

N F A P

South Africa's National Forestry Action Programme

1 SEPTEMBER 1997



**Department of Water Affairs
and Forestry**



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Preface

STRATEGY FOR SUSTAINABLE FORESTRY DEVELOPMENT FOR SOUTH AFRICA



Professor Kader Asmal, MP

Minister of Water Affairs and Forestry

The forest sector makes a significant contribution to the economy and has enormous potential in the development of some of our impoverished rural areas.

Rural development poses an enormous challenge for our country – it is a challenge that has not been met successfully by a great number of other developing countries. In South Africa, we need to meet the challenge head-on.

Nearly 40% of our population are extremely poor – so poor, in fact, that their daily nutritional needs are probably not being met. The vast majority of these people are black, and live in rural areas, many in the ex-homelands where they were driven by the policies of the apartheid government. Among the poorest of the poor are those living in women-headed households. In the rural areas, because of the migration of men into urban areas under the pernicious influx control laws, many of the households are, *de facto*, headed by women, and there are disproportionate numbers of women and elderly people.

We are committed, as a government, to improving the lives of all the people of South Africa, so that they can have enough food and water, so that they have access to health care, so that they can live, with dignity, in a clean and healthy environment.

By the year 2000 we need to have an annual economic growth rate of 6% and to be adding 400 000 jobs each year. To do this we need a country in which people are able to participate in the economy. The provision of people's basic needs, such as water, is part of that process. So is the return of land to the people. The further building blocks must be growth in the economy, the creation of employment and the redistribution of wealth. The forest sector can play a large role in this area.

The National Forestry Action Programme translates the vision of the White Paper on Sustainable Forest Development in South Africa into concrete and discrete actions. It is driven by the

principles of the Constitution and the Reconstruction and Development Programme. It has been written, in keeping with the spirit of the new South Africa, through an open and consultative process, involving a wide range of stakeholders with very diverse positions. It is part of the process of transforming the forest sector so that it serves, in all its elements, the needs of all of the people of South Africa.

An integral part of the National Forestry Action Programme will be the rewriting of the forest legislation to facilitate the sustainable and equitable management of South Africa's forest sector. Amongst other things, the new legislation will strive to:

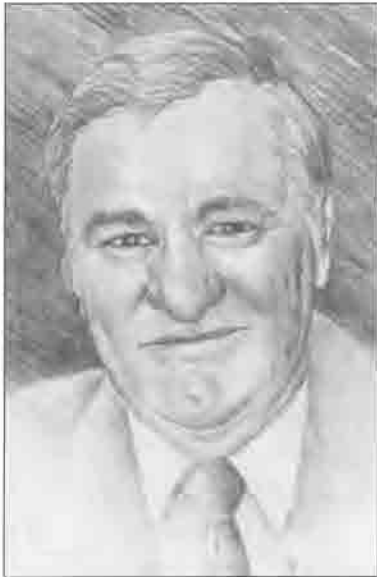
- give greater access to the country's forests for the majority of the South African people;
- place a greater emphasis on the development potential of community forestry;
- prepare the legislative tools for controlling seed pollution and the spread of invasive trees; and
- address sustainable forestry needs as defined under Agenda 21, and as mandated in the Constitution under the clause committing us to "ecologically sustainable development and use of natural resources" and the promotion of "justifiable economic and social development".

I hope that this process will facilitate the contribution of the forest sector to the renewal of South Africa, will find the common ground that exists between even the most diametrically opposed stakeholders, and will help to ensure that future generations can enjoy, to the full, the benefits of our natural resources.

Over the past year, a vast number of people have given their time, energy and commitment to the development of the National Forestry Action Programme. I would like to express my thanks to everyone who has contributed to this process.

Thabo Mbeki

Welcome to the NFAP



Hennie Coetzee

Chief Director: Forestry

In the Preface, our Minister stresses the significance of the forest sector in our environment, our economy and our social fabric. He further calls on one and all to devote time and energy to the implementation of this Programme.

What then is "The Way Ahead"? It is essential to realise that the production of this document is not the end of the NFAP, but just the close of phase one. The initial concept called for a three year period to implement the policy developed for the White Paper on Sustainable Forest Development in South Africa. Producing this programme for action has taken us only one year down the road.

Phase two is to roll out this road-map into a series of detailed strategic action plans, identifying very specific objectives of achievement which can be measured for success. In reality, the recently launched exercise to draft a new Forest Act is such a strategic action. There must be many more, probably one for each Chapter, or at least one for each Section. These will be developed using this Programme Report and its supporting Key Issue Papers. Then, two years from now, as the new millennium dawns, the progress of these strategic plans will be reviewed and the plans revised, to address the decade ahead: a process which must be repeated *ad infinitum*.

This programme will be achievable only if my Chief Directorate develops the essential capacity to meet the delivery deadlines suggested.

I wish to add my thanks to those of our Minister when he addresses the many persons who have been directly and indirectly involved in the development of this road-map which will guide us into the 21st Century. I trust that the efforts of my Chief Directorate – and those with whom we work at all levels in South Africa and beyond its borders – will bring you, who were involved, the satisfaction of achievement that you envisaged as you created this foundation for the future.

Thank you.

A handwritten signature in green ink that reads "Hennie Coetzee". The signature is fluid and cursive, with a small flourish at the end.

List of acronyms and abbreviations

ABE	Adult basic education
APS	Afforestation permit system
CBFM	Community-based forest management
CBO	Community-based organisation
CCMA	Commission for Conciliation, Mediation and Arbitration
CITES	Convention on International Trade in Endangered Species
COSATU	Congress of South African Trade Unions
CSD	(United Nations) Commission on Sustainable Development
CSIR	Council for Scientific and Industrial Research
CTC	Central Timber Cooperative Limited
DA	Department of Agriculture
DACST	Department of Arts, Culture, Science and Technology
DBSA	Development Bank of Southern Africa
DDF	District development forum
DE	Department of Education
DEAT	Department of Environmental Affairs and Tourism
DFID	(UK) Department for International Development
DLA	Department of Land Affairs
DME	Department of Minerals and Energy
DOL	Department of Labour
DTI	Department of Trade and Industry
DWAF	Department of Water Affairs and Forestry
ETQA	Education and Training Qualification Authority
FAO	(United Nations) Food and Agriculture Organisation
FOA	Forest Owners Association
FTS	Forestry Training Service
GDP	Gross Domestic Product
GEAR	Government's Programme for Growth, Employment and Redistribution
GGP	Gross Geographical Product
HRD	Human resources development
ICFR	Institute for Commercial Forestry Research
IDC	Industrial Development Corporation
IPF	Intergovernmental Panel on Forests
JFM	Joint forest management
LRA	Labour Relations Act
NCT	Natal Cooperative Timber Limited
NEDLAC	National Economic Development and Labour Council
NFAC	National Forestry Advisory Council

NFAP	National Forestry Action Programme
NGO	Non-Governmental Organisation
NQF	National Qualifications Framework
NSB	National Standard Setting Body
PFM	Participatory forest management
PTF	Planning Task Force
RDP	Reconstruction and Development Programme
SABS	South African Bureau of Standards
SADC	Southern African Development Community
SAFCOL	South African Forestry Company Limited
SAFRI	South African Forestry Research Institute
SALMA	South African Lumber Millers Association
SANCO	South African National Civics Organisation
SAPPI	South African Pulp and Paper Industries
SAQA	South African Qualifications Authority
SATGA	South African Timber Growers Association
SAWGU	South African Wattle Growers Union
SETO	Sectoral Education and Training Organisation
SFM	Sustainable forest management
SGB	Standards Generating Body
SMME	Small, medium and micro-enterprises
TWK	Transvaal Wattle Growers Cooperative
UNCED	United Nations Conference on Environment and Development
WTO	World Trade Organisation

Biome descriptions

The following biome descriptions support figure 1, *Biomes of South Africa, Lesotho and Swaziland* and are taken from: *Low, A.B. and Rebelo, A.G. (Eds) Vegetation of South Africa, Lesotho and Swaziland*, Department of Environmental Affairs and Tourism, Pretoria.

Forest Biome

This comprises indigenous forests and excludes plantations. The canopy cover is continuous, comprising mostly evergreen trees, and beneath it the vegetation is multi-layered. Herbaceous plants, particularly ferns, are common only in montane forests, whereas lianas and epiphytes are common throughout. The ground cover is almost absent due to dense shade.

Thicket Biome

No formal "Thicket Biome" is recognized in the scientific literature. However, it is a useful classification for transitional vegetation types between "Forest" and "Savanna". Subtropical thicket is closed shrubland to low forest dominated by evergreen, sclerophyllous or succulent trees, shrubs and vines, many of which have stem spines. It is almost impenetrable, is generally not divided into strata, and has little herbaceous cover.

Savanna Biome

The Savanna Biome is characterised by a grassy ground layer and a distinct upper layer of woody plants. Where this upper layer is near the ground, the vegetation may be referred to as Shrubveld. Where it is dense it is known as Woodland, and the intermediate stages are locally known as Bushveld.

Grassland Biome

Grasslands (also known locally as Grassveld) are dominated by a single layer of grasses. The amount of cover depends on rainfall and the degree of grazing. Trees are absent, except in a few localised habitats. Frosts, fire and grazing maintain the grass dominance and prevent the establishment of trees.

Nama Karoo Biome

The dominant vegetation type in the Nama Karoo is a grassy, dwarf scrubland. Grazing rapidly increases the relative abundance of shrubs. Most of the grasses and shrubs are deciduous in response to rainfall events.

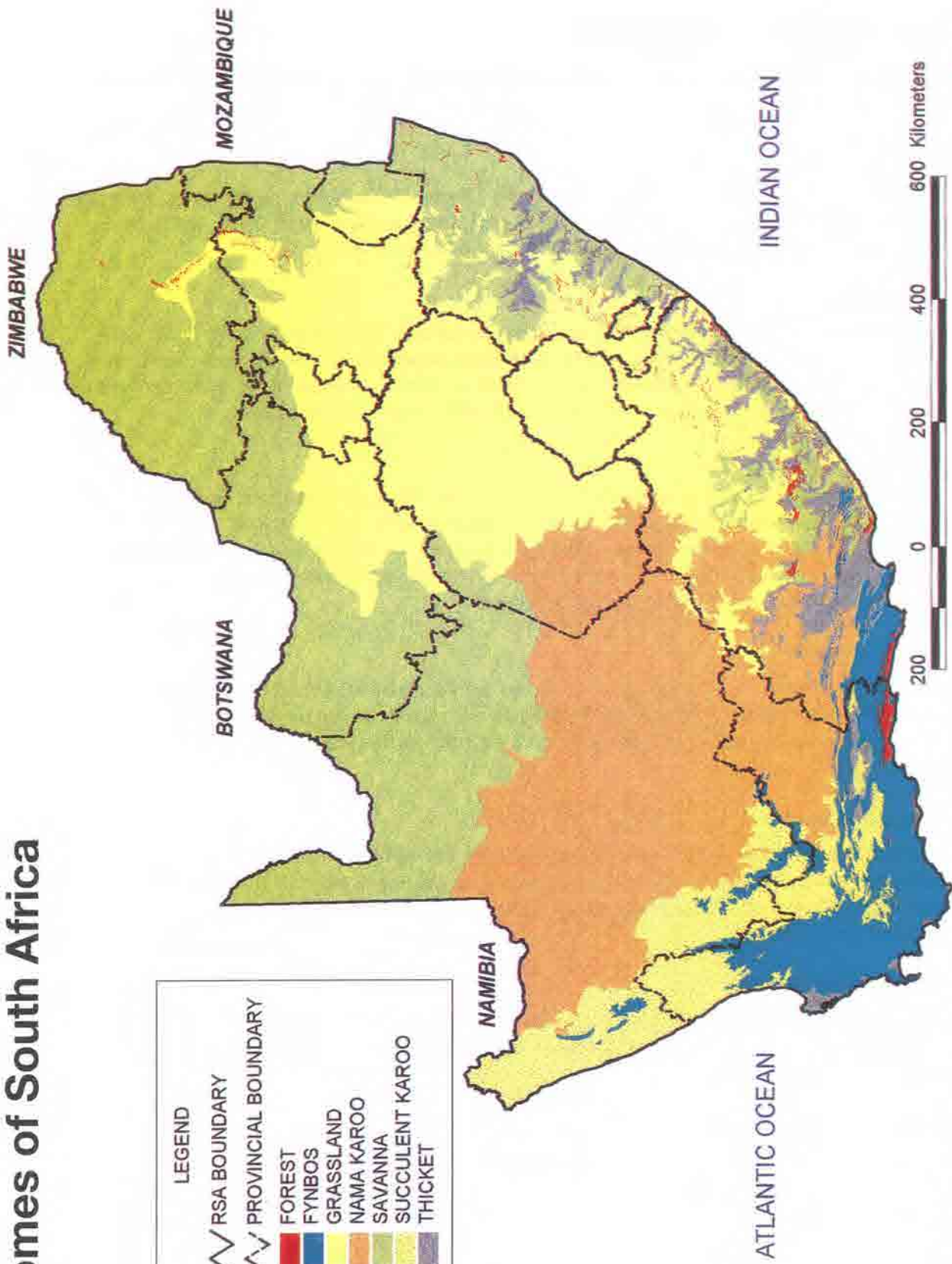
Succulent Karoo Biome

The vegetation is dominated by dwarf succulent shrubs and mass-flowering displays of annuals occur in spring, often on degraded or fallow lands. The number of plant species - mostly succulents - is very high and is unparalleled elsewhere in the world in arid areas of this size.

