows:

- **United Nations Forum on Forests (UNFF):** The UNFF was established in 2000 by the Economic and Social Council (ECOSOC) of the United Nations to establish an instrument for the management, conservation and sustainable development of all types of forests and to strengthen long-term political commitments made in the Rio Declaration in 1992, taking into account the Forest Principles, Chapter 11 of Agenda 21 and the outcome of the IPF/IFF processes and other global forestry commitments and agreements. The department actively participates in this forum, which meets biennially and has been instrumental in uniting Africa during the breakdown of the G77 in the negotiations of a Non-legally Binding Instrument of the UNFF in 2005 and 2006. As a result, the African Group became a strong negotiating partner and was fundamental to the breakthrough in the negotiations in 2007.
- **United Nations Commission for Sustainable Development (UNCSD):** The UNCSD was created in December 1992 to ensure effective follow-up from the United Nations Conference on Environment and Development. The Commission ensures the high visibility of sustainable development issues within the UN system and helps to improve the UN's coordination of environment and development activities. The current cycle focuses directly on forestry. The department is working on strengthening its participation in this forum.
- **United Nations Framework Convention on Climate Change (UNFCCC):** This is an international environmental treaty for the promotion of reforestation to create carbon sinks for greenhouse gases. The department supports the lead department (the DEA) and participates in this forum. Forestry is identified as important in terms of both climate change mitigation and adaptation. Forests are active carbon sinks that remove the greenhouse atmospheric gas, carbon dioxide, through the process of photosynthesis. The forestry sector thus contributes to reducing South Africa's greenhouse gas inventory, although not enough to compensate fully for emissions made by all other sectors of the economy.
- **Convention on International Trade in Endangered Species (CITES):** South Africa ratified the Convention on Trade in Endangered Species (CITES) as well as the United Nations Convention on Biological Diversity (UNCBD). Only one true South African tree species, the red stink wood (*Prunus Africana*) appear on the CITES list, which limits trade in this species. The species is heavily used for medicinal purposes in Africa. The red stinkwood has been listed as a protected tree species under the National Forests Act of 1998, and is less threatened locally than in the rest of Africa due to better monitoring and control. As a CITES signatory, South Africa has an obligation to monitor and control CITES timber moving through its borders. A Timber Monitoring Group initiated by the non-government organization, TRAFFIC in cooperation with the Department of Agriculture, Forestry and Fisheries undertakes periodic monitoring of cross-border timber movement, and has trained customs officials at several ports in timber identification processes. Timber monitoring focuses mainly on detecting CITES timber harvested in tropical countries and checking whether permits for these are in place. There is a periodic monitoring of products of locally protected tree species imported from neighbouring countries, such as camel thorn (*Acacia erioloba*) and leadwood (*Combretum imberbe*) braaiwood imported from Namibia, Botswana and Mozambique. These species are also protected in some of the neighbouring countries, and cooperation on monitoring these within the SADC region is essential. The Department of Environmental Affairs (DEA) is the lead agent for both CITES and the UNCBD. Officials of the Department of Agriculture, Forestry and Fisheries participate or give



input into the Conference of the Parties on the Convention on Biological Diversity. This includes inputs into South African position papers, and an evaluation and report-back on the implementation of the Extended Programme of Work on Forests and the conservation targets of the UNCBD.

- **International Tropical Timber Organization (ITTO):** ITTO is an intergovernmental organization promoting the conservation and sustainable management, use and trade of tropical forest resources. The International Tropical Timber Organization (ITTO) was established under the auspices of the United Nations in 1986 amidst increasing worldwide concern for the fate of tropical forests. While almost everyone was alarmed at the rate of deforestation occurring in many tropical countries, there was also considerable agreement that the tropical timber trade was one of the keys to economic development in those same countries. The reconciliation of these two seemingly disparate phenomena is ITTO's story. ITTO develops internationally agreed policy documents to promote sustainable forest management and forest conservation and assists tropical member countries to adapt such policies to local circumstances and to implement them in the field through projects. In addition, ITTO collects analyses and disseminates data on the production and trade of tropical timber and funds a range of projects and other actions aimed at developing industries at both community and industrial scales. ITTO occupies an unusual position in the family of inter-governmental organizations. Like all commodity organizations, it is concerned with trade and industry; but like an environmental agreement, it also pays considerable attention to the sustainable management of natural resources. It manages its own program of projects and other activities, enabling it to quickly test and operationalise its policy work. Other features include:
 - an equal partnership in decision-making, policy formulation and project development between producing members (tropical developing countries) and tropical timber consuming members (mostly temperate developed countries);
 - the active participation of civil society and trade organisations in meetings and project work;
 - the formulation and implementation of projects in producing member countries, using mostly local expertise;Twice-yearly meetings of its governing body (the International Tropical Timber Council), meaning a comparatively rapid pace of debate, decisions and action.

Despite having a very small area of natural forests, South Africa can benefit from ITTO's best practices and projects. The country is in the process of affiliating; it is hoped that this process could be finalised by the end of 2010 or during the first quarter of 2011.

3.2 THE AFRICAN AGENDA: REGIONAL CONTEXT OF FORESTRY IN SOUTH AFRICA

The government of South Africa has committed itself to the objective of contributing to and promoting the creation of a better Africa and a better world. According to outcome 11 of the MTSF, forestry needs to contribute towards African advancement and enhanced international cooperation. This includes consolidation of the African Agenda among other things. In this regard, South Africa plays a key role in promoting sustainable development within the southern African region.

3.2.1 The Southern African Development Community Protocol on Forestry

The declaration and treaty establishing the SADC was signed at the Summit of Heads of Government in Windhoek, Namibia in August 1992. The objectives of the SADC are: to achieve development and economic growth, alleviate poverty, enhance the standard and quality of life of the peoples of southern Africa and support the socially disadvantaged through regional integration, evolve common political values, systems and institutions, promote and defend peace and security, promote self-sustaining development on the basis of collective self-reliance and the interdependence of member states, achieve complementarity between national and regional strategies and programmes, promote and maximise productive employment and utilisation of the resources of the region, achieve sustainable utilisation of natural resources and effective protection of the environment, and strengthen and consolidate the long-standing historical, social and cultural affinities and links among the peoples of the region.

The SADC encompasses a large and diverse forest area, including both tropical and temperate forests. SADC countries together account for 9% of the world's forests. A large part of this (38%) is located in the Democratic Republic of the Congo, which has 60% of its land area under forest. In addition, Angola, Malawi, the United Republic of Tanzania and Zambia all have a high percentage of their land area under forest. South Africa and Swaziland have significant forest plantation programmes.

Although South Africa has only 2% of the SADC's forest area, it dominates the production and trade of forest products in the region. The country produces almost 60% of the region's industrial roundwood, 65% of its sawnwood, more than 80% of both its panels and its paper pulp, and nearly all of its paper and paperboard. The country also dominates the

region's exports in most products. The southern African forests are important for carbon storage (particularly those of the Democratic Republic of the Congo) and biological diversity conservation and they have important wildlife resources.

The SADC subregion developed the SADC Protocol on Forestry, which was signed in Angola in 2002 and which is the overall policy framework for collaboration among member states on forest development that also covers the substantive matters of the UNFF. South Africa was among the first countries to ratify the protocol (it did so in 2003), which has been ratified by ten of 14 countries so far. Thus, the protocol has been ratified by a sufficient number of member states, enabling it to enter into force in 2009. Consequently, a draft SADC Regional Forestry Strategy has been developed and is under review. The overall purpose of the strategy is to implement the Protocol on Forestry. The strategy sets a vision, mission and values as well as the strategic direction of the SADC forestry sector, in terms of programmes that should be implemented in the coming ten years to enhance forestry development in the region. The next step after the strategy is to develop programme documents to implement field activities in member states. There is a draft implementation plan for the protocol but it is yet to come into force. Even though the plan is not yet implemented, South Africa currently implements the principles of the protocol through its national programmes, for example, the signing of MoUs on cross-border fire management with adjacent countries.

3.2.2 The African Forestry and Wildlife Commission

The government continues to play a leading role in all regional forestry initiatives, including the African Forestry and Wildlife Commission (AFWC). Created in 1959, the AFWC is one of six regional forestry commissions established by the FAO to provide a policy and technical forum for countries to discuss and address forest issues on a regional basis. It meets every two years. The department has also chaired this commission and made contributions to ensure that the continent presents a common agenda at the Committee on Forestry (COFO), in which it actively participates. Continuous participation will ensure that the country benefits from the programmes of the FAO in the region, such as Forest Resources Assessments. The commission acknowledged in the 17th session that the forestry and wildlife sectors are often managed by different government agencies and governed by different legal instruments. This is also the case in South Africa, where DAFF is responsible for forestry resources while the DEA is responsible for the wildlife sector. However, the DEA has been encouraged to participate in this forum.

3.2.3 Bilateral relations

South Africa is continually striving to ensure sustainable forest management in collaboration with regional and international bodies. Consequently, the country has orchestrated collaboration with the countries in the region and internationally. This mainly aims to consolidate the African agenda, *strengthen south-south cooperation, north-south cooperation and participation in the global system of governance, and strengthen political economic relations* as they pertain to forestry. This has resulted in the signing of several MoUs as discussed below.

3.2.3.1 Cooperation and integrated veldfire management

In an attempt to deal with the issue of veldfires in the country and across its borders, South Africa has embarked on a process of entering into bilateral agreements on mechanisms for the management of cross-border fires with the countries bordering the Republic. The New Partnership for Africa's Development (NEPAD) and the SADC Committee Protocol on Forestry were used as the vehicles to mandate countries to collaborate on common veldfire issues.

The process of engaging identified countries began in September 2006 with on-going forestry support, direction from the Directorate: International Relations and the involvement of the regional offices. The neighbouring SADC countries engaged and approached included Lesotho, Swaziland, Mozambique, Botswana, Namibia and Zimbabwe. Discussions were held to solicit the common problem and agreement was reached that the objective of the MoU would be to expand and continuously explore the best strategies for cooperation between the parties in the following areas:

- Measures to facilitate the combating of cross-border wildfires
- Measures to facilitate SFM and development
- The sharing of available resources
- Technical, scientific, educational and social information exchange in all forestry related matters

Furthermore, it was agreed that the MoU should also cater for other forest management issues in the light of the current and predicted increasing timber shortage within the SADC region. All discussions culminated in discussion documents which eventually resulted in MoUs to be signed between the government of the RSA and these countries.



The governments of the RSA and Lesotho signed an MoU on 19 June 2007. Article 4 of the signed MoU provides for the constitution of a Permanent Technical Committee (PTC) comprising not more than five members designated from each implementing authority. The PTC will be chaired jointly by one member from each implementing authority. The Acting Director-General of the then Department of Water Affairs and Forestry, on behalf of the government of the RSA, approved the names of five departmental officials to serve on the PTC. At the same time, a letter was prepared and sent to the government of Lesotho, requesting them also to start with the process of constituting its own PTC.

In terms of Article 4, the PTC is empowered to adopt its terms of reference (ToR) in accordance with the objectives and provisions of the MoU. It is also regarded as constituting a Committee of the Joint Bilateral Commission for Cooperation (JBCC), which is a bilateral cooperation structure that was established in 2001 with the objective of coordinating co-operations between the two countries. The PTC is therefore expected to participate in future proceedings and deliberations of the JBCC.

South Africa has also signed an agreement with the US on the prevention and combating of forest fires. The MoU between DAFF and the SAWS was signed in 2005 and was valid until July 2010. This was signed to pave the way for collaborations, particularly with regard to the NFDRS, a system that is required in terms of Chapter 3 of the National Veld and Forest Fire Act, of which DAFF is the custodian.

3.2.3.2 Capacity building

South Africa has signed an MoU on capacity building and a training programme with Rwanda. It is yet to sign an MoU with India regarding a Forestry Exchange Programme on Sustainable Forest Management and Development.

The country has signed MoUs with China on afforestation and the exchange of technical information and technology. The MoU signed with the Russian Federation deals with the prevention and combating of fires, the sourcing of timber to South Africa, and the management and sustainable development of forestry resources. MoUs on forestry issues with Sri Lanka, Vietnam, Australia, New Zealand and Brazil are in the pipeline. The country has also held study tours in other countries, including Uganda.

3.3 INSTITUTIONAL, FOREST POLICY AND LEGISLATIVE FRAMEWORK IN SOUTH AFRICA

3.3.1 Institutional framework

Following the election of the new administration in May 2009, government departments were reconfigured to enhance service delivery. The Forestry branch was moved from the former Department of Water Affairs and Forestry to the former Department of Agriculture now known as DAFF. DAFF is now the custodian of South Africa's forestry resources. It is primarily responsible for the formulation and implementation of policies governing the forestry sector. The Forestry branch has three Chief Directorates, namely Forestry Regulation and Oversight, Forestry Development and Forest Regions. The main purpose of the Forestry branch is to ensure the sustainable management of the country's forest resources (natural forests, woodlands and plantations) in order to realise their optimal social, environmental and economic benefits. It addresses SA's framework for sustainable development, cooperative governance and participation of local communities in forest management as provided for by the White Paper on Sustainable Forest Development (1996), the National Forestry Action Programme (1997) and the resultant National Forests Act and National Veld and Forest Fire Act, both of 1998.

3.3.2 Policy and legislative measures

The overall goal of forest policy is to promote a thriving forest sector that can be utilised for the lasting benefit of the nation and developed and managed to protect the environment. In 1996, the department released a policy document, the White Paper on Sustainable Forest Development in South Africa. This White Paper, which was the result of an extensive consultation process to ensure inclusive contributions by all the relevant stakeholders, is premised from this overall goal. Over the years there has been a call for the department to take stock of progress made regarding the implementation and relevance of the White Paper. Several issues within the department have triggered the review of the White Paper. They include:

- Language relating to community forestry
- Principles of forest enterprise development
- Silence of the White Paper on forest health
- The relevance of the Reconstruction and Development Programme as a thrust for policy choices
- Phraseology relating to former homeland issues

This review of the White Paper, as part of the SA National Forest Programme (NFP), was completed during the first quarter of 2010. In order to further effect the provisions of the White Paper, the department developed and promulgated the following Acts:

- **The National Forests Act of 1998:** The NFA contains a set of principles that guide sustainable forest management. It is mainly intended to promote and enforce the sustainable management and development of forests for the benefit of all, to promote the sustainable use of forests, and to provide special measures for the protection of forests and trees. To balance the protection of forests with sustainable use, the Act regulates a wide range of uses and sets out the right of everyone to have reasonable access to state forests for non-consumptive purposes. The rights to the use, management, control and operation of state forests and the produce in them rest with the Minister and are regulated by the department through this Act, which was amended in 2005 by the Forestry Laws Amendment Act, 2005 (Act No. 35 of 2005).
- **The National Veld and Forest Fire Act of 1998:** The NVFFA aims to prevent and combat veld, forest and mountain fires throughout the country and thereby limit and reduce the damage and losses caused by fires to life, fixed property, infrastructure, movable property, stock, crops, fauna and flora and veld in South Africa. The NVFFA is the primary legislation currently governing integrated veldfire management in South Africa. It was amended by the National Veld and Forest Fire Laws Amendment Act, 2001 (Act No. 12 of 2001).
- **The National Forestry Action Programme (NFAP) of 1997:** South Africa developed and implemented its National Forestry Action Programme (NFAP) framework as its strategy for achieving the policy goals set in the White Paper on Sustainable Forest Development in South Africa (1996). The NFAP was meant to be a three-year programme, and was replaced when South Africa adopted the international standard, National Forestry Programme (NFP) as the framework for national policy development and planning to ensure conservation and sustainable use of forests. A South African NFP Framework was therefore compiled during 2004 to meet local requirements. Guiding principles, vision and goals, approach and methodology were all included in this NFP framework. The NFP is an integral part of the country's National Sustainable Development Strategy. The approach is to use the NFP to coordinate and integrate policy and strategy development initiatives within a single programme.