Fynbos Biome

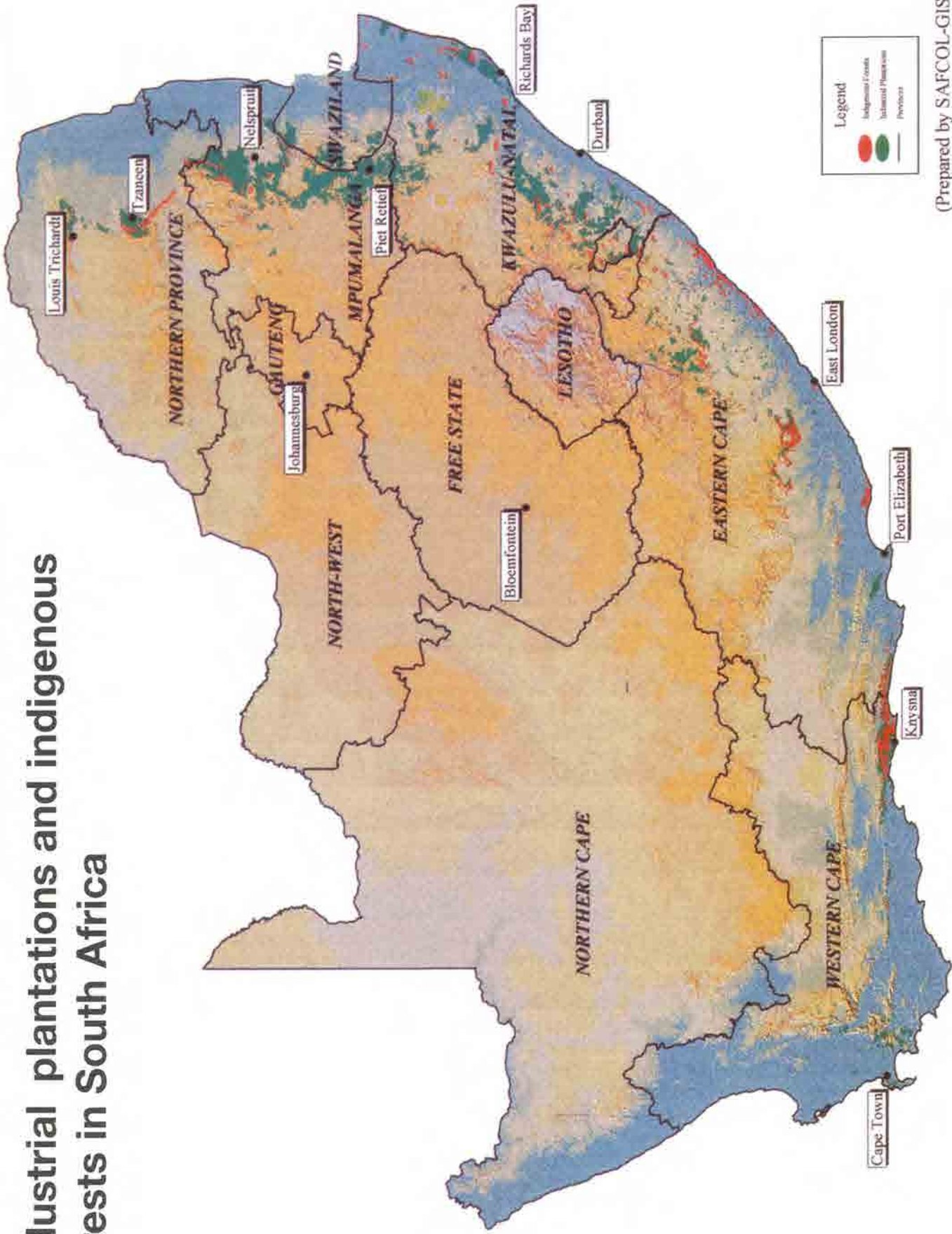
The Fynbos Biome can be considered as essentially synonymous with the Cape Floral Kingdom which is characterised by high species richness and endemism. The Fynbos biome includes both the Fynbos and Renosterveld ecological systems.

Biomes of South Africa



Low, A.B. & Rebelo, A.G. Vegetation of South Africa, Lesotho and Swaziland. Department of Environment Affairs and Tourism

Industrial plantations and indigenous forests in South Africa



(Prepared by SAFCOL-GIS)

1

The state of the forest sector in South Africa today

Introduction

1.1 For the first time, an attempt is being made to provide a complete account of the place of the forest sector in South Africa. This chapter provides an evaluation of South Africa's forest resources and their capacity to supply forest goods and services. Because this capacity depends on how the resources are developed and managed, it includes an assessment of the institutions involved with the forest sector, as well as the degree to which the financing of sustainable forest development is being achieved. The chapter concludes with recommendations for ways to regularly monitor and evaluate the state of forest resources in South Africa.

1.2 South Africa has extensive and valuable forest resources. The mountain and coastal forests are the exception, being small fragments of habitat set within grasslands and fynbos. They are valued for their biological diversity, for medicinal and local uses, and for their aesthetic and spiritual values. Only in the vicinity of Knysna and George, in the Western Cape Province, and in the Amatola Mountains of the Eastern Cape Province, are these forests much used for their timber.

1.3 The most extensive resources are the woodlands, originally about 42 million hectares of open savanna, of which as little as half now remains. Then there are about 1.49 million hectares of industrial forest plantations – a

resource that has come to support a multi-billion rand industry, employing over a hundred thousand people, and which is managed for sustainable production.

1.4 Although these resources are extensive, there are many places where natural forests have been depleted and where people's needs are not being met. These resources vary significantly between provinces. Table 1.1 provides a summary outline of the distinctions between the provinces.

1.5 South Africa's forest policy, as set out in the White Paper on Sustainable Forest Development in South Africa, includes in its scope all kinds of forests in the country, i.e. natural forests and woodlands, as well as planted forests and small groups of trees.

Benefits from forest resources

1.6 Distinct benefits are gained from land areas with trees. These benefits are called forest goods and services. Forest goods and services fall into two broad categories: one, where the resources are consumed (the use values of forest resources) and two, where the resources may not be consumed but are nevertheless valued by people (the non-use values). Forest goods and services come both from plantations and natural forests and woodlands; however, the benefits and costs associated with each type of forest cover may differ greatly.

Table 1.1: Summary outline of important distinctions between the provinces with respect to the forest sector

PROVINCE	FACTORS DESCRIBING THE FOREST SECTOR			
	Industrial forests	Natural forests and woodlands	Environmental and resource issues	Social and economic factors
Eastern Cape	Third most important province for industrial forestry (11%), with apparently large potential for expansion. Currently mainly for sawlog and pole production. Good potential for expansion of industrial forests in the central and northern parts of the province.	Important forests in the Tsitsikamma, the Amatolas and scattered along the coast and in the mountains of the northern part of the province; often very important for biological conservation.	In the west, fynbos habitats are major reservoirs of biological diversity. Invasive trees and other weeds are a widespread problem with high resource and environmental costs; mountains prone to invasion. Water resource constraints are strong. Relatively large balance of water resource available in the northern half of the province.	Widespread rural poverty, need for rapid rural development. A significant portion of the land in forest zones is communal.
Free State	No significant resource, though local plantations are important. Most of the province is climatically unsuited to industrial forestry.	Various small woodland types and low forests in the mountains; locally very significant social, economic and environmental functions. Resources very limited.	Protection of water catchments (e.g. the former OwaQwa) and maintenance of biological diversity.	Localised rural poverty, but often with good opportunities for resource-based livelihoods in which forestry can play a role.
Gauteng	No significant resource; climatically unsuited.	Some significant remaining areas of Bushveld.	Much of indigenous resource lost to other land uses. Increasing pressure from urban expansion.	Resource offers significant potential for recreation and development of activities such as ecotourism.
KwaZulu-Natal	Contains the second largest area of plantation forest in South Africa (37%) and highest investment in forest products processing; small-scale growers also prominent. Significant afforestation principally for pulpwood production.	Forests scattered along mountains and coast are extremely important in the conservation of biological diversity, as are woodlands in major river valleys and the northern part of the province.	Relatively large balance of water resource available, but afforestation limited by competition for water. Wide concern about invasive alien plants, especially in mountains.	Widespread rural poverty, need for rapid rural development. A significant portion of the land in forest zones is on communal land.
Mpumalanga	Contains the largest area of plantation forest in South Africa (41%). Sawlogs, mining, timber and pulpwood all important. Further expansion apparently severely constrained.	Important forest patches occur along the escarpment. Natural woodlands extensive at middle and low altitude, very important economic and environmental role.	Water resources heavily committed. North-East Mountain Sourveld habitat, important in biological diversity, depleted.	Several major districts from the former homelands where communal land remains important.

Table 1.1: Continued

PROVINCE	FACTORS DESCRIBING THE FOREST SECTOR			
	Industrial forests	Natural forests and woodlands	Environmental and resource issues	Social and economic factors
Northern Cape	No significant resource; climatically unsuited.	Limited resources; those available can play a significant role in improving livelihoods and protecting the environment. Extensive open woodlands in the north-east important for conservation of biological diversity.	Maintaining biological diversity.	Widespread rural poverty, but limited opportunities for the development of natural resources. Urban forestry important throughout the province, especially in view of the harsh climate.
Northern Province	Contains about 5% of the country's industrial forests.	Woodland formations dominate throughout the province. Closed forests in the Wolkberg, Magoebaskloof, Soutpansberg and Blouberg are very important for conservation of biological diversity. Woodlands vitally important in the economy of the province, e.g. for ecotourism development.	Critical pressures on water resources place severe constraints on further afforestation.	Widespread rural poverty, need for rapid rural development. Much of the resource is communally owned.
North-West Province	No significant resource; climatically unsuited.	Extensive areas of open woodlands. These play a very significant local economic and environmental role.	Significant areas of woodland lost to agriculture.	Widespread poverty but with some potential for natural resources to significantly improve livelihoods. Much of the resource is communally owned.
Western Cape	Limited in extent (6% of the national resource) but locally important for sawlogs and poles.	Important forests in the George-Knysna region. Many small forests in mountain kloofs, with rare tree species such as <i>Widdringtonia</i> .	Fynbos habitats are major reservoirs of biological diversity. Invasive plants entail very high resource and environmental costs. Water resource constraints are strong.	Local wood-based industries (George, Knysna, greater Cape Town and hinterland) are economically important.

1.7 Examples of use values of forests, for which there is normally an active market, are:

- wood products (logs) destined for industrial processing, and wood for fuel
- non-wood forest products, such as resin, fruit and other foods, medicinal plants, bark and fibres, and wildlife that is harvested

- opportunities for recreation and tourism development.

1.8 Non-use values are derived from the following kinds of services, for which there is usually no market:

- spiritual, religious and cultural values
- protection of water resources

- conservation of biological diversity
- fixing of carbon dioxide from the air to compensate for industrial emissions.

1.9 Although goods and services with non-use values are not traded, they do have great value. Sometimes people place a higher value on these than on any of the formally marketed goods and services. This is one important reason for having a forest policy. Where the market fails, and people are not motivated by financial considerations to put goods and services to the best use, their values and aspirations must influence the outcome.

People and forest policy

1.10 The purpose of the forest policy is to promote the forest sector so that it is able to provide these goods and services now and in the future. It extends to any resource that provides forest goods and services and any activity that relates to tree-based resources. This is why this document refers to a **forest** policy, rather than a **forestry** policy. A national perspective is required on a strategy for sustaining the supply of goods and services from our forest resources. This does not imply that the resources have to be managed centrally.

1.11 The term "forestry" refers to the practice of managing forests. In South Africa, this has tended to be associated with the technical activities of managing planted forests and the closed natural forests that can produce marketable wood. It has been mainly concerned with delivering wood products. Other goods and services have been treated as more or less incidental.

1.12 Instead of forestry as such, the policy goal is sustainable forest development. This means that we must know what forest goods and services can be provided, now and in the future, to satisfy national and local goals and aspirations.

1.13 Because the RDP and other national policies focus clearly on people's needs for development and their aspirations for a better life, forest resources are seen in the light of their relationship with people.