The department, in partnership with the Food and Agriculture Organization of the United Nations (FAO)'s NFP facility, has developed the strategy for raising the profile of forestry in South Africa. The following strategies are also currently being developed to address the challenges identified by, among others, the Forest Sector BBBEE Charter and are at different stages of development and/ or adoption:

- National Sawlog Strategy (to combat the long-term timber supply shortage)
- National integrated National Forest Protection Strategy for the forest sector
- Small Medium and Micro Enterprise Strategy
- National Industrial Policy Action Plan (paper, wood and furniture)
- Strategy on climate change

Most recently, the department has embarked on the development of a long-term strategy for the forestry sector as a whole entitled "*Forestry 2030 Roadmap*". This document determines a new vision and sets strategic objectives with goals, targets and actions based on challenges identified together with stakeholders and the experience gained in the implementation of the White Paper on Sustainable Forest Development in South Africa since its adoption with consequent programmes and initiatives. Consequently, the action plan for forestry was developed, consulted and agreed with the sector in 2008. The roadmap is currently being aligned with the overall plan for the newly established DAFF to make it relevant to the mandate of the new department.

3.3.3 Forest certification standards

The NFA provides for Sustainable Forest Management (SFM). It also encompasses the promotion of certification programmes to encourage SFM. Although both certification and PCI&S (discussed in Part 1) are aimed at achieving sustainable forest management, they attempt to do this through different processes and are driven from different spheres of influence.



In contrast, the main purpose of certification is to certify the fulfilment of certain expectations related to SFM, or progress towards them. It is designed to send a market signal to buyers that the products they purchase are derived from forests that are managed to particular environmental, social and economic standards. In addition, it is a procedure of independent evaluation in which a third party makes an evaluation as to whether or not a set of standards is fulfilled. This demonstrates to users or buyers that the product comes from a forest that fulfils

quality expectations or is progressing in that direction. Most plantation forests have been independently certified by the Forest Stewardship Council (FSC), the certification process being initiated voluntarily by forest owners themselves. To date, the total area certified under FSC is 1 572 568 ha, including planted and non-planted areas.

In 2004 the forestry sector engaged in a National Initiative to develop a South African Certification Standard to be accredited by FSC. A National Working Group composed of Governance Chamber, Social Chamber, Environmental Chamber and Economic Chamber representation was established to oversee the process. The objective of the National Initiative is to aid local promotion of forest certification through a standard that is locally appropriate to South African conditions. The development process entailed the appointment of an independent Professional Service Provider to drive the process as well as consultations with the stakeholders, experts and non-governmental organisations. This process was finalised in June 2009 and despite the fact that the FSC is to review its own principles and criteria, the Working Group nevertheless decided to submit the draft standards to the FSC before the end of 2010 under their existing principles and criteria.

3.3.4 The Forest Sector Broad-Based Black Economic Empowerment (BBBEE) Charter

The government of South Africa is committed to improving the lives of its citizens, as attested to by the outcomes in the Medium Term Strategic Framework (MTSF). The Forest Sector BBBEE Charter, developed in collaboration with the sector, is one of many means by which forestry contributes to the realisation of these outcomes, e.g. decent employment through inclusive economic growth, and vibrant, equitable and sustainable rural communities contributing towards food security for all. The Charter was signed in Cape Town on 22 May 2008. It is the most important instrument for development within the forestry sector in the medium term. The Charter outlines the proposed targets and commitments by industry, government and labour in effecting sustainable transformation in and by the sector. The implementation of the Charter requires considerable financial investment by all sector stakeholders to secure the desired outcome. However, a number of other aspects of the Charter require non-financial investments and in some instances could even assist in successfully enduring the financial pressure placed on the industry. Some of the factors that enable the Charter to assist in maintaining the industry are due to the fact that all sector stakeholders working towards common goals for the forestry and forest products industry in South Africa were included in its compilation.

A strong focus of the Charter is to attain a weighted black ownership profile of 30% for the industry as a whole within ten years. The industry and government are committed to working together in pursuing this target. Some of the means they announced to achieve this aim include:

- The transfer of equity ownership to achieve 25% ownership by black people in existing forest enterprises
- The restructuring of state forest assets to support black ownership in the forestry subsector and in the forest product sectors
- The entrance of significant numbers of new black-owned enterprises into the sector through enterprise development support initiatives by industry and government (including opportunities for new afforestation on land already owned by black people as well as growth in black-owned forestry value-adding enterprises)
- The restructuring of the remaining (Category B and C) state forest plantations still under the jurisdiction of DAFF in accordance with the pro-poor development agenda of the government

All these commitments are based on the premise of providing black communities with ownership of land. However, these commitments, in line with the recent economic crisis, could be redefined as creating not only immediate employment, but also long-term employment. These actions could also absorb the impact of increased unemployment in a number of sectors such as the construction and automotive industries. An added advantage of the employment created on the basis of these commitments is that it will occur mainly in rural areas. This is of great importance as international trends have shown that the impact of the economic crisis on the forestry sector will be hardest felt in rural communities.

In order for South Africa to remain internationally competitive, the sector has to be able to adapt to rapid changes in the larger environment (such as those presented by the economic crisis). This could include the diversification of products and development of new products which will broaden market access. The Charter includes this specific aim. The Charter motivates new afforestation and new forest enterprise development. In this regard, the government and the sector undertook:

- To support the development and implementation of a diversity of enterprise ownership and financing models
- Through cooperatives and companies, to continue its key role in providing services linked to the supply of raw material and services and as part of their commitment to enterprise development
- To provide forest enterprise development support services for small, medium and micro-enterprises throughout the forestry value chain

- The successful implementation of the Forest Sector Charter requires an afforestation authorisation process that is accessible and affordable, particularly to new entrants to the forestry industry but also to existing players. Success in the fibre-processing subsector also depends on the expeditious processing of applications for water-use licences. Because of insufficiencies experienced in the past, the Charter facilitates these processes through the implementation of a cooperative governance initiative between authorising government departments and levels of government. This cooperative governance initiative has the following aims:
- To streamline and expedite afforestation licensing procedures to facilitate the establishment of a minimum of 100 000 ha of net increase in planted areas over ten years
- To publish procedures for mill licensing applications and authorisations that will indicate what information is required to make a decision on issuing a licence and the time frames in which they will make those decisions (including the development of sector-specific guidelines for the compilation of information in support of water-use licence applications by paper and pulp mills)
- To apply the licensing and permit system under the National Water Act of 1998 and the NFA to promote the objectives of the Charter
- Government and industry also need to look jointly and with urgency at the heavy dependence of certain products on single markets (e.g. woodchips to Japan) and panels (heavily dependent only on exports) with a view to diversifying outlets and so cushioning against extreme dislocation in future demand crises. Nevertheless, this is market-driven and does not entirely depend on government and the industry.
- Furthermore, given that there are still significant shortcomings with regard to afforestation authorisation processes and commitments made in the Charter, this issue too should receive urgent attention. Furthermore, because of the restriction on fiscal resources, special emphasis should be placed on commitments made in the Charter that relate to financial support of emerging entrepreneurs and SMMEs. These include:
- The establishment, after consultation with Treasury, of a Forest Enterprise Development Fund that provides for:
 - A forestry grant aimed at increasing the tempo of forest enterprise development, particularly given the long timeframes involved in growing trees
 - Seed funding for the development of fire insurance schemes for emerging growers, where the ownership of such schemes vests with the participants (DAFF will also facilitate framework agreements with existing enterprise development agencies for the implementation of such a fund.)
- The negotiation, through its representative associations, of framework agreements with banks and other private sector funding agencies that meet the particular funding requirements of the sector (Government will use its influence to assist the industry in this regard.)
- Through its representative associations, promoting the development of accessible and cost-effective fire insurance schemes for emerging growers
- Initiation of a process, with timeframes, for negotiating with the Department of Rural Development and Land Reform, the Land Bank, the Industrial Development Corporation (IDC) and other public funding and donor institutions on the establishment of framework agreements to access funding facilities available within these institutions

It has been stated that the decrease in the demand for timber products caused by the global economic crisis could undermine efforts to improve the environmental performance of forestry and possibly favour illegal logging (FAO 2009) as increased unemployment in rural areas will leave rural communities to resort to heavy reliance on natural resources. In this regard, the Charter makes provision to manage the possible increased pressure on natural resources as commitments made by the Charter include the protection of natural resources. Furthermore, the Charter encourages the certification of production areas under management of small growers and does pay attention to this matter by the advancement of certification of small growers. The Charter further notes that small grower certification is important to improve access to local and international markets for emerging black growers. To this end, the forestry industry and government undertook to continue to develop and implement appropriate forestry certification methodologies for emerging growers. In this regard, the Small and Low Intensity Managed Forests (SLIMF) certification scheme being piloted by Natal Cooperative Timber (NCT) is making good progress.

Since the signing of the Charter the following milestones have been achieved:

- The Forest Sector Charter Council has been registered as a section 21 company.
- Charter council members have been appointed.
 - The Charter has been gazetted as a section 9 code, which means that it is legally binding.



- The department has established a Charter Implementation Unit to coordinate and monitor government's undertakings made in terms of the Charter.
- The Department of Water Affairs (DWA) has initiated the Letsema project, which is aimed at fast tracking the water-use licensing process. Currently there is an area of about 30 000 ha that has been processed and satisfies the licensing requirements in terms of the National Water Act of 1998.
- The Industrial Policy Action Plan (IPAP) for 2010/11–2012/13 has been finalised by the Department of Trade and Industry. This provides a Plan of Action with regards to industry development and economic growth for the different sectors that have an impact on the economy.
- Funding for the Forest Charter Council has been made available. To date, the DAFF has contributed some R2 064 507 towards the Council. In addition, R430 000 was made available for the development of the monitoring and reporting system.

Though individual companies have embarked upon the transfer equity, the major challenge in implementing the Charter has been funding for different initiatives such as Environmental Impact Assessments (EIAs) required for the processing and issuing of afforestation licenses, and seed funding for fire insurance and the Enterprise Development Fund. The integration of Forestry and Fisheries into the Department of Agriculture provides a number of opportunities, particularly access to funding. DAFF is currently in the process of establishing a One-Stop Shop Development Finance which will provide access to development finance packages such as grants, credit through intermediaries, technical support and incentive schemes to subsistence, small-holder and commercial farmers in the three sectors. The department has also committed to provide funding for the EIAs during the 2010/11 financial year to ensure that applications are issued and afforestation can commence in the 30 000 ha identified through the Letsema project.

PART 4

Policies and interventions

4.1 STRATEGIC POLICY RESPONSES TO PROTECT THE ENVIRONMENT AND DEVELOP THE FOREST SECTOR

The forest sector faces various challenges and constraints that may hamper the sector's attempts to realise its full potential in terms of its contribution to sustainable development. Investment in forestry, particularly with respect to woodland management, remains far below what is required and the capacity to enforce laws and to implement programmes effectively remains weak in the country. Some key concerns and strategic interventions are summarised below.

4.1.1 Timber shortage

Over the last few years, several studies have confirmed the fact that the country is now beginning to experience a shortage of timber. This shortage can be expected to affect government's intention to achieve a 6% economic growth rate. The effect of the timber shortage is already evident in some parts of the country, particularly with regard to the sustainability of local sawmilling, pulp and paper operations, and consequently poses a threat to employment opportunities and local economies. It is anticipated that South Africa will not in future be able to meet its domestic demand for timber from the existing, growing stock in timber. This will affect the national economy through increased prices and a lack of timber products to meet domestic demand. A National Sawlog Strategy is being developed to address this challenge.

4.1.2 Land restitution

Security of tenure is a major requirement for forestry investment and development. The challenge is in defining the rights, roles and responsibilities associated with forest use which are crucial for the poor to receive an equitable share of the benefits from forestry. At present, great uncertainty exists over the long-term ownership of forest lands. Some experts estimated that 60% of the Komatiand Forest is subject to land claims. In the absence of a speedy resolution of these claims many people are left wondering how the benefits will eventually be shared. Uncertainty also exists on the ground with regard to the powers and responsibilities of traditional authorities and local communities in the management and control of woodlands, indigenous forests and woodlots in communal areas post-1994. However, this is also a local issue and may require intervention through local council by-laws. The Department of Rural Development and Land Reform is developing policy in this area to allow greater security in all of South Africa's land restitution systems.

4.1.3 Skills shortage in technical forestry

The Forest Sector Transformation Charter identifies the dire shortage of critical, scarce and core skills as well as shortcomings in skills development infrastructure in the sector as key constraints to transformational growth. A concerted and coordinated sector initiative is required to address this challenge. The Forest Sector Transformation Charter highlights the need to develop and implement a sector skills plan through FIETA (At the time of writing there was talk of FIETA being about to be dissolved) and the Forestry, Pulp and Paper, and Wood Products chambers. The department must play an active role through its participation in FIETA and continue to play its role as a sector leader.

The implication of the Forest Sector Charter and the new structure in the Forestry branch is that posts have to be filled and there is a concern that the branch does not have adequate/competent technical personnel such as foresters and scientists to fill these vacancies. It is therefore essential to raise awareness, improve the profile of forestry and promote it as a career option. The previous system of identifying, selecting and funding the best matriculants who can be absorbed by the sector needs to be reintroduced. The department should also increase its effort in monitoring the roll-out of and compliance with the bursary scheme.

4.1.4 Support to communities/community readiness

Support to communities for forestry development in the form of policies, programmes and technical assistance is inadequate and/or ineffective. Access to extension support services is critical for the success of emerging entrepreneurs. Industry cooperatives and companies play an important role in providing these services but unfortunately focus mainly on ensuring the supply of raw material to the corporate forestry companies for processing purposes. The services must be extended to the entire value chain so that emerging entrepreneurs can enter



and benefit along the entire value chain. Government therefore has a role to play in availing these services to fast-track access to opportunities in the entire value chain for emerging entrepreneurs and for those growers who do not wish to be linked to a market but want to establish themselves independently.