1.14 Because the Constitution guarantees everyone the right to a safe and healthy environment, it is essential to establish how forest management and development influence the environment and how the development of the sector can be placed on a sustainable basis.

Community forest resources

1.15 Community forestry is forestry applied for local development. This definition is expanded in Chapter 3. It includes forestry for income, for subsistence, and for a better environment. It is forestry practised by individuals, farmers and other entrepreneurs, and communities.

1.16 Community forest resources are those which are used to meet local social, household and environmental needs, while contributing to local economic development. The main resource base is the natural forests and woodlands, followed by industrial plantation forests, home gardens and local woodlots.

1.17 Community forestry takes on many forms. Thousands of people are engaged in supplying pulpwood and wattle bark to forestry companies through small-scale growing in KwaZulu-Natal. Communities manage forests and woodlands for many goods and services such as wood, grazing and medicinal plants. Households and communities use trees in home gardens and in public places in towns and cities.

1.18 Both the resources for the provision of forest goods and services at the community level, as well as their levels of consumption, are poorly measured. The most obvious good is fuelwood, with annual consumption estimated at about 11 million tonnes, mostly from natural woodlands.

1.19 Depletion of the resources of the natural forests and woodlands has led to local shortages in the availability of their goods and services.

1.20 It is unlikely that community forest resource shortages will be made good by planted tree resources. Consumers may have their needs better met if local woodlands are

rehabilitated or if economic development allows households to purchase substitute goods and services, for example by switching energy sources. In the latter case, plantation forestry can contribute to local economic development and household income in certain districts.

1.21 Some provinces are rich in woodland resources and others are not, but people in every province seek some benefit, greater or smaller, from the forest sector. Strategies have to be developed at the provincial level to take account of the variation in needs and resources.

Industrial forests: plantations for wood used by industries

1.22 The area under plantations currently yields about 19 million cubic metres of roundwood, which equates to about 11 cubic metres per hectare per annum. However, this is considerably less than their potential. These forests are potentially very productive. Experts claim that about 15 to 18 cubic metres per hectare per annum could be achieved. This shortfall is due to:

- application of genetic improvements and better silviculture on less than 30% of the total planted area; only in future rotations can this be extended to the rest
- the fact that many of the plantations are still young and are not yet yielding timber
- poor yields from the plantation forests of the former homelands

- poor species selection for certain sites, resulting in low growth
- losses through death and depressed tree growth owing to drought and disease
- economic factors, such as relatively low prices for wood in certain places, which discourage good silvicultural practices.

1.23 Generally, yields are not constrained by factors such as forest fires (estimates suggest that approximately 0.5 to 1.0% of the area burns annually, although SAFCOL reports 2% of its area burns annually), pests and diseases, or an inability to regenerate the forests. South African silviculture and forest management are generally very good, and often set world standards.

1.24 This wood supply is consumed in a variety of products, as summarised in Table 1.2.

1.25 Estimates by the Forest Owners Association indicate that about 28 to 30 million cubic metres of roundwood per annum could be yielded in future from currently afforested land, i.e. an increase of nearly 50% from the present 19 million cubic metres per annum.

1.26 At this stage, the yields of wood from the current resource base are regarded as sustainable, largely because of the good forest management practices applied in most of the forests. Steady improvement of the genetic stock through tree breeding and ongoing research programmes to support

Table 1.2: Summary of the consumption of industrial roundwood in South Africa ('000 m³) in 1995/96, and projections to the year 2020 in various product categories based on a scenario of GDP growth of 2.5% (LHA 1995)

Product category	Volume of roundwood sold from plantations, 1995/96	Projected consumption for the domestic market and exports, 2020
Lumber (sawtimber)	4 745	7 870
Pulpwood and chip exports	10 920	24 130
Mining timber	2 560	2 560
Other	1 070	2 585
Total	19 295	37 145

improvements in management systems have also played a role.

1.27 Potential current threats to the sustainability of wood supply include the following, though no effects on productivity have been verified yet:

- soil acidification and declining soil fertility, influenced also by the deposition of atmospheric pollution in Mpumalanga and elsewhere
- forest pests and diseases
- increased climatic variability owing to greenhouse climate effects
- an ongoing threat of destructive forest fires.

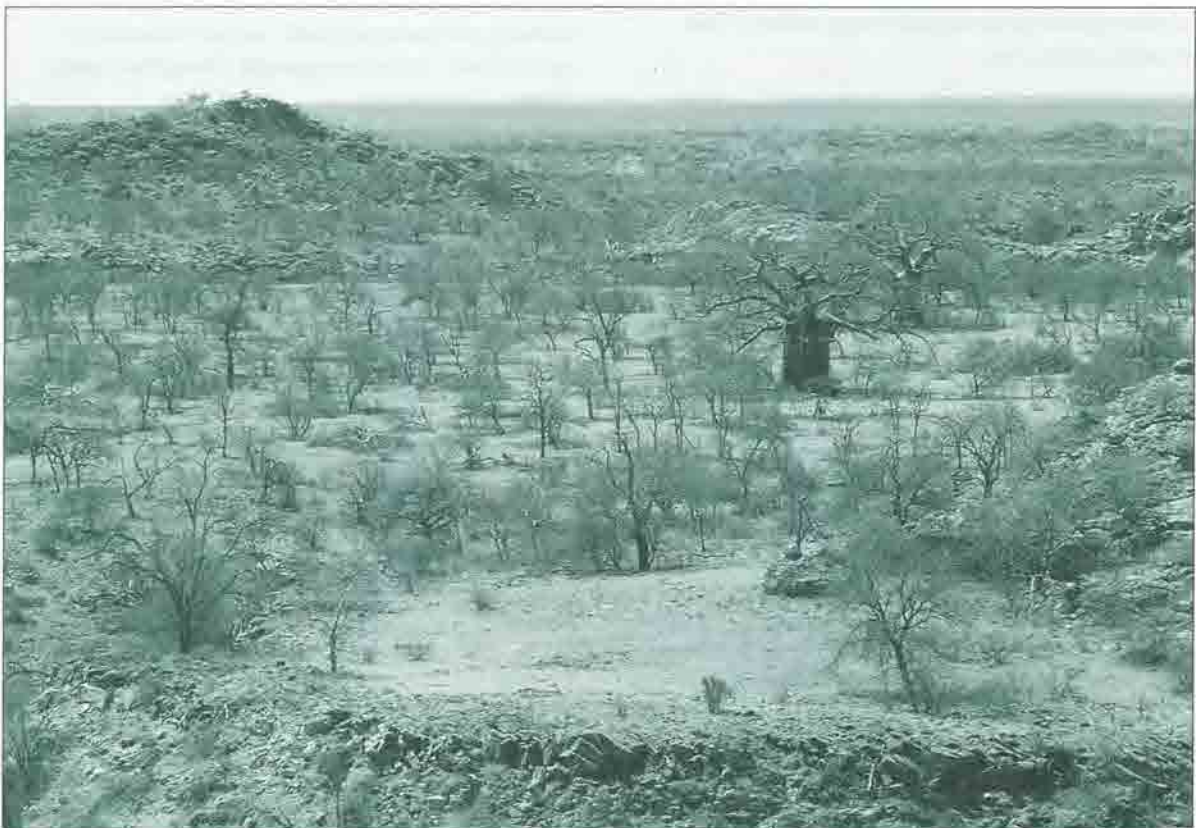
1.28 These potential threats affect everyone and should, therefore, be addressed jointly by all stakeholders in the sector, including government.

1.29 Whether development of the resource as a whole can be sustained depends on additional social and environmental

considerations, with special challenges being the following:

- increasing competition for water in a water-scarce country
- the need to ensure higher net economic benefits from forest-sector development than can be derived from the use of resources by other sectors where trade-offs are involved
- the need to ensure that forest development contributes meaningfully to local rural development
- the need to protect biological diversity in the rich ecosystems found in South Africa
- the need to achieve stakeholder agreement on the criteria and indicators of, and systems for, sustainable forest management.

1.30 These social and environmental considerations must apply equally to all sectors. The forest sector must compete among the rest for resources.



The woodlands of South Africa are, by international definition also "forests" and are receiving special attention to ensure their sustainable utilisation. Photo: Christopher Willis

The natural forests and woodlands

1.31 Landscapes with trees originally covered about 42 million hectares in South Africa, i.e. 33% of the land. The area has been reduced to about 23 million hectares; about half a hectare per person. Increasing demand for agricultural land could see it decline further.

1.32 Several different classes of forest cover are relevant here. These are discussed in Chapter 8. All of these types are included in the Food and Agriculture Organisation of the United Nations' definition of "forest", and all contribute, to a greater or lesser extent, towards the forest goods and services needed in South Africa. The most important of these are:

- wood for fuel, homestead use and fencing
- food from fruit and animal resources
- medicinal plants
- a healthy environment.

1.33 The condition of these resources in their entirety has not been comprehensively surveyed and evaluated. A relatively small fraction of the total area is included in areas protected by law and owned by the State. Whereas the percentage for the indigenous closed forests is about 75%, for woodlands it is only about 9.6%.

1.34 Outside the protected areas, forest resources have been depleted. Some reports indicate that about 40 to 45% of the estimated original extent has been lost. Of the open woodlands (the Bushveld types), between 25% and 90% has reportedly been lost. Where estimates are available, these must still be verified (see Chapter 8).

1.35 The reduction in these areas is caused mainly by conversion of the land cover to pastures and crops and by residential development. Special aspects of these losses include:

- extensive conversion of arid and semi-arid woodlands to unsustainable maize and other crop systems
- conversion for small-scale agriculture and peri-urban residential areas in the former homelands, driven by apartheid policy which included land betterment schemes in many

districts, and general overcrowding resulting from removals

- on a smaller scale, loss of forest and woodland cover through harvesting of wood for fuel and tree products for medicinal purposes.

1.36 Trends in the state of these resources should be investigated. Changes in agriculture policy (specifically, the removal of direct subsidies, price support, and tariff barriers), and in the agricultural economy, have evidently caused commercial farmers to switch towards safari tourism instead of stock farming. It is likely that, in some areas, the state of the resource is improving.

1.37 However, poverty in the areas of the former homelands, a lack of local development, and uncertainties during transition to new local government structures are resulting in continued forest resource degradation in some areas.

1.38 Clearly, the country has lost much of these resources. In many cases, conversion of this land can be justified on the grounds of its use for sustainable production systems that contribute to national goals. In other cases, the conversion has been at a net cost to the economy. It is urgently necessary to understand the costs, benefits and trends in forest land conversion and to establish the elements of land-use planning systems that would satisfy national and local goals of sustainability.

Sustainable management of the forest resources – do we meet the criteria?

1.39 Chapter 12 defines sustainable forest management, referring to industrial forests. It is not simply about the sustained yield of forest goods and services, but also about the forest resource as a whole being managed to meet South Africa's aspirations of a healthy environment, social equity and economic efficiency.

1.40 This means that we have to define sustainable forest management not just in words but also by measurable indicators that are relevant to all these dimensions of a sustainable environment and economy.

1.41 Around the world, defining sustainable forest management and measuring progress towards the goal of sustainability are being approached through the development and application of principles, criteria and indicators of sustainability. Here, we are in the early stages of doing this. Certain principles have been proposed, but they would have to be given practical meaning by developing the criteria to assess forest management according to each of the principles and, for each criterion, measurable indicators.

1.42 At this stage, we can make a tentative assessment of the state of the national resource with regard to each of the principles. The state of our forest resources against commonly applied principles for sustainable forest management is outlined in Table 1.3.

Sustainability: natural forests and woodlands

1.43 Major questions arise as to the sustainability of resources in the natural forests and woodlands in the former homelands and on commercial farms where they are cleared for pasture development and crops. In these cases, the woodland area has been reduced and habitats have been degraded.

1.44 Many State forests and protected areas have been managed sustainably and a great deal of technical expertise is available in the country. Standards of management in these areas are world class. In many areas, however, there is an urgent need for the introduction of new systems of management which can utilise existing technical expertise, but which must also ensure a sustainable flow of goods and services to local communities.

Sustainability: industrial forests

1.45 Industrial forests are well maintained and are increasing their outputs, except in the case of resources which were administered in the so-called homelands prior to 1993 (a situation that is due to be remedied), and in the case of tens of thousands of hectares of derelict woodlots.

1.46 There is concern about the potential effect on industrial forestry of loss of soil fertility, the future spread of new pests and

diseases, the risk inherent to monoculture forests (especially the use of clonal eucalypts) and future effects of atmospheric pollution and of unpredictable drought. Except for the last, most of these factors have not affected wood yields and are regarded as manageable if addressed through adequate research and forest practice improvement.

1.47 There is a major concern about, and commitment to, developing improved and effective ways of managing and mitigating the effects of industrial forests on water resources and biological diversity.

1.48 The potential for socio-economic benefits needs to be developed to a much higher degree than has been the case to date.