4.1.5 Research, development and innovation

Although the South African forest sector research and development is in good standing, it is facing a number of challenges. Over the years the government's funding of forestry R&D has plummeted. This has caused the private sector to carry nearly 100% of the expense. However, the department is (as stated elsewhere in this document) contributing to the national initiative, the South African Sirex Control Programme through significant funding to the value of R2472000 and further serves on the Sirex Control Programme Steering Committee. A number of plantations under management of the department participate in the monitoring programme to evaluate the spread of the pests and successes of the biological measures currently in place. Overall, DAFF contributes R4950000 annually towards forestry R&D. As a result of the inadequate support and participation by the government in the past, intellectual property produced by research bodies (often the fruit of private funding) is not accessible to all. There is a large body of intellectual property that has accrued from government's investment in the forest sector R&D over the past century. This includes tangible and intangible property as well as tacit knowledge among R&D practitioners. Although much of this is in the public domain, for example in the form of publications, much is not public or is otherwise inaccessible.

Even though a large proportion of the information generated by forest research is available in peer-reviewed publications and internal reports, this information is not freely available or accessible to small and subsistence growers, who need it the most to ensure their growth and success. Even though FSA and the ICFR are already involved in disseminating information generated by research through their "Toolkit" project, there is still a great need for the development of an information dissemination network that will facilitate the spread of information to all stakeholders in the sector.

Very limited R&D support exists to deal with land reform, transfer of technology, human resource development and other critically related BBBEE questions. R&D investment in support of households reliant for their livelihoods on forest goods and services is weak. Little or no consistent attention has been paid to the management of the environmental constraints to forest sector development, including issues such as biodiversity management, the sustainable harvesting of non-timber forest products (NTFP) and fuelwood.

Another area of concern is the potential impact of climate change on forest sector productivity and, more particularly, future prospects and sustainability.

Research and monitoring in woodlands and natural forests are deteriorating because of various factors. Several prominent scientists in research into natural forests and woodlands have left the country or are approaching retirement. Funding is more difficult to obtain for such research, and crime has affected research and monitoring in certain places. These challenges and a lack of funding for vital applied research and monitoring have resulted in certain project restraints. Human capital, the key resource at the core of R&D, is declining within the sector.

The forestry sector has found that, with the exception of a few pockets of excellence, forest sector R&D activities suffer from under-funding, a lack of coordination and a declining skills base. This situation has to be rectified to ensure that South Africa's national development imperatives in the forestry sector can be met and because it undermines the country's ability as a signatory to a number of international and regional conventions (e.g. NEPAD and the SADC Forestry Protocol) that deal with forestry R&D collaboration to fulfil its international obligations adequately. The insufficient strategic leadership by both government and the industry in forest sector R&D is a major obstacle in dealing with the challenges. The National R&D Strategy (2002) requires that sector R&D strategies be prepared and that line departments take the lead in the sectors they serve. A forest sector R&D strategy needs to be launched and the institutional capacity within DAFF needs to be strengthened so that it can take the lead in this regard. These two issues have also been highlighted in the Forest Sector Transformation Charter.

4.1.6 Forest conservation and protection

South Africa still lags far behind the 15% target of natural areas under protection, which is globally pursued. Only 6,8% of South Africa's total land area is currently under formal protection. Even where protection measures are in place there remain persistent pressures on protected areas from neighbouring communities, industrial and mining developments and urban development. For example, certain forest types, such as the coastal and scarp forests, are persistently under pressure from resource utilisation and development.

4.1.6.1 Forest Protection Strategy

One of the principles of the NFA is that natural forests may not be destroyed save under exceptional circumstances. It remains a challenge to enforce this principle. Once forests have been degraded, the damage is difficult to repair and

therefore it is vital that forests be maintained and utilised sustainably. Forest protection includes veld and forest fires as well as pest and diseases. Every year, large plantation areas are lost to fire, insects and diseases. This, in turn, has a negative impact on the future supply of timber.

- **Veld and forest fires:** These are a common feature of the South African landscape. Unmanaged veldfires are among the main contributors to economic and social threats and environmental degradation in the country. Veldfires impact severely on the economy, accounting for loss of life and property, jobs, displacement of people, habitat loss, biodiversity loss and damage to the environment.
- **Pests and diseases:** All of the scientific evidence available points to an increase in the incidence of forestry pests and diseases in the future. Many of the new pests and diseases present in SA will increase in terms of their distribution and have a greater impact. Furthermore, all evidence points to the fact that additional new pests and diseases will be introduced into the country and there is growing evidence that native pests and disease are adapting to kill off commercially grown trees. The prospect of timber imports further adds to the potential risk of accidental introductions. While commercial forestry is a core issue in terms of promoting industrial development and employment opportunities, it is also important not to lose sight of the fact that native trees in South Africa are seriously threatened by exotic insect pests and diseases. What is more, the predicted effects of global climate change are likely to escalate the risk even further through drought and other stress factors in the tree-growing areas, thus predisposing trees to damage by pests and diseases. It is imperative that South Africa develop and sustain a consolidated and integrated approach to the challenges posed by pests and diseases. The importance of maintaining a plantation health surveillance programme cannot be overemphasised. Furthermore, to deal with pests and diseases, the ICFR is developing a National Forest Protection Strategy to be concluded during 2010.

4.1.7 Climate change and the Green Economy

Climate Change is the new phenomenon posing a threat to sustainable development across many parts of the world. The impact of climate change recognises no national boundaries, resulting in a global concerted effort to mitigate the magnitude of any negative effect while at the same time exploring adaptation strategies in South Africa. According to projections by climate models the Western Cape will become drier, while in the summer rainfall area there already seems to be a trend towards higher temperatures, especially during the winter months. From a mitigation point of view, the forestry sector in South Africa is a net sink of carbon (it removes more carbon dioxide than it releases). It is probably the only sector that can claim this, as even agriculture emits more greenhouse gases than it removes. However, our forestry baseline is small and curtailed by the dry climate, restrictions on water and biodiversity concerns. It is widely accepted that implementation of national policies and strategies for mitigating and adapting to climate change will have a significant impact towards the objectives of improving the quality of the life of people, especially in the under-developed and developing countries. The need for climate change action and overall resource management and protection holds the potential to accelerate the pace of green job creation and overall green investments in the years ahead. A global transition to a low-carbon and sustainable economy can create large numbers of green jobs across many sectors of the economy, and indeed can become an engine of development, for example, in the forest subsector, the partnership between the department (DAFF) and the Working for Water aligned programme, the Working for Forests has created about 150 green jobs in the pilot areas of KwaZulu-Natal and the Eastern Cape. More jobs are expected to be created as the programme extends to other provinces and areas and in the process contributes to the envisaged Green Economy path South Africa and the World have adopted. South Africa has a rich natural resource base and ranks among the top three in the world's most biodiverse countries. An integrated resource use strategy, once developed will result to optimal utilisation of this rich natural resource base, thereby contributing to the sustainable development of our country.

The topic, Climate negotiations of Reduced Emissions from Deforestation and Forests Degradation in Developing Countries (REDD) has become a key matter of interest for forestry in recent years. Although South Africa has a relatively low rate of deforestation, it is important that the country participates actively in these processes because the REDD/REDD-plus is of great importance to the SADC and Africa. Moreover, these processes support the Green Economy initiatives many countries are encouraged to embark on in the midst of the climate change phenomenon and the need to seek alternative mechanisms for the production of energy. A number of key issues that are discussed at various Conference of Parties (CoP) meetings, which are of particular interest to the department of Agriculture, Forestry and Fisheries include; Reduced emissions from Deforestation in Developing Countries (REDD); Land Use, Land Use Change and Forestry (LULUCF); Small-scale Afforestation and Reforestation (AR-CDM); and cooperative sectoral approaches and sector specific actions). The majority



of these issues have a strong emphasis on monitoring, reporting and verification. This poses a challenge to the department in the sense that suitable monitoring systems are not currently in place. It is the objective of the Forestry Branch to improve capacity and develop new approaches to overcome this challenge.