Contribution to our economy

1.49 The most prominent part of the forest economy is the industrial forest subsector, but the other subsectors each make important contributions. Because these have not been estimated in money terms, we tend to place too little value on the benefits they provide.

1.50 An approximate summary of the contribution of the sector to our economy appears in Table 1.4. About 2.5 to 3 million households directly gain some significant benefit from the forest sector.

Financing sustainable forest management

1.51 The turnover of the industrial forest and forest products sector was about R12 billion in 1995/96, off an asset base valued at about R20 billion. Of this, about 15% was attributed to the sale of roundwood. About R1 billion is spent annually on silviculture and forest management to maintain and renew the resource base.

1.52 Sustainable management of the industrial plantation resource depends critically on this reinvestment, since the high-class management systems employed are costly to maintain. On the whole, financial returns from forest operations are sufficient to finance sustainable management. However, there are indications that, in some places, revenue is inadequate for this, especially where sawlogs

Table 1.3: Preliminary assessment of the degree to which sustainable forest management is achieved in South Africa, measured against commonly applied principles

Sustainable forest management principle	Industrial forest subsector	Natural forests and woodlands
Maintaining the forest resources base	Good, though there are concerns about long-term fertility, pests and diseases, especially in clonal forests.	Good in protected areas and on many farms, weak on certain farms and in certain districts of the former homelands.
Maintaining the sustained yield of goods and services	Good system for forest management overall, but for wood production only; recreation and forestry improving; no consistent management for non-wood forest goods and services.	Good in protected areas and on many farms, weak on certain farms and in certain districts of the former homelands.
Maintaining biological diversity	At the level of the forest management unit there is increasing application of improved habitat protection and management, including restoration and management of riparian zones. But environmental management plans need improvement. At the regional or provincial level, improved planning methods such as strategic environmental assessment need to be applied, e.g. in KwaZulu-Natal, Mpumalanga and Eastern Cape.	Good in protected areas and on many farms, weak on certain farms and in certain districts of the former homelands.
Use of water	The interim afforestation permit system allows for consultation at provincial and local levels. Concern exists, however, about a lack of policy and principles for the system, that decisions are not based on adequate data and that criteria are not consistently applied.	Unclear.
Optimising the socio-economic impact	Generally weak, some good cases (see Chapter 16).	Generally weak, some good cases emerging with conservation agencies.
Supportive institutional policy and frameworks	Strong capacity for sustainable forest management in the major companies, supporting consultants and many private operators; policy capacity relatively weak, especially in government.	Relatively strong in conservation agencies and consultants supporting woodland management; needs improvement, especially regarding former homelands.

are produced. Ensuring market-based log prices is an important measure to assure the financing of sustainable forest management.

1.53 Most of these plantation management operations are in the private sector (SAFCOL has government as sole shareholder but operates as an independent company), financed largely from current income. The private sector has also invested about R25 million in forest plantations in outgrower

schemes, bringing farmers from the subsistence sector into the formal forest economy.

1.54 Government spent R350 million in 1995/1996 in the industrial forest sector on the loss-making forest operations of the former homeland administrations. These operations are inefficient, but could achieve profitability if properly restructured. This restructuring will take place within the next 12 to 36 months.

Table 1.4: Summary of economic benefits of the forest sector in South Africa

Category of economic benefit	Industrial forestry	Community forestry	Natural forest and woodland management
Monetary contribution to the economy	Approximately R1.8 billion in 1995/96, equivalent to 8.7% of agricultural output, plus R10.2 billion from forest products manufacturing.	No estimates available; however, approximately 2.5 to 3 million households use forest goods and services.	Probably R400 to R500 million per annum, mainly through tourism and recreation receipts in national parks and safari ranches.
Employment	In the primary growing sector approximately 61 500 full-time and a further 50 000 in downstream processing.	Unquantified: many craft or small-scale enterprises use forest products for wood-carving, etc.	About 50 000, based on 1 person per 100 ha of privately managed savanna.
Household livelihoods	When the total number employed (full or part-time) is considered, about 200 000 households may obtain income from industrial forestry.	Up to 100% of rural households in certain districts use woodfuel; about 2.5 to 3 million households depend to some degree on forest resources.	Most community forestry goods and services are provided by the woodlands.
Foreign exchange earnings	About R4.8 billion in 1995/96, R2 billion net.	Probably very little, but some households sell forest products or curios to tourists; significant foreign-exchange savings because wood is used.	Difficult to estimate but probably between R200 and R300 million.

1.55 Most management of the natural forest woodlands is financed by the private sector, mainly through safari ranching which has replaced stock ranching in many places over the last ten years. A larger area is conserved in such ranches than in protected areas. The financing attributable to woodlands of these private-sector operations is not currently documented.

1.56 Financing by government in this sector probably amounts to about R100 to R200 million per annum, mainly in the management of national parks and equivalent protected areas. Even here, current income is financing more and more of the share of costs. The Kruger National Park, for one, operates on a current surplus income.

1.57 National government expenditure outside the former homeland forests amounts to about R30 million per annum, mainly for research, policy and extension services focussed on community forestry, small-scale growers and conservation forestry.

1.58 A sustainable forest sector needs other forms of long-term investment, especially in research (see Chapter 23). Current annual expenditure on research in the sector as a whole amounts to about R50 million, of which about R30 million goes to research on the management of the forests as such. This is a relatively low investment in comparison with counterpart sectors overseas. Research and technical human resources have been declining in South Africa, and our sound knowledge base and technology in forestry are being eroded. Without redressing this, the sector is likely to become unsustainable and uncompetitive.

Capacity to manage forest resources

1.59 Managing forest resources sustainably requires the right combination and levels of adequately competent human resources, capital, technology and expertise, all organised through effective institutions.

1.60 Table 1.5 gives a summarised assessment of the state of these factors in

Table 1.5: Summarised assessment of the capacity of institutions to achieve or manage for sustainable forest development in South Africa

Institution	Capacity to support industrial forestry	Capacity to support community forestry	Capacity to support the management of natural forests and woodlands
National government	Capacity is needed for economic analysis, monitoring and evaluation.	About 70 staff; probably sufficient if trained further and focussed.	Good technical expertise, needs to be made available to implementing agencies.
Provincial government	Not strong; strong role needed, e.g. in strategic environmental assessment.	Variable: some departments have strong rural development capacity.	Variable, good to weak.
Local government	Rural local governments still lack capacity for local development planning and to participate in integrated resource-planning institutions, e.g. with respect to water resources; effective institutions are needed to facilitate local planning of forest sector development in relevant districts.	In transition, mostly weak. Local government capacity to support integrated local development needs strengthening.	In transition, mostly weak. Local government is expected to be a major role player in facilitating integrated local economic development, including the sustainable management of natural forests and woodlands.
Private sector	Good, but probably needs strength in environmental management and labour relations.	Good for outgrowers. Not generally required in other areas, except through corporate social investment programmes.	Apparently mostly good.
Education for professionals	Good; output would appear to meet demand, efforts are being made to address gender and race.	Weak; needs curriculum development and a greater understanding of employment opportunities to determine an appropriate flow of graduates and diplomates.	Good.
Skills training	Some good training institutions. However, there is a need for skills training to be more accessible, widely recognised, standardised and transferable.	A need to improve understanding of skills needs, develop curricula and more standardised, accessible qualification.	Similar to industrial forestry, may need more social skills capacity.
Research and technology	Moderate.	Weak.	Technically good, although economic and social research capacity is weak.
Community-based organisations (CBOs)	Needed to facilitate local development; capacity is highly variable, some are strong.	Highly variable and they have an important role in many areas.	Needed for community-based and joint forest management.
Non-governmental organisations (NGOs)	Weak; NGOs are often important to facilitate negotiations between the private sector and local communities.	NGOs have a crucial role to play in identifying community needs. However, they lack resources, skills; their approaches vary, and coverage is limited.	Development and conservation NGOs have an important role to play in facilitating JFM (Joint Forest Management) and CBFM (Community-based Forest Management), however, capacity to fulfil roles varies and coverage is limited.

South Africa today. Generally, there is strong capacity for management in the private sector and in several conservation agencies. Overall, however, many aspects of management capacity need strengthening, especially at local level and in government, non-government and community-based organisations.

Conclusion

1.61 South Africa does not have a system of national forest resource accounts yet. Consequently, the picture of the value of the forest sector is incomplete and, in particular, does not properly reflect the balance sheets for environmental and social costs and benefits associated with the sector as a whole. However, the benefits of the sector are currently undoubtedly undervalued.

1.62 The forest sector in South Africa has many significant strengths and some major weaknesses. It does contribute significantly to the national goals, but the opportunity to increase this contribution is great.

1.63 We are rapidly approaching a stage where South Africa's forest sector can no longer be seen in isolation. It is becoming part and parcel of the forest sector of the Southern African Development Community (SADC). Some of the foundations of a regional approach are being laid, such as joint studies on research, education and centres of excellence, the development of SADC regional forest policy, and a planned SADC timber association. In future, greater emphasis will have to be placed on regional strategies for forest sector development.

1.64 A number of important priorities need to be addressed if this potential is to be developed:

- the necessity to identify and promote the forest and forest products industry as a major contributor to national goals
- the necessity to reach agreement between all stakeholders on a credible and effective system which maximises the benefits of industrial forestry while managing the impacts on the environment in general and on water resources in particular, based on criteria and indicators of sustainability
- the necessity to broaden access to the opportunities provided by development of the forest sector and to promote ways of obtaining maximum social benefit locally, especially in rural areas
- the issue of establishing an appropriate and effective national forest authority which will have the capacity to promote all aspects of the sector
- creation of a positive investment climate for development of enterprises based on forest resources, especially forest products industries
- the necessity to establish national resource accounts for the forest sector, including adequate systems for valuing the resources and an effective system of monitoring and evaluation, especially for natural forests and woodlands
- effective ways of sustaining and extending the benefits of community forestry.

2

Background and context

Definitions

2.1 Many different people are involved in forestry. To each of us, the words “forests” and “forestry” mean something different, sometimes very different. To the small-scale grower in KwaZulu-Natal contracted to supply pulpwood to the big manufacturers, forestry is about growing a super-tree, a eucalypt hybrid, to add to his family’s income. To a traditional healer in our northern or eastern provinces, forests are a source of medicinal plants, and perhaps a place of magic. To a horse-rider in Cape Town, the forest may be the radiata pine plantation at Tokai, excellent for a weekend ride. Hunters know that plantation forests have now become home to game, such as duiker and bushbuck, that used to occur only in the natural forests.

2.2 South Africa’s forest policy covers all of our forests and all of the benefits that people derive from them (Chapter 1). We know that the forest resources are not all the same and cannot all be treated in the same way. We also know that there is good reason to look at all forests together. For example, some communities wish to plant trees locally to provide timber, poles and firewood, so that they can protect the natural trees in their district to provide those goods and services that the planted resource cannot. Big companies manage their plantations for industrial roundwood production, but also protect and manage the natural forests and woodlands on their land for the purpose of conserving biological diversity and protecting beautiful landscapes.

2.3 To deal with the diversity of the forest resource in South Africa, and to explain how we will manage the differences, we start by breaking up the forest sector into three parts. When we do this, we recognise that using these three classes is artificial and that we must bear this in mind all the time; as well as the fact that there are overlaps as well as differences.

These three classes are:

- the community forestry sector: community forestry is forestry for local economic development, focussed on satisfying the needs and development aspirations of previously disadvantaged people; it is fully defined in Chapter 3, but it is important to note that it includes both forestry for commercial gain as well as forestry for social and environmental benefit, as long as it is about local development, and it is both about planting trees as well as managing and using the trees that occur naturally around us
- the natural forests and woodlands: these provide abundant community forestry benefits and, sometimes locally, industrial timber, such as in the vicinity of George and Knysna and in the Eastern Cape; environmental values of these natural resources are very strong
- the industrial forest sector: this is forestry for the production of roundwood for sale to manufacturing industries – sawmilling, mining timber manufacture and pulp production for paper-making and export.

2.4 It stands to reason that we have to look deeper into each of the different parts. We should understand the differences between urban forestry and community forestry for rural development, for example. We should know the differences between industrial forests for producing sawlogs and those for producing pulpwood, and how these affect our development strategy. The National Forestry Action Programme (NFAP) does this, but we also recognise that many of these more detailed differences receive proper attention only in the process of applying the NFAP.

What we mean by policy and strategy

2.5 One definition of policy is, simply, a course of action adopted and pursued by government (or a firm, or any other body). Good government requires that we all know what course of action has been adopted, thus policy is also about communicating through a policy statement or a document. An answer to the question, "What is your policy?" must be at hand. Better still, modern principles tell us that good government will be characterised by the development of policy through consultation with, and the participation of, all relevant stakeholders: the wider the agreement reached and the better the communication during the process, the greater the likelihood that one will end up with a policy that works. In this it is also important to give a proper hearing to minority points of view and to make a strong effort to reach broad consensus or, failing that, to recognise the implications of divergent interests – besides, today's minority opinions often turn out to be tomorrow's majority.