For the Branch: Forestry to participate and contribute consistently and meaningfully towards climate change negotiations and policy development, as well as implementation of strategies, it will require the appointment of additional dedicated staff, as well as an operational budget that would allow substantially more for research and monitoring, as well as for international travel so that dedicated policy staff can participate in all negotiations, for which there are usually several international meetings in a year.

From a climate change point of view, the strongest emphasis within the forests sector internationally is on deforestation. South Africa is regarded as a low-forest-cover country with low rates of deforestation. Although woodlands cover almost a third of the country, the carbon density of these, compared to forests in other SADC countries such as Zambia and the DRC, is relatively low. The exact rate of deforestation and its main driving forces are also poorly understood. Given this relatively weak information basis, it would be appropriate for South Africa to increase its investment in forest monitoring. Government's objective of creating green jobs, that is, employment in industries and facilities and that are designed to mitigate the impact on the environment and natural systems, can possibly benefit through projects aimed at reforestation, forest rehabilitation and enhancement of carbon stocks in forests. However, it would be appropriate that South Africa moderates its expectations with regard to revenue in-flows from international mechanisms such as CDM and REDD-plus. In this light, it is critical that South Africa maintains strong participation in future negotiations, including the upcoming CoP 17.

4.1.8 Forestry and the regulatory environment

Growth, especially in the commercial forest industry, is constrained by a wide variety of legal requirements that negatively affect the business environment in South Africa in general and the forestry sector in particular. There have been dramatic changes in the regulatory system since 1994, with the 1998 NFA designed to promote sustainable use, cooperative governance and stakeholder participation. Despite this, the system remains restrictive in some areas, with excessive bureaucracy and overly constraining regulations. For example, small growers still face a number of challenges in obtaining the necessary licences for afforestation under the National Water Act. As a result, companies are now finding it difficult to supply their mills with timber purchased from such small growers without affecting their certification conditions.

4.1.9 National integrated land-use resources assessment project

Information is the cornerstone of adaptive management and sound decision making. Reliable and up-to-date spatial and non-spatial information forms the basis for much of the operational and strategic planning in forestry. Forest monitoring depends on the spatial baseline information and provides further quantitative and qualitative information that informs planning and decision making. Specific technical and subject information is further required on the range of forestry applications and technology. The NFA provides a strong mandate for forest monitoring and dissemination of the information generated through monitoring. At present, a set of PCI&S are available for promoting SFM. These C&Is should also form the basis for forest monitoring. However, the C&Is are currently only applicable within DAFF, and performance measured against these instruments is weak. This undermines the ability of the department to use these instruments for monitoring the entire sector.

4.1.10 Transformation and development of the sector

Another major challenge in the forest sector is the implementation of the Forest Sector BBBEE Transformation and Growth Charter. Government, industry and labour have joint responsibility to ensure that the various undertakings outlined in the Forest Sector Charter are implemented. These undertakings can be divided into three categories:

- The undertakings by forest enterprises to implement the scorecard targets as outlined in the Charter
- The undertakings by sector role players (industry, government and labour) to implement a set of instruments to support the achievement of BEE targets by forest enterprises
- The undertakings by sector stakeholders to implement structures and systems to manage and support the implementation of the Charter

4.2 PROPOSED STRATEGIC INTERVENTION

With regard to the shortage of timber the department should conduct research on fast-growing species that are felled at a younger age but provide the same yield and quality as fully grown trees. The research will also assist in decreasing

the length of investments that will attract communities to participate and decrease the chances of trees being felled at a younger age.

With regard to addressing the skills shortage in technical forestry, the following must be done to inform the development of the Skills Development Strategy:

- A skills audit must be carried out for each subsector.
- Infrastructure needs must be determined for training centres.
- The profile of forestry must be improved in primary and secondary schools through the creation of incentives to attract learners and increase the attractiveness of forestry.
- Advantage must be taken of the opportunities provided by the government secondment policy to expose young professionals to multilateral institutions abroad.
- Professionals and beneficiaries of land claims must be sent to countries which have excelled in advancing small-scale forestry development to learn more.

With regard to forest monitoring, the Criteria, Indicators and Measures (CI&M) alone are also not sufficient. The Directorate: Forestry and Technical Information Services (FTIS) should provide an appropriate institutional home for the function of information management to improve its performance and provide more robust information services. The department, as the custodian of the tree-dominated biomes in the country, has a mandate to monitor forests.

There is also an urgent need to develop a monitoring, reporting and verification system in view of the current climate of claiming carbon credits for mitigating against the effects of climate change. DAFF is currently initiating an integrated land-use assessment project which will provide baseline information on forestry and provide a platform for monitoring trends in forest/land-use changes over time. This project has the potential to generate an estimated 3 000 jobs in the next four years, the ability to enhance the skills of professionals and local communities and raise awareness of careers in forestry in rural areas. It will, furthermore, encourage communities to protect the environment they live in. The project links very well with the need to address the requirements of the NFA and contribute to government's objectives/MTSF outcomes which are:

- Decent employment through inclusive growth paths
- Protecting and enhancing our environmental assets and natural resources

With regard to support for communities, a model that could help them to grow trees independently of a tied market is proposed so that these communities can benefit better from the sale of trees in the open market. This needs to be explored.

A comprehensive extension support service is also needed within DAFF. It should be a dedicated function with economists, business analysts, foresters and scientists.

DAFF's Development Finance Programme should be expanded to fund the following SMME support services in the grower and NTFP subsector:

- Matching grants to provincial spending on the establishment of forestry projects (up to the point where projects can secure business finance)
- One-off forestry grants for afforestation projects to match loan funding provided by Development Finance Institutions
- Matching grants to industry spending on SMME training (accredited short courses, learnerships and bursaries)
- Matching grants to grower cooperatives' spending on forestry extension services
- One-off grants (seed capital) for the establishment of a fire insurance scheme for emerging growers
- Additional funding for the rehabilitation and transfer of DAFF plantations
- LED grants for NTFP projects

The forest sector further provides various opportunities for the development of a green economy, some of which have been realised already to some extent. Forest degradation leads to reduction of ecosystem services, and therefore the rehabilitation of degraded forest areas would lead to more healthy ecosystems, which are the basis of a green economy as outlined by the United Nations Environment Programme (UNEP). The department is currently drafting a green jobs programme for the next five years which it will implement in conjunction with the partners in the industry. The programme will take cognisance of the existing projects and new ones which have the potential to create jobs, improve and protect the environment and contribute to sustainable development and economic growth.



To overcome the research challenges, the department should develop a structured funding mechanism for R&D by securing funding from National Treasury.

In an attempt to deal with the issue of veldfires in the country and across the borders, South Africa should enter into agreements with neighbouring countries that outline arrangements on how to deal with cross-border fires. These arrangements should not be limited to response activities but should include all aspects of integrated fire management such as fire detection, fire prevention and preparedness measures. Furthermore, the department should strengthen the existing capacities of FPAs that operate as community-based natural resource organisations for the purposes of veld-fire management.

Concluding remarks

This report has captured the progress that has been made since the publishing of the first SoF report in terms of section 6(3) of the National Forests Act in September 2007. The Forest Sector BBBEE Charter was signed in May 2008 in Cape Town, and subsequently launched by the Minister in June 2008. The Charter Council has been set up and the Minister has appointed council members and a Chairperson to oversee the process of Charter implementation. The Forestry Charter Implementation Unit has been created within the department's Forestry branch to coordinate and monitor compliance with the Charter obligations, particularly from the government's perspective.