2.6 Policy has many parts to it, including:

- the vision for the future – in this case, of a South Africa where all sections of society have benefited from forestry in a meaningful way and our economic competitiveness has been strengthened wherever possible by the contribution from the forest sector, coupled with sound and responsible environmental care in all aspects of forestry
- a chosen and clearly documented direction of sustainable growth through increased participation in the sector, especially by rural people, and the benefits it provides transpose through more and better jobs,

increased business opportunities and increased addition of value to the raw materials produced – value which must be added if the forest sector is to compete for scarce resources against other sectors; directives and guidelines that will allow us to know when we are moving in the chosen direction and when not

- instruments to support policy, of which law is one, though there are others, such as incentives, market-based instruments, education and communication
- defined and clear roles for government and other institutions in the sector, including private institutions which are transformed, developed and properly resourced and coordinated, to serve the needs of forest sector stakeholders, including providing forums for ongoing discussion and debate on matters of policy and strategy; dynamic roles that will allow institutions to adapt and evolve (and, if necessary, close down) as we make progress
- the ways and means of, and systems for, monitoring and evaluating progress with the implementation of policy and the consequences and impacts of policy, so that we can continually learn and improve.

2.7 The question as to what the role of government should be in the policy for the forest sector has caused lengthy debate. The White Paper sets out what this role should be. At times, government should be the regulator and the enforcer of regulations. But mostly its role would be described in terms of providing incentives, arbitration, facilitation, evaluation, reporting and communication.

2.8 There are, however, two special roles for government:

- to redress the wrongs of the past and ensure that the needs of previously disadvantaged groups receive proper attention
- to regulate or promote solutions where the market fails; i.e. where the behaviour of individuals or firms would not lead to a beneficial outcome, because they would not gain financially or economically by choosing that outcome; markets tend to fail around social justice and equity issues and environmental costs and benefits, although in many

product markets environmental costs are increasingly being recognised through pricing mechanisms such as certification.

2.9 Development of the policy in the White Paper, and the strategy set out in this NFAP, have been guided by several principles, viz.

- the particular role that government should play, as outlined above, should be defined in relation to the roles of other stakeholders, such as the private sector
- generally, the principle of subsidiarity applies, i.e. decisions and actions should take place at the appropriate levels, with individuals and organisations acting with the greatest possible degree of autonomy, within policy and the law
- the principle of cooperative governance, in instances such as where national and provincial government need to address the forest sector together
- the necessity to ensure the most beneficial use of resources, balancing the public interest and private interest, national and local priorities, and the interests of today's generation without prejudice to tomorrow's
- private initiative, responding to effective market forces, as the most efficient basis for gaining value from forest resources
- the necessity to take account of other policies affecting the forest sector and to incorporate in forest policy those measures that would ensure a positive relationship with other policies
- that legislation, as an important policy instrument, should be designed to support the implementation of policy by setting and enforcing minimum standards in the public interest, but by enabling local solutions wherever possible
- that change and progress must be anticipated, and therefore that policy should be designed to favour flexibility and diversity.

The nature and purpose of the National Forestry Action Programme

2.10 The White Paper on Sustainable Forest Development in South Africa makes a commitment to turn policy into action through a strategic plan, namely the National Forestry Action Programme (NFAP). This document is

the strategic plan. It sets out the most important work to be done for the next three years, identifies specific goals for each issue and provides action plans.

2.11 The objective of the NFAP is to provide a framework for implementing the new forest policy as set out in the White Paper. The necessity for such a programme of action, with clear objectives, schedules and responsibilities, is recognised in the White Paper. This is central to the effective use of resources and institutions to support government's policy goal, i.e. to promote a thriving, equitable and sustainable forest sector.

2.12 Important features of the NFAP are:

- it is a framework for action and not a detailed, rigid plan
- it is designed to satisfy national, provincial and local needs while meeting international obligations, e.g. in terms of Agenda 21
- it is based on wide consultation, involving the less powerful and articulate together with established participants, based on objective information gathered to develop strategy
- it focusses on mobilising human resources
- it incorporates the three principal components of the forest sector, i.e. industrial forests, community forestry and natural forests and woodlands
- it is integrated with wider government policies and strategies, particularly rural and industrial development and the development of other relevant sectors
- it incorporates the best lessons learnt from the experiences within and outside South Africa
- it is realistic in its objectives and feasible in terms of the resources (financial and human) required to achieve them
- it ensures that the forest sector is fully integrated with wider resource management strategies, emphasising links with land-use planning and integrated catchment management.

Producing the NFAP

2.13 The NFAP was produced through a coordinated procedure, based on plans approved by the Minister.

2.14 The Chief Directorate: Forestry of the Department of Water Affairs and Forestry (DWAF) has been responsible for the coordination and final preparation of the NFAP (but not its content).

2.15 Following completion of the NFAP, the Chief Directorate: Forestry (or a successor, see Chapter 25) will assume responsibility for monitoring and reporting progress in NFAP implementation to the National Forestry Advisory Council through the Director General of DWAF. It will also be responsible for regular revision of the NFAP.

2.16 The NFAP was developed by a number of teams comprising people selected for their knowledge of various aspects of the sector and, as far as possible, representing a diversity of perspectives on the relevant policy issues. The names of the people who worked in each of these teams appear in Appendix 1. Unfortunately, many people approached to participate could not do so because of other commitments. The team composition was enhanced by additional members nominated by the National Forestry Advisory Council.

2.17 The first team was the **Planning Task Force (PTF)**, which supervised the development of the NFAP. This included the DWAF officials tasked with convening and coordinating the NFAP, as well as the conveners of the different working groups. It drew invited representation from a range of interested and affected parties, including representatives of the forest industries, trade unions, environmental interest groups, expert bodies (such as the Land and Agriculture Policy Centre) and NGOs involved in the delivery of community forestry.

2.18 The PTF was responsible for:

- developing the NFAP on the basis of its direction and briefs to the working groups
- drawing the outputs of the working groups into one integrated sector programme
- ensuring that working groups adopted a participatory and consultative approach in their planning task and communicated their deliberations and findings
- promoting the concept of, and developing a capacity to undertake, sustainable consultative sectoral planning within DWAF.

2.19 **Working groups** were appointed to address the issues within each of the three sub-sectors, as well as in certain cross-cutting areas:

- community forestry
- industrial forestry
- natural forests and woodlands
- human resources development and labour
- law
- administration
- research, development and innovation.

2.20 The working groups were briefed by the PTF to provide the material to be synthesised into the complete NFAP. Each of Chapters 3 to 25 of this document is drawn from, and supported by, a key issue paper. The working groups were each led by a convener, usually from the Chief Directorate: Forestry, and were constituted by drawing on individuals from within and outside the government.

2.21 Each working group had the task of:

- addressing and refining a set of key issues relevant to its subject area
- reviewing and critically appraising the available literature and data sources relevant to the key issues
- identifying and commissioning any specialist studies which may be needed to provide information on which to base strategy
- facilitating workshops around key issues such as legislation, criteria and indicators for sustainability, and future supply-and-demand modelling
- developing a set of key issue papers.

Consultation and communication

2.22 Although there had been broad consultation in the process of developing the policy in the White Paper, many of the concerns raised by interested parties could not be addressed when writing policy itself, but only when the time came for policy to be implemented. For example, the policy was to review the law for the forest sector. The White Paper indicated what the new law could contain, but it left the development thereof to the next stage.

2.23 Because of this, the process of developing the NFAP and its contents was tested and improved through further consultation.

2.24 The ground was prepared for consultation through a communication programme designed to confirm and identify those people interested in the implementation of forest policy, to obtain their views on the key issues, and to help them prepare for their contributions in the consultations.

2.25 Communication was effected through various media:

- a special newsletter, distributed to 2 800 people
- two discussion documents mailed to 750 key stakeholders
- radio broadcasts
- media releases
- special educational briefs and workshops with community representatives in each province.

2.26 In this way:

- the NFAP teams did the groundwork to produce information and proposals on which the wider community of interested parties could base their contributions
- the consultative process brought in a wide range of knowledge, experience and opinion to strengthen the strategies by debating the options available; the work of the relatively small group of experts was tested and validated through this process.

2.27 General consultation took place in two ways:

- invitations for written comment on discussion documents describing the process through which the NFAP was to be produced and the key issues to be addressed
- a series of ten workshops, one in each province and one for the organised forest industry, held from 14 to 30 May 1997, preceded by the distribution of copies of the draft NFAP to all people who had expressed an interest in participating; a full record of these workshops has been distributed to all participants.

2.28 Special questions were addressed through additional consultative mechanisms:

- meetings in each of the provinces to discuss the distribution of responsibility and authority between the different levels of government, especially regarding community forestry and the management of natural forests and woodlands
- meetings with representatives of relevant national government departments to discuss such matters as the new forest law.

2.29 In addition:

- the **National Forestry Advisory Council** received regular progress reports on the NFAP, was invited to make recommendations on the appointments to different NFAP teams, and coordinated the inputs of various expert reference groups on the contents of the NFAP
- reports were made to the **Portfolio Committee on Agriculture, Water Affairs and Forestry** and to **Minmec**, the body for consultation at political level between the Minister and the relevant Members of the Executive Council of each of the provinces.

2.30 The process of developing the NFAP involved several steps:

- the preparation of a situation analysis outlining the current state of the sector and identifying cases where improvements and actions are needed
- the specification of sector goals for the programme period
- the identification of necessary, desirable conditions to be met in moving towards the goals identified
- optional strategies for reaching the goal
- once preferred strategies were clear, a programme of action was defined, along with responsibilities and schedules to implement these strategies.

2.31 The NFAP is compiled from several parts. First, teams identified the various key issues that had to be resolved urgently to allow policy to be applied effectively. The key issues finally addressed are those that appear in Chapters 3 to 26 of this document. Key issues were identified by selecting from the White

Paper those aspects judged to be the most important, through consultation with the National Forestry Advisory Council and correspondence with about 500 stakeholders.

2.32 For each key issue, working groups addressed the following:

- the importance of the key issue, as well as the current situation regarding that issue
- the goal and objectives to be served by addressing the issue
- feasible alternative strategies to address the issue.

2.33 For each key issue we now have a goal which sets out what needs to be achieved to resolve the issue, an outline strategy to address that goal, and specific action plans.

The process of developing forest policy and the National Forestry Action Programme

2.34 The action programmes for each strategy are challenging, but not beyond reach. These programmes must be realised through the business plans of transformed institutions in the forest sector. The most important transformation is that required of the role of national government (DWAF) in the forest sector (see Chapter 25).

2.35 The final form and content of the action programmes will depend on the development of these business plans. The tasks included, and their timing, are therefore only indicative at this stage.

2.36 A step-by-step approach was followed in developing the new forest policy, each stage building on the inputs of the previous stage. The main steps in the development of the Forestry White Paper were:

- the National Forest Policy Conference held in March 1995
- the publication of a Green Paper in June 1995
- the Greening of South Africa Conference held in October 1995
- the White Paper on the forest sector approved by Cabinet on 6 March 1996.

2.37 The details of this process are summarised in the relevant documents.

2.38 Following the approval of the White Paper, the Minister initiated the process to develop the NFAP in August 1996.

The scope of forest policy and strategy

2.39 Policy for the forest sector in South Africa covers all kinds of forests and addresses all the factors that affect its sustainable development. Various stakeholders have objected to this inclusive approach.

2.40 The first concern is that including natural forests and woodlands together with industrial plantation forests will tend to cause conflict of interests in the administration of policy. For example, promoting the industrial sector will necessarily have environmental implications; promotion of the industry should be part of forest policy, and environmental management part of environment policy. This has been the approach in revising the procedures for managing afforestation permits, which are used to regulate the impact of the industry on water resources.

2.41 The inclusive approach in the White Paper has been retained in the NFAP for a number of reasons:

- there is no rigid boundary between the different parts of the forest sector: community forestry links up with industrial forestry where householders and farmers grow trees for sale to the formal sector; community forestry benefits are often drawn from use of the natural forests and woodlands
- the forest policy itself must be comprehensive and must allow South Africa to address the development of the sector holistically, but this does not mean a uniform, indiscriminate and centralised approach to implementing policy, as is clearly set out in Chapter 25 ("The Role of Government in the Forest Sector")
- international policy, set by the Forest Principles in Agenda 21, deals with "all kinds of forests" for the same logical reason, i.e. the resource bases, though different, are interlinked.