The structure of the Forestry branch has been enlarged to create and fill two additional Chief Director posts. Furthermore, five vacant Director posts were filled in the national office while the structures for the regional offices were also expanded to increase human capacity and to ensure improved efficacy in the implementation of forestry projects. The department has further started to recognise the importance of Research and Development (R&D) in forestry, thereby filling the critical posts to drive the process. Several strategies have since been developed to expedite forestry transformation, growth and development. These have been discussed in this report along with, among others, the 2030 Forestry Roadmap and the National Certification Standard to be implemented once the FSC Board has endorsed it.

Despite this progress, challenges were encountered. These challenges necessitate even greater efforts to take the department forward in its endeavour to adhere to the government's pro-poor agenda, which seeks to improve the lives of the country's people. As we forge ahead and work faster and smarter, the following needs attention so that service delivery can be improved for the purpose of meeting the mandate of the department in particular and government in general:

- **Forest protection and monitoring:** While commercial plantations and natural (indigenous) forests are reasonably protected or well-managed, the same cannot be said about the woodland biome of South Africa. Woodlands cover about 33% of the country's forested land area, and yet only about 9% of woodlands are formally protected by virtue of the fact that they exist in protected areas on state land. More emphasis needs to be placed on the protection of woodlands if the objectives of the MDGs of reducing biodiversity loss by 10% by 2010 are to be achieved and the protection and enhancement of environmental assets and natural resources as espoused in the MTSF are to be ensured. A Woodland Management Strategy was developed in 2005 but because of financial constraints and capacity limitations in the regions/provinces this has not yet been put into operation. The envisaged integrated land-use resources assessment soon to be rolled out will provide baseline information on the extent of all forest types but this will not extend to sustainable management of these resources. It is therefore necessary for the department, in collaboration with other relevant stakeholders, to make resources available for improving the management of woodlands to curb woodland degradation and deforestation. The implementation of the Woodland Management Strategy developed by DAFF requires the filling of identified, dedicated posts for woodland management in the regional offices. Funding would also be required for the implementation of such projects as biodiversity (forest-protected areas) planning and the raising of awareness.
- **Establishment of a compliance and enforcement unit:** While significant progress has been made with regard to the deployment of systems and policies supporting the implementation of both the NFA and the NVFFA, compliance with and the enforcement of the two forestry legislations remain a challenge. The department invests, albeit inadequately so, financial resources in an endeavour to raise awareness on the importance of forests and the negative effects of unwanted fires and other human activities on these scarce natural resources. The department further collaborates with the Justice College and the DEA in training members of the South African Police Service (SAPS), the judiciary and other enforcement agencies on the two Acts. Although the departments were commended for this effort, this is not sustainable as it is dependent on the availability of funds for training purposes. The establishment of a compliance and enforcement unit within the Forestry branch and/or the department as recommended by a study commissioned in 2006 has now become a priority. A dedicated unit should effectively and efficiently deal with non-compliance and enforcement matters pertaining to this legislation. This effort will ensure that environmental assets and natural resources are enhanced and protected. This calls for a decisive position and full support from top management on the matter, which has been overlooked for a very long time.
- **Funding for Fire Protection Associations (FPAs):** Since the passing of regulations under Chapter 2 of the NVFFA enabling the registration of FPAs, about 180 organisations have been established and



registered with the department. Audits have indicated that most of these organisations are not functioning properly and that they are at the brink of collapse unless government intervenes. The current findings on the assessment of the FPAs suggest that they are not sustainable. The NVFFA provides for the Minister's discretion in assisting needy FPAs and indigent communities to establish and manage these voluntary organisations financially or otherwise. Many FPAs are not complying with the requirements of Chapter 5 (firefighting and readiness) citing lack of funding. In certain areas where FPAs need to form, this cannot happen, particularly in communal areas where there are no commercial farms. This puts the lives and properties of these communities at risk. The department has developed the Policy on financial assistance to fire protection associations with the intent to resolve the challenge but the policy could not be implemented as it was not approved by the National Treasury. The department therefore has to explore internal means of making funds available for this purpose or incorporate veldfire issues into other programmes of the department through which financial resources can be made available to needy communities and FPAs.

- **The National Fire Danger Rating System:** The NFDRS was launched in 2007 as an early warning tool for fire danger but the system is yet to be operationalised. Although it has been almost three years since its inauguration, the system has still not gone live because of a number of challenges, financial and institutional. The management of the system has been delegated to the SAWS as required by the NVFFA and the department has to give the SAWS assistance where required as stipulated in the MoU signed between the two organisations. Although the department is convinced that the system is almost finalised, this cannot be guaranteed as deadlines in the past were missed for various reasons, most of which were unforeseen. It is important that the department make sufficient funds available to assist with the finalisation of the development of the system when a need arises, for example, where an external provider could be sourced when SAWS is overstretched as was the case some time ago during the implementation of the project.
- **Transformation and development of the sector:** It was reported in this document that some progress has been made with regard to the implementation of the Forest Sector Broad-Based Black Economic Empowerment Charter. The Charter is an important strategic tool through which meaningful transformation and development of the sector could be achieved. It is through this tool that forestry can contribute to the creation of decent employment and sustainability in rural communities. However, it would seem that progress with its implementation is very slow. Moreover, the aspirations of many of South Africa's people, particularly the rural poor, are pinned on this strategic intervention aimed at improving their living conditions. It would therefore be crucial that developments around the implementation of the Charter, including progress made and any challenges encountered in its implementation, are timeously communicated to all interested and affected parties. Currently, there seems to be no mechanisms in place for communicating and advocating for the Charter. It is therefore recommended that government (the department) investigate adequate mechanisms for communicating key activities pertaining to the Charter. This may necessitate the development of a comprehensive Communication Plan for the Forest Sector Charter.

Although implementation of the Forest Sector Charter is slow, the charter is ahead compared to other sector charters. After government and industry have reported to the forest sector charter council a report will be prepared for the dti and the Presidential BBBEE council for consideration.

- **Working for Forests**—it terms of the Forest Sector BBBEE Charter, government and industry committed to afforest 100 000 ha in the Eastern Cape and KwaZulu-Natal over a ten year-period. The aim of the afforestation is two-pronged, (1) to address the critical shortages in forest products, particularly saw timber; and (2) to diversify and improve the livelihood options for deep rural communities. The forest products to be explored in this regard include: Fuelwood, building material, pulp and paper, poles, non-fibre products; and bio-renewable energy such as charcoal and biofuels. A vehicle for exploring goods and services derived from these products is the Working for Forests Programme, a partnership between DAFF and the Working for Water Programme. The Working for Forests recognises the scarcity of critical forest products and plans to meet the required afforestation target of 100 000 ha over the next ten years through the following activities:
 - Conversion of the existing invader species, such as wattle. This will, in turn, improve the value of water resources;
 - Implementing a rehabilitation programme for the existing state-owned plantations; and
 - Rolling out an afforestation programme in catchments with adequate water to support forestry development.

Through the Working for Forests Programme, two pilot projects have been initiated in KwaZulu-Natal and the Eastern Cape through wattle jungle conversion and rehabilitation of state forest plantations, thereby generating about 150 green jobs. It is anticipated that more green jobs will be created once the programme is expanded to other areas in the country.

To create synergies and promote forestry development in the country, government needs to seriously review the role of SAFCOL as a potential vehicle for assisting with implementation of selected forestry projects such as the rehabilitation of category B and C state forest plantations, afforestation, forestry enterprise development and fire management issues.

Forestry and the National Industrial Policy Framework – Forestry has been identified as one of the key sectors that can contribute to economic development and growth in the country, especially in rural areas. As a result, forestry is part of the National Industrial Policy Framework, which is put into operation through the Industrial Policy Action Plan (IPAP). The forest industries or subsectors that can participate meaningfully in the IPAP are: Fuelwood, building material, pulp and paper, poles, non-fibre products and bio-renewable energy, for example, charcoal and biofuels.

For communities to benefit significantly from the IPAP, it is crucial that government should create an enabling environment, through for example, reviewing the long-term timber contracts and concessions which are in the hands of few companies, providing technical assistance and helping new enterprises to access start-up funds.

Long-term Timber Contracts—the department still has two timber contracts running with the Amathole Forestry Services (AFS) and Sappi. The Sappi contract is ending in 2019, whereas the AFS is open-ended. These contracts are for the supply of timber from state forest plantations to the companies. However, current evidence points to some challenges pertaining to these long-term timber contracts. Government is no longer in a position to supply the companies with timber in the required quantities specified in the contracts in a sustainable manner. This is the result of numerous factors, including the devastating fires of 1999, 2007 and 2008 in the Amathole area which wiped out big plantation areas; temporary unplanted areas (TUPs) that remained fairly big owing to budgetary constraints; timber theft and hail damage in certain instances. It is said the situation can only normalise towards 2030.

The above scenario poses a risk to the department in that the companies may lay claims for losses against the state in the long run if the department continuously fails to deliver the required volumes of timber as per the contracts. Furthermore, these contracts, being long-term in nature defeat the objectives of the Forest Sector Broad-Based Black Economic Empowerment Charter, which seeks to transform and grow the sector, thereby among other issues, broadening participation to include individuals and groups which were previously not participating in the sector (including the market). The arrangement restricts participation by emerging entrepreneurs because new entrants cannot access the resources which are bound by the long-term contracts. With the department currently reviewing these contracts, it is prudent that the negotiation processes be conducted expeditiously to ensure that the forests assets under this arrangement are unlocked as quickly as possible to ensure the sustainability of the SMMEs in the industry. This challenge is very complicated but decisive action requires to be taken to resolve it, particularly in the interest of the Forest Sector BBBEE Charter and the new strategic direction of Government.

Land Restitution and Lease Agreements—government entered into lease agreements with a number of companies, namely, Siyaqhubeka Forests (Pty) Ltd in KwaZulu-Natal; Singisi Forest Products and Amathola Forests Company (Pty) Ltd, both in the Eastern Cape; and Mountain to Oceans Forests Company (Pty) Ltd in the Western Cape. The leases are long term, having to run for 70 years with the first ones signed in 2001. The leases, like the long timber contract discussed above, are compounded by serious challenges, including allegations from unions and communities that communities were not actually reaping the intended benefits. It is said that some workers previously employed by the former Department of Water Affairs and Forestry had lost their jobs, no capacity building or skills transfer was done by the companies and that the land reform beneficiaries are yet to receive their monies accrued from rentals, some nine years later after the signing of the lease agreements. However, it should be noted that while some companies have done too little to uplift adjacent communities, some have done commendable work in this regard. In summary, the model used to devolve category A plantations is generally not well received by beneficiaries and unions and is at best regarded as a “raw deal”. It is therefore recommended that alternative models be developed as soon as possible, which should be in the best interest of communities. The duration for the leases is also a matter that needs serious consideration, particularly in aligning this to the intentions of the Forest Sector Charter. This is because such leases, once concluded, do not necessarily afford new entrants the chance to participate meaningfully in the sector.

On the other hand, it is anticipated that the land restitution programme will impact positively to the transformation and growth of the sector in that it seeks to transfer a portion of forest land from the big forestry companies to rural communities who will then have ownership of land and forest assets. Initially, for the first ten years, lease funds will be collected from companies on behalf of communities that have lodged claims while they are being capacitated to acquire the necessary skills such as technical, financial and others required to manage commercial plantations as viable businesses. While Forestry South Africa is working on the models for this programme,



it is important that government ensures the speedy roll-out and implementation of this initiative. The delay in finalisation of claims is another challenge in that there are uncertainties with companies reluctant to invest more in forestry operations, hence it is important that all role players put in greater effort and ensure that the land claims are finalised as soon as possible to avert a situation whereby the current timber shortages will possibly be exacerbated in the near future.

Funding for Forestry—Spending priorities according to National Treasury's guidelines, are aligned to the Strategic priorities of government. The Forestry Programme contributes to the following priorities, namely: Enhancing the quality of education and skills development; and Decreasing rural poverty by taking steps to raise rural incomes and improve livelihoods by enhancing access to land and providing support for emerging farmers.

The department, in consultation with the industry, has developed a draft Forest Sector Plan (forestry 2030 roadmap) which will serve as a roadmap or blueprint for effective and sustainable development of all forestry resources and will assist the forestry sector in addressing its constraints and challenges and realising its full potential in terms of contribution to job and wealth creation as well as conservation of biological diversity within a framework extending to 2030. The draft Forest Sector Plan is now an integral part of the comprehensive DAFF Sector Plan comprising the three sectors, Agriculture, Forestry and Fisheries. Specifically, the Forest Sector Plan highlighted challenges that require additional funding to enable the Forestry Programme to effectively contribute to the abovementioned strategic objectives of government. These challenges include, Refurbishment of state-owned assets to be transferred to land beneficiaries (communities); Access to funding to ensure sustainable forestry enterprise development and livelihoods; and Forest assessment, research and protection to secure the resource and its contribution to economic development and sustainable livelihoods.

The Forestry Programme's main goal is to promote a thriving forest sector which significantly contributes to the country's economic growth, employment, poverty eradication and transformation by wide consultation/ participation in formulating and implementing policies of the forest sector in South Africa. It is anticipated that the costs that will be incurred to re-establish the temporary unplanted areas are R116 571 168 for the 2012/13 financial year, which will result in the generation of approximately 1 500 jobs, for example, silvicultural costs must be added to the above figure. The current budget allocated to the Forestry Programme is inadequate to cover all costs, considering that 67% of the budget is allocated to compensation of employees and the remaining 33 % is operation budget (goods and services and capital). Additional forestry activities that require funding include, forest technical and information services; forests and fire regulation; forestry oversight; sustainable forest management; forest development and sustainable management of commercial forestry assets. The Mpumalanga commercial forestry operations are currently unfunded and this exacerbates the challenge of inadequate financial resources allocation to the Forestry Programme. Preliminary calculations projected that the Forestry Programme requires additional funding for the MTEF period 2010/11–2012/13 for the following amounts (R'000); 226 201 (2010/11); 256 553 (2011/12) and 286 349 (2012/13).

Without additional funding, the programme will not be able to roll-out the Forest Sector Plan and other forestry-related projects effectively, negatively affecting the overall strategic objectives of the department and inevitably, those of government. It is, therefore, recommended that additional funding be sought urgently to ensure seamless implementation of the Forestry Sector Plan and the Forestry Programme in general.

It is evident from the above that there still lies a bigger task ahead in terms of optimising the role forestry plays in the economy of South Africa. It is therefore important that in the future, the department remain focused on critical issues that will ensure the greatest impact on society. Implementation of the Forest Sector Charter and the Forest Sector Plan (roadmap) is the pillar of forestry transformation and development in the country for the future. To ensure that the gains achieved so far are sustained, DAFF needs to reinforce and support these pillars. Finally, it will remain important for the department to regularly monitor and assess the impact that forestry projects have on the government's developmental state agenda.

Notes