2.42 Another concern of this kind is that the forest policy should not deal with such matters

as labour and human resources development since these are the subject of other policies, such as the labour policy for South Africa. Here too, the inclusive approach has been retained for the following reasons:

- experience around the world shows that the promotion of a thriving competitive sector cannot be undertaken unless all the parts that make up the sector are approached

together; for example, competitive industries need skilled workers

- generally, successful countries and sectors are those that address inter-sectoral linkages effectively
- the new policies for labour and human resources development place an onus on each relevant sector to identify and organise itself to play its part in implementing policy.

3

Community forestry: its current and potential contribution to national goals

What is the issue and why is it important?

3.1 South Africa's new dispensation is framed within the Reconstruction and Development Programme (RDP) and numerous other policy statements, including the Macro-economic Strategy. Clear commitment is given to achieving national goals of equitable growth, sustainable development, full employment and poverty alleviation. Community forestry can significantly contribute to achieving these goals in both rural and urban areas. The nature of this role varies with respect to local resources, aspirations and needs.

3.2 This chapter and the following three deal exclusively with community forestry in the rural context. Community forestry in urban areas is considered separately in Chapter 7.

3.3 The White Paper on Sustainable Forest Development in South Africa defines community forestry as "forestry designed and applied to meet local social, household and environmental needs and to favour local economic development. It is implemented by, or with the participation of, communities."

3.4 Defining community forestry has been a challenge in itself. The approach chosen here has been to define it in terms of the needs of the people it is intended to serve, rather than in terms of types of forest resources. Through defining this subsector in terms of the purpose

of supporting local economic development (as in the White Paper), this results in the following characteristics:

- it is those local development activities, based on forest resources of all kinds, undertaken by individuals or groups from previously disadvantaged communities
- it generates a range of goods and services (see Chapter 1), which may contribute to household subsistence on the one hand, and to income generation on the other (such as outgrower schemes)
- it includes activities undertaken by individuals, or by groups within communities, and can take place on private or communally owned land
- it includes tree planting as well as the management of natural forests and woodlands.

3.5 Conversely, community forestry is not meant to imply:

- government initiatives undertaken on behalf of communities without full community support
- an opportunity for job creation through tree planting as an end in itself.

3.6 Community forestry should lead to self-sustaining development, i.e. development which is not reliant on external inputs of resources and initiative.

3.7 In addressing sustainable rural development in South Africa, the tree-based

component of rural livelihoods must be considered. Before practical and realistic support for community forestry can be developed, however, it is essential that the role of trees in rural livelihoods be understood. The cost of ignorance in terms of inappropriate and poorly focussed effort is high.

PROBLEM STATEMENT:

At least two million rural households in South Africa have long gained benefits from trees and associated resources. However, these resources are in decline. Although there are notable successes, community forestry efforts in South Africa and elsewhere have frequently failed to reverse resource decline and to impact on improving rural livelihoods.

Policy context

3.8 The **Bill of Rights** enshrines human dignity, equality and freedom. Furthermore, it guarantees environmental rights by declaring that everyone has the right to "have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that secure ecologically sustainable development."

3.9 The **White Paper on Sustainable Forest Development in South Africa** acknowledges the significant but largely unrecognised contribution of community forestry to rural livelihoods in economic, environmental and social terms. Yet, community forestry has had little success to date in rural South Africa, due to the lack of an effective policy and institutional framework. In redressing this, the White Paper emphasises the necessity:

- to consider community forestry essentially within the context of rural livelihood systems
- to recognise that community forestry has two components, i.e. tree planting and the management of natural forest and woodland resources

- for government to continue to support community forestry initiatives
- for community forestry extension services to be integrated within a wider unified extension service.

3.10 The **Rural Development Strategy within the RDP** recognises forestry as an important natural resource that can play a major role in improving living environments and economic opportunities. The Strategy requires that rural development be directed by local people and be delivered by a combination of rural people and representative local government.

3.11 The **White Paper on a National Water Policy for South Africa** requires that water resources are allocated, after account is taken of the water reserve, on the basis of optimum use.

3.12 The **White Paper on Rural Development** sets out five key strategic themes to transform rural South Africa from the present situation of poverty, inequality and poor services to a future of dignity, growth and prosperity. From the community forestry perspective, the most important among these are the necessity to:

- provide effective and focussed services to support rural development
- recognise and develop the role of local government in determining needs, setting priorities and coordinating services.

3.13 The **White Paper on Agriculture** provides a vision based on six policy goals to bring forth a market-driven, efficient agricultural sector. These include encouraging new entrants to the sector by broadening access through land reform and by targeting technical assistance and financial support to the resource poor.

3.14 The **White Paper on the Transformation of the Public Service** identifies the necessity to redress past imbalances in the delivery of services as a key element in transforming the public service. Reorienting service provision to meet rural people's needs is a policy priority.

3.15 The **White Paper on Environmental Management for South Africa** recognises the interrelationship between environmental degradation and poverty. Two of its key objectives are, therefore, sustainable resource management and sustainable agriculture. Community forestry has a clear role to play in achieving both of these objectives.

3.16 The draft **Energy White Paper** indicates that fuelwood is, and will remain, a major source of energy for many rural households. It commits government to facilitate the sustainable production of fuelwood through a national community forestry programme, to improve the management of existing natural woodlands and the development of other fuelwood resources.

3.17 The **Land Reform Programme** aims to improve access to land and security of tenure through three main means:

- the restitution of land rights (or provision of adequate compensation) for dispossession based on racial laws
- the redistribution of land to improve access of the rural poor to the means of production
- tenure reform to clarify and strengthen the rights of individuals and groups to land and resources.

A number of legislative instruments, including the **Development Facilitation Act (1995)** and the **Communal Property Associations Act (1996)**, have been promulgated in pursuit of these objectives.

3.18 The **White Paper on the Conservation and Sustainable Use of Biological Diversity** identifies as a national priority the necessity for sustainable use of biological resources. This includes the necessity to restore degraded ecosystems, to control the spread of alien organisms and to integrate biological diversity considerations into land-use planning procedures and environmental assessments.

Current setting

3.19 Trees provide a host of renewable forest goods and services which contribute directly to the livelihoods of rural households:

- biomass, primarily in the form of fuelwood, accounts for close to 10% of net national energy consumption; in rural areas, fuelwood constitutes between 50 and 60% of household energy requirements – forests and woodlands being the major source
- trees also provide poles for building and fencing, income from commercial tree growing, traditional medicines, fruit and fodder for livestock; the value of these products has not been quantified to date in South Africa.

3.20 There are also the non-use values of trees, such as soil improvement, beautification, shade and shelter, which add to agricultural productivity and the dignity of life. Trees also have an important global value in maintaining biological diversity and sequestering carbon dioxide.

3.21 About 40% of South Africa's estimated 38 million people live in rural areas characterised by a high level of poverty. Much of the poverty is a result of a long history of racial discrimination, particularly in the dispossession of land and limitations in access to services and rural infrastructure.

3.22 In the past, the availability of urban employment enabled the rural economy to turn away from agriculture, resulting in a dependency on wage labour gained in urban centres. However, this trend has changed as the capacity of the industrial centres to provide employment has decreased. Wage labour, however, continues to contribute 63% of rural households' cash income. Agriculture contributes only 3.4%.

3.23 A lack of immediate cash benefits can lead to the undervaluation of natural resources in many rural areas. This provides little incentive to manage resources, which in turn results in their degradation. This erosion of the natural resource base leads to deteriorating rural livelihoods and increasing levels of poverty, especially for poorer households which are the most dependent on natural resources.

3.24 Community forestry cannot be expected to offer cash benefits to all rural households. However, outgrower schemes and other forms



*Fuelwood in rural areas constitutes, on average, between 50% and 60% of household energy requirements.
Photo: Department of Water Affairs and Forestry*

of income-generating community forestry have been very successful. Even where cash benefits are limited, community forestry can still make an important contribution to improved living conditions in all rural households.

Towards successful community forestry support

3.25 Prior to 1994, community forestry interventions in South Africa addressed the development of biomass resources for fuelwood. Interventions were not participatory in their planning and implementation and failed to adequately take account of communities' expressed needs, priorities and constraints. Although in recent years there has been a greater emphasis on participation in service delivery, many interventions have failed to make lasting impacts relative to their costs of implementation.

3.26 The principal lessons learnt from South Africa and elsewhere indicate that, to be successful, community forestry development must:

- be part of an integrated rural development system
- be responsive and flexible to meet local community and household demands
- address the management of natural forests and woodlands and encourage tree planting
- actively include women in participation and decision-making
- be designed to be self-sustaining and to avoid creating a dependency in communities on service providers
- involve services based on a business-like relationship between service provider and user
- be productive, yielding a sustainable flow of goods and services.

Strategic actions**Overall goal for community forestry**

3.27 To put in place measures to ensure that institutions, services, technologies and policies promote and support self-sustaining community forestry.

Indicators of achievement

3.28 Achievement of the following would indicate progress towards the goal:

- an improved understanding among stakeholders of the value and contribution of community forestry to rural households as part of local integrated development
- agreed roles and responsibilities for various stakeholders

- provision of efficient, effective and complementary services to support community forestry development as an integral part of local rural development (see Chapter 5)
- implementation of measures to remove the obstacles to community forestry and identification of the need for additional interventions (see Chapter 6)
- mobilisation of financial and other resources to match the need.

Strategy

3.29 To develop, throughout the country, provincially based integrated planning frameworks, for the development of community forestry, based on an improved understanding of local resources, opportunities and aspirations.

Table 3.1: Overall strategy for community forestry

GOAL	To put in place measures to ensure that institutions, services, technologies and policies promote and support self-sustaining community forestry.		
INDICATORS OF ACHIEVEMENT	<ul style="list-style-type: none"> • an improved understanding of community forestry's value and contribution • agreed roles and responsibilities for various stakeholders • provision of efficient, effective and complementary services • removal of obstacles to community forestry • mobilisation of resources. 		
STRATEGY	To develop, throughout the country, provincially based planning frameworks for the development of community forestry, based on an improved understanding of local resources, opportunities and aspirations.		
TASK	RESPONSIBILITY	TIMING	RISKS
1. Improve understanding of the value of community forest resources at the local and national levels through developing a system of national forest resource accounting.	DWAF (with Central Statistical Office)	Start: Jan 1998 End: Dec 2000	Skills not available.
2. Ensure that service-providing agencies are properly resourced according to business plans and budgets.	DWAF (with DME, DA, NGOs, CBOs, companies, provincial and local government)	Start: Jan 1998 Ongoing	Financial constraints inhibit development of new services and functions.
3. Evaluate and select appropriate mechanisms for financial support to community forestry initiators at local level.	DWAF (with NGOs, CBOs, communities, provincial and local government)	Start: Jan 1998 End: Dec 2000	Skills and other resources not available.
4. Equip the national forestry authority with the skills and capacity necessary to fulfil its mandate.	DWAF	Start: Jan 1998 End: Dec 2000	Financial constraints inhibit institutional development of DWAF.
5. Align the budgets of national, provincial and local government to fulfil new mandates and roles.	DWAF (with provincial and local government)	Start: Jan 1998 End: Dec 1998	Financial constraints inhibit development of new services and functions.
6. Disseminate and share experience of successful community forestry development initiatives.	DWAF (with provincial and local government, NGOs, CBOs)	Start: Jan 1998 Ongoing	Lessons learnt may not be applicable elsewhere.
7. Enter into local and provincial integrated resource planning to: <ul style="list-style-type: none"> • identify roles and responsibilities • identify local and provincial support needs • identify obstacles to community forestry. 	DWAF (with NGOs, CBOs, communities, provincial and local government)	Start: Jan 1998 Ongoing	No risk.
8. Pilot and monitor new forms of support services to meet specific needs at provincial and local levels.	DWAF (with provincial and local government, NGOs and CBOs, communities)	Start: Jan 1998 Ongoing	Lessons learnt may not be applicable elsewhere.

4

Organising for effective support to community forestry development

What is the issue and why is it important?

4.1 A range of organisations at national, provincial and local levels support community forestry, either in direct project implementation or through less direct functions. There are also institutions that, despite having a potentially important role to play, are currently not involved.

4.2 Most community forestry service providers operate independently and often use different approaches to community forestry development. This can result in conflicting advice being given and in duplication of services, while certain areas receive no services at all.

PROBLEM STATEMENT:

There are many organisations at all levels which support, or should support, community forestry in South Africa. However, their roles are poorly defined, communication between them is ineffective and they remain uncoordinated to the detriment of service delivery and the sustainable management of the resource.

Policy context

4.3 The **Constitution** defines specific provincial and local level competencies:

- administration of indigenous forests is a concurrent competency between national and provincial government
- rural development is essentially a provincial and local competency. Local government is intended to be the driving force for decentralised development planning and implementation.

4.4 The **White Paper on Sustainable Forest Development in South Africa** identifies the need for a partnership between national, provincial and local government in achieving sustainable forest management. Central to this is the concept of a unified extension service whereby community forestry services are offered as one component of a wider, integrated natural resource portfolio.

4.5 The **Rural Development Strategy contained in the RDP** requires that rural development be based on a multi-sectoral approach. It should be directed by local people and delivered by a combination of rural people, representative local government and the many provincial and national government agencies involved.

4.6 The **Rural Development White Paper** sets out the need to provide effective and focussed services to support rural development

and to develop the role of local government in determining needs, setting priorities and coordinating services.

4.7 The **White Paper on Agriculture** recognises the need for participation and coordination with other rural development support service providers in ensuring effective service delivery.

4.8 The **White Paper on the Transformation of the Public Service** identifies institution-building and restructuring of the public service as central to ensuring coordination between service providers and effective consultation and participation with stakeholders.

4.9 The policy context represents a fundamental shift in the way in which services should be provided, and how service providers should be coordinated.

Current setting

Past initiatives

4.10 Prior to 1992, limited forestry extension services were provided by the administrations of the former homelands. NGOs provided pockets of support and forestry companies assisted through their outgrower schemes.

4.11 In 1992, the target of the Department of Water Affairs and Forestry's (DWAF) forestry extension services shifted from white commercial growers to black communities. The major emphasis was on fuelwood production, but with no direct focus on natural forests and woodlands.

4.12 The Biomass Initiative of the Department of Mineral and Energy Affairs, which was initiated in 1992, made a concerted effort to improve knowledge of the fuelwood supply-and-demand situation and to support tree planting. Owing to its target-based and project-focussed approach, however, little was achieved towards consolidating coordinated service provision.

Present situation

Government

4.13 The government departments currently involved, or having the potential to be involved

in community forestry include: the Department of Water Affairs and Forestry (DWAF), the Department of Agriculture (DA), the Department of Land Affairs (DLA), the Department of Environmental Affairs and Tourism (DEAT), the Department of Minerals and Energy (DME) and the Department of Education (DE).

4.14 DWAF is currently taking the lead in providing community forestry support services, including extension, tree supplies and research. DWAF's capacity is limited to about 70 extension staff. DWAF intends to shift from its current role of field-level service provision to that of a broader support service to other field-level service providers such as the Department of Agriculture and NGOs. DWAF's role, in future, would be to maintain a critical mass of community forestry specialists at the national level to support other field-level staff within a unified, integrated support service.

4.15 The national Department of Agriculture, and its existing larger field-level extension staff and its provincial counterparts, as well as NGOs and CBOs, are recognised as more appropriate vehicles to deliver direct community forestry support as part of a wider unified extension system at provincial and field levels. However, it is recognised that the existing capacity of extension staff to deliver community forestry support services in many areas is weak and will have to be developed.

4.16 The role of provincial government departments is central to planning and implementing community forestry support. However, these administrations are still evolving and variation exists between provinces in terms of capacity. Provincial level service provision is constrained by:

- problems associated with incorporating former provincial and homeland administrations into new provincial structures
- severe financial limitations
- a lack of appropriately trained staff.

4.17 Although local government is currently not a service provider, it should be the main driver of development planning and implementation. Rural local authorities are, however, not well established yet. This is

creating difficulties for provincial departments and development agencies in planning and implementing projects.

4.18 There is strong sentiment in many areas that, until local government is capable of fulfilling its roles and responsibilities, alternative channels will have to ensure that resources and support services reach local development initiatives.

4.19 The lack of clarity on the role of service providers with regard to woodlands needs to be addressed, in particular with regard to the resources in communal areas.

NGOs and CBOs

4.20 Despite having limited resources, NGOs and CBOs have historically played the lead role in identifying end-user needs and implementing community forestry initiatives in rural areas. In order to ensure optimum use of their experience, expertise and resources, it will be essential to integrate service delivery between government and non-government organisations on the basis of comparative advantage and complementarity. This may involve government support to NGOs and CBOs for their own identified activities, or the subcontracting to NGOs and CBOs by government to deliver agreed services.

4.21 Other civil society institutions, such as District Development Fora (DDF) and the South African National Civics Association (SANCO), have the potential to play an important role in planning, coordinating and facilitating development because they can draw together interest groups from within government and elsewhere, and because they represent generally marginalised sectors of society.

Commercial companies

4.22 Forestry companies have been involved in outgrower schemes since 1983. These schemes provide expertise, credit and extension to small-scale timber growers. These have been very successful in many areas, although some concern exists with regard to their environmental and social impact. The equity aspects of these schemes and their potential to make farmers dependent on the companies are also matters of concern.

Traditional Authorities

4.23 Traditional Authority structures remain strong in many areas where their involvement remains critical for the successful implementation of local development initiatives.

4.24 Areas of well-managed natural woodlands on communal land in former homelands, such as Kangwane and Gazankulu, indicate fairly effective Traditional Authority support for community forestry. Elsewhere, degradation of forests and woodlands in the former homelands indicates local institutional failure.

Towards greater organisation of community forestry support

4.25 Institutions that can deliver community forestry services do exist. However, they lack coordination at national, provincial and local levels.

4.26 The current situation clearly calls for a move towards an effective and efficient institutional framework for community forestry service provision. Such a system would:

- encompass all relevant institutions at national, provincial and local levels
- define clear roles and responsibilities on the basis of comparative institutional advantage
- emphasise complementarity, not just coordination, in service delivery
- be flexible and responsive to changing circumstances
- reflect the expressed needs of end-users
- consist of institutions with appropriate skills and expertise profiles.

Strategic actions

Goal

4.27 A coordinated system through which government and non-government institutions offer efficient, effective and complementary support services for community forestry.

Indicators of achievement

4.28 Achievement of the following would indicate progress towards the goal:

- a clear and general understanding of the definition and implications of unification of community forestry services

- provision of core services by each candidate institution in line with agreed roles and responsibilities
- clear understanding of roles and responsibilities for each candidate institution, and mechanisms for coordination so that they complement each other at all levels
- development of a relevant community forestry capacity in DWAF
- alignment of budgets to support community forestry development
- services delivered in accordance with end-user needs.

Strategy

4.29 To develop, throughout the country, a co-ordinated system of community forestry service provision based on joint planning between government at all levels, and other stakeholders.

Table 4.1 Strategy for organising effective support for community forestry

GOAL	A coordinated system through which government and non-government institutions offer efficient, effective and complementary support services for community forestry.		
INDICATORS OF ACHIEVEMENT	<ul style="list-style-type: none"> • understanding of the definition and implications of unification of community forestry services • provision of core services by each candidate institution • clear understanding of roles and responsibilities for each candidate institution, and mechanisms for coordination • relevant community forestry capacity in DWAF • alignment of budgets • services delivered in accordance with end-user needs. 		
STRATEGY	To develop, throughout the country, a coordinated system of community forestry service provision based on joint planning between government at all levels, and other stakeholders.		
TASKS	RESPONSIBILITY	TIMING	RISKS
1. Establish provincial-level forums for the design of structures to deliver community forestry services.	DWAF (with provincial and local government, NGOs, CBOs, communities)	Start: Jan 1998 Ongoing	No risk.
2. Design, evaluate and disseminate a system for providing end-users with the information they need and require in respect of service providers and the comparative advantage of each.	DWAF (with provincial and local government, NGOs, CBOs, communities)	Start: Jan 1998 End: Dec 1999	Service providers fail to collaborate; needs of end-users still unclear or misunderstood.
3. Equip DWAF with the skills and capacity necessary to fulfil its mandate.	DWAF	Start: Jan 1998 End: Dec 2000	No risk.
4. Equip other service providers with the skills necessary to fulfil mandates.	DWAF (with DA, provincial and local government, NGOs, CBOs)	Start: an 1998 Ongoing	DWAF lacks capacity to fulfil its mandate.
5. Align budgets of national, provincial and local government with mandated community forestry functions.	DWAF (with provincial and local government)	Start: Jan 1998 End: Dec 1999	Budgetary constraints inhibit full development of new mandates.
6. Pilot innovative approaches to service delivery.	DWAF (with provincial and local government, NGOs, CBOs, communities)	Start: Jan 1998 Ongoing	Lessons learnt may not be applicable elsewhere.

5

Services to support community forestry development

What is the issue and why is it important?

5.1 For the purpose of this discussion, community forestry support services include:

- **extension:** the exchange of technology and information (including legal advice and business skills) among and between service providers and service users
- **training:** the training of other service providers to deliver services to the community
- **research:** the generation and validation of technical knowledge to extension service providers and end-users
- **supply and distribution of appropriate community forestry inputs:** including planting and other materials
- **promoting forestry:** through the stimulation of interest, provision of information and raising of awareness of available services
- **education:** through input into the national and provincial curricula
- **financing of community forestry:** including incentives and subsidies, formal credit and the mobilisation of local financial resources by community members.

5.2 Throughout the consultations for the development of new forest policy, people seeking benefits from community forestry have called for better access to information, skills and other services.

5.3 Despite the continued commitment by a number of organisations to the provision of community forestry support services, there is no clear understanding or agreement in South Africa regarding the type of support required or the principles and methodologies to be followed in providing it. This has often resulted in the provision of inappropriate support services.

5.4 The White Paper on Sustainable Forest Development in South Africa emphasises the concept of unified extension services. In this context, the concept of a unified extension service means the delivery of advice through general extension agents (such as NGOs, CBOs, provincial departments, local government) supported by community forestry subject specialists. This does not imply the establishment of a single extension structure servicing all needs.

PROBLEM STATEMENT:

Community forestry support services have, to date, not been directed towards improving local capacity to manage and develop resources within an integrated rural livelihood system. Community forestry support will be greatly improved by being responsive to the end-user, thus ensuring that it is relevant, affordable, widely available and competently delivered.

Policy context

5.5 The **Rural Development Strategy** within the RDP recognises the importance of forestry within multi-sectoral natural resource development, and that such development should be directed by local people.

5.6 The **White Paper on Sustainable Forest Development in South Africa** emphasises the necessity for continued support of community forestry initiatives and for community forestry extension to be integrated within wider unified extension services.

5.7 The **Rural Development Strategy** emphasises the necessity to provide effective and focussed services to support rural development.

5.8 The **White Paper on the Transformation of the Public Service** identifies the necessity to reorientate service provision to meet the needs of previously disadvantaged people. The development of services for community forestry fits well with this.

5.9 The **Science and Technology White Paper** calls for a portion of government funds to be spent on science to enhance the capacity of the rural poor to make informed choices.

Current setting

Extension services

5.10 Extension staff, both within government and NGOs, are thinly spread and lack resources. DWAF and many NGO forestry extension providers have been thrust into community forestry with little experience or appropriate training. Weaknesses apparent in extension provision include:

- an urgent need for skills in participatory approaches to research, planning and management, and technical skills relating to natural woodland management
- efforts to date have focussed on tree planting and woodlot establishment;

woodlands remain largely ignored, while trees in other uses (agroforestry) have been applied to a limited extent only

- a lack of clear strategy and direction leading to *ad hoc*, unstructured interventions
- a very limited range of extension support materials to assist staff
- forestry extension still being seen as separate from the mainstream of natural resource management and rural development
- extension focussing on technical information about tree planting and not on the development of other skills such as those required to support small, medium and micro-enterprises (SMMEs)
- there being little innovation in the approaches to extension service delivery which could improve its efficiency and content
- services being provided in an often paternalistic manner and not being based on client needs.

Training

5.11 To date, DWAF activities have tended to focus on the end-user and not on the training of other service providers. In the future, efforts should include the identification of individuals, and groups within communities, who can ensure continued transfer of skills.

Research and technology generation

5.12 It is recognised that community forestry has valid research needs and that forestry research must take into account the social and economic dimensions of the rural context. However, community forestry research has a number of limitations:

- research remains predominantly technical; little effort has been made to develop more participatory or on-farm approaches to research
- research is still done largely in isolation by a number of poorly coordinated organisations
- there is no framework for the identification and prioritisation of research needs; links between extension and research thus remain poor.

Planting material

5.13 **Species choice:** there have been limited attempts by service providers to develop innovative means of production and distribution of planting material. In the past, a very narrow range of primarily exotic species (predominantly eucalypts) was offered to communities for the establishment of woodlots and planting for shade and shelter.

5.14 While a clear decision has been made by key service providers to widen the range of species available to include indigenous and multi-purpose tree species (including fruit trees), the choice remains limited. This has:

- limited the opportunities for farmers to incorporate trees into a wider range of planting situations other than woodlots
- created an incorrect perspective that community forestry simply equates with woodlots and eucalypts.

5.15 **Seed supply:** a well-stocked and well-managed facility for seed supply exists in the

Seed Store of the DWAF. However, there is insufficient information about end-user needs for seed, and appropriate delivery systems, to determine whether the existing systems for seed supply are adequate.

5.16 **Nurseries:** there are options in scale and ownership of forest nurseries to support community forestry. There is, however, currently no strategy at national level relating to size, financing, management and ownership of nurseries, and no regulation relating to sanitation and seed pollution.

5.17 If planting material provision is to become self-sustaining, nursery size and location will have to be determined by local market forces.

5.18 Distribution of seedlings should be market focussed. Small, medium and micro-level producers can use local markets as a vehicle for the distribution of planting and other materials.



Production and distribution of planting material needs to be market-focused and, where appropriate, financially self-sustaining. Photo: Department of Water Affairs and Forestry

5.19 Supply, pricing and distribution of planting material require special attention within the future development of policy.

Promotion

5.20 Promotion of awareness of the benefits of community forestry and of the services available to support community forestry is a key requirement for progress. To date, efforts have included tree awareness through national events, such as Arbor Week, the President's Forestry Award and Environment Week.

5.21 Emphasis should be shifted towards informing communities of the range of services available.

Education

5.22 Input has been made into the new educational curricula, but the curricula have yet to be introduced in schools. This requirement, to ensure that forestry support is given to curriculum development and review in schools, will be ongoing and will apply also to curriculum development in all institutions dealing with natural resource sciences (see also Chapter 21).

Finance

5.23 Other than the outgrower schemes in KwaZulu-Natal, there has been little formal credit made available to community forestry activities. The demand for formal credit is limited by the generally low and slow revenue generation in community forestry.

5.24 A significant role will exist for the informal mobilisation of financial resources at local level. A number of interesting examples of community-based methods of raising finance already exist, such as the "stokvel" approach. These models could be piloted for community forestry.

5.25 The provision of subsidised inputs (trees, nursery equipment), payment of labour, and the supply of a wide range of material (e.g. shade cloth, fencing, transport) have often resulted in:

- creating dependence on service providers, which hinders self-sustaining community forestry

- benefits being concentrated among those who have access to land and the influence to secure benefits
- reduced sense of ownership and responsibility among the intended beneficiaries of community forestry
- a perception that short-term job creation in itself is development, without the benefit being seen to come from forestry initiatives
- a common perception that tree planting and environmental protection are the responsibility of government.

5.26 Incentives and subsidies should be put to use carefully so that they stimulate, rather than become the reason for, community forestry.

Strategic actions

Goal

5.27 To put in place measures which will ensure that end-users receive appropriate and integrated support services to promote self-sustaining community forestry.

Indicators of achievement

5.28 Achievement of the following would indicate progress towards the goal:

- a competent, well-trained service at all levels of delivery which is participatory and responsive to client needs
- a sound relationship between service providers and clients, based on mutual respect and a businesslike approach
- community forestry support services received as one component of a unified natural resource portfolio
- a user-determined portfolio of community forestry support available to end-users at affordable prices.

Strategy

5.29 To develop and apply systems appropriate to each province for delivering relevant support services designed to meet end-user needs and tailored to local resource opportunities.

Table 5.1: Strategy for community forestry support services

GOAL	To put in place measures which will ensure that end-users receive appropriate and integrated support services to promote self-sustaining community forestry.		
INDICATORS OF ACHIEVEMENT	<ul style="list-style-type: none"> • a competent, well-trained service • a sound relationship between service providers and clients • a unified service portfolio for natural resources • a user-determined portfolio of affordable services. 		
STRATEGY	To develop and apply systems appropriate to each province for delivering relevant support services designed to meet end-user needs and tailored to local resource opportunities.		
TASK	RESPONSIBILITY	TIMING	RISKS
1. Develop participatory planning at provincial and local levels to: <ul style="list-style-type: none"> • identify end-user needs • identify skills gaps in existing service providers • identify research needs. 	DWAF (with provincial and local government, CBOs, NGOs)	Start: Jan 1998 Ongoing	No risk.
2. Train service providers at all levels, including community-based trainers.	DWAF(with NGOs)	Start: Jan 1998 Ongoing	DWAF lacks capacity to fulfil its mandate.
3. Develop national government strategies (see also Chapter 25) for community forestry support services relating to: <ul style="list-style-type: none"> • extension • training • research • plant and other material supply • promotion • education • finance. 	DWAF	Start: Jan 1998 End: Dec 1998	No risk.
4. Pilot new approaches to the delivery of services in each province including: <ul style="list-style-type: none"> • service grants • private-sector supply and distribution of services and planting material. 	DWAF (with provincial and local government, CBOs, NGOs)	Start: Jan 1998 Ongoing	Lessons learnt may not be applicable elsewhere.
5. Pilot new institutional arrangements in each province for delivering services.	DWAF (with provincial and local government, CBOs, NGOs)	Start: Jan 1998 Ongoing	Lessons learnt may not be applicable elsewhere.
6. Harmonise strategies between service providers relating to pricing and methodologies for service delivery. DWAF (with provincial and local government, CBOs, NGOs)	DWAF (with provincial and local government, CBOs, NGOs)	Start: Jan 1998 End: Dec 1999	Failure to agree on a common strategy due to divergence of views.
7. Provide information to end-users of the range of services available and the means of accessing them.	DWAF (with provincial and local government, CBOs, NGOs)	Start: Jan 1998 Ongoing	No risk.

6

Enabling community forestry to succeed

What is the issue and why is it important?

6.1 The contribution of community forestry to the development of South Africa will depend mainly on the decisions people make concerning their tree-based resources, i.e. whether to invest in developing them and managing them sustainably, or to allow them to degrade. These decisions are based on people's expectations as to the benefits they may receive from forest goods and services.

6.2 These decisions are determined by factors at local and national levels which can either favour community forestry development, or hinder it. Community forestry initiatives can be entirely blocked in places by these forces. For example, land-tenure issues are delaying small-scale grower initiatives in the Eastern Cape. Erosion of customary arrangements regarding tree tenure and the use of woodlands has undermined local management of these natural resources in many districts. These factors need to be considered and addressed (when their impact is negative) in a concerted manner to ensure that self-sustaining community forestry development can take place.

6.3 While creating enabling conditions is necessary for long-term sustainable community forestry, this in itself may not be sufficient. Additional direct support, for example, in the form of projects and extension services, may

also be required to act as a catalyst for initiating community forestry or for overcoming local constraints.

PROBLEM STATEMENT:

Individual community forestry initiatives are often hampered by:

- *lack of secure access to resources, including land*
- *limited local income opportunities, including a lack of markets and market information*
- *past forest, agricultural and energy policies which discriminated against sustainable community forestry, together with a national forest department which did not support community forestry*
- *inappropriate policies often resulting from a consistent under-valuation of the contribution of community forestry resources to household and national economy.*

Unless these obstacles are removed, they will continue to hamper community forestry initiatives.

Policy context

6.4 The **White Paper on Sustainable Forest Development in South Africa** recognises the need for incentives to enable community-based management of forest resources. It also identifies the need to create a positive environment for community forestry, which includes securing tenure and developing income opportunities from forest enterprises.

6.5 The **White Paper on the Conservation and Sustainable Use of Biological Diversity** recognises the need for incentives which support the maintenance of biological diversity at the user level.

6.6 The **White Paper on Agriculture** addresses many of the conditions which inhibit agricultural development relating to community forestry, particularly marketing and financing. The White Paper acknowledges the need for activities to be commercially viable in order to be sustainable.

6.7 The **Rural Development Strategy** presents five strategic themes which are designed to create an enabling environment for rural development. These include broadening access to basic factors of production and the provision of appropriately targeted support services.

6.8 A number of legislative instruments, including the **Development Facilitation Act (1995)** and the **Communal Property Associations Act (1996)**, have the potential to play an important role in establishing communities' rights over resources, subject to accessibility and interpretation.

Current setting

6.9 The most pertinent enabling conditions relating to community forestry development in South Africa are discussed below.

Meaningful participation

6.10 Previous community forestry interventions centred mainly around woodlot establishment and were driven and initiated by government. Few of these projects have

become self-sustaining, despite large amounts of money having been spent.

6.11 This supports the central point that, to be effective, community forestry development must be participatory at every stage, from project inception onwards. Poor levels of participation, particularly by key stakeholders, will always inhibit community forestry.

The role of women in community forestry

6.12 Women play the key role in the implementation of community forestry development initiatives relating both to tree planting and the management of natural forests and woodlands. However, in many areas, women are marginalised from decision-making and active participation by custom and by inappropriate institutional arrangements. Freeing women to play a fuller role could mobilise resources that would allow much faster progress in resource management than could otherwise be achieved. Recognising their role and establishing it in systems for community forestry service provision and local-level decision-making are vital to enabling sustainable community forestry development.

Rights to land and trees

6.13 Access rights are extremely important in determining whether people plant or manage trees. Ownership or usage rights to trees do not necessarily depend on ownership of the land on which they grow. However, unless people can secure access to the benefits which trees provide, they will not undertake the considerable investments in terms of time, effort and money involved.

Systems to manage communal property

6.14 Although traditional common property resource management systems have been weakened in many parts of South Africa, they still play a key role in many places (see also Chapter 10).

6.15 The future relationship between communities, Traditional Authorities (where still effective) and local government will be very important in determining the effectiveness of communal systems in managing forest resources.

6.16 Commercial companies are also starting to work with communities through the Communal Property Associations Act in an effort to establish outgrower schemes on communally owned land.

Local incentives

6.17 The decision to sustainably manage or develop new forest resources, as opposed to degrading them or converting them entirely to another land use, reflects people's perception of the benefits to be gained from forest products and services as opposed to any alternative land use.

Economic conditions and policies

6.18 The prevailing economic situation directly influences the incentives and opportunities to engage in forestry activities, e.g. the price of wood compared with agricultural produce.

6.19 Rural poverty has, undoubtedly, often forced people to pursue unsustainable practices which satisfy basic needs or offer quick cash returns. This necessity has discouraged community forestry activities which, in many cases, offer slow returns.

6.20 The restructuring of South Africa's economy through, for example, the removal of price support for agricultural commodities, should enable communities to make effective long-term decisions about natural resource management.

National land-use planning and resource management systems

6.21 Sound national, provincial and local land-use planning can contribute significantly to effective land-use. Such planning in South Africa has been inadequate in the past, and even detrimental in some areas, particularly in the former homelands where the pursuit of the Betterment Policy often resulted in the imposition of unpopular and inappropriate land-use decisions.

National forest policy

6.22 Without a supportive forest policy, community forestry faces the risk of becoming

a sporadic activity which does not reach its full potential in terms of contributing to rural development. The White Paper on Sustainable Forest Development in South Africa reverses this neglect by recognising the importance of community forestry.

Other sectoral policies, particularly agriculture and water

6.23 Conversion from one land use to another is determined by the profitability of different land uses. However, specific national policies can make one land use more attractive than another through, for example, mechanisms such as price support and subsidies, land redistribution and biased service delivery. Similarly, decisions to plant trees may be restricted by other sectoral policies, such as those pertaining to water.

6.24 Lack of a comprehensive system of forest resource accounts has resulted in a consistent under-valuation of community forestry resources. This has led to policies which, in relative terms, have over-valued activities which lead to the removal of forest resources, rather than their establishment and management.

Legislation

6.25 Laws can provide a powerful support to community forestry. Forest legislation in the past in South Africa did not provide for community forestry. Other legislation usually focussed on resources in private ownership to the neglect of communally owned assets.

6.26 It is important to ensure that formal legislation does not conflict with existing informal rights. Laws must be enforced by all people, including those with limited access to representation.

Strategic actions

Goal

6.27 The implementation of measures which support the creation of an enabling environment for sustainable community forestry development in rural South Africa.

Indicators of achievement

6.28 Achievement of the following would indicate progress towards the goal:

- all relevant stakeholders, particularly women, participate at all stages of community forestry development
- strong local markets exist for forest goods and services
- enterprises and communities which seek to implement community forestry initiatives enjoy secure access to land and tree resources
- where forest resources are in common ownership, effective management systems exist

- local institutions make effective and beneficial decisions concerning land-use change
- implementation of supportive legislation for community forestry development accessible to rural communities, and which is complementary to existing informal rights
- policies from other sectors, which include agriculture and water, facilitate self-sustaining community forestry development.

Strategy

6.29 To mobilise resources at national, provincial and local levels to remove obstacles to sustainable community forestry development.

Table 6.1: Strategy for enabling community forestry to succeed

GOAL	Implementation of measures which support the creation of an enabling environment for sustainable community forestry development in rural South Africa.		
INDICATORS OF ACHIEVEMENT	<ul style="list-style-type: none"> • stakeholder participation, particularly by women • strong local markets exist for forest goods and services • secure access to land and tree resources • effective communal property management systems exist • effective and beneficial decisions concerning land-use change • supportive legislation, complementary to existing informal rights • compatible policies from other sectors. 		
STRATEGY	To mobilise resources at national, provincial and local levels to remove obstacles to sustainable community forestry development.		
TASK	RESPONSIBILITY	TIMING	RISKS
1. Review and assess current policy and legislation with a view to achieving harmony at national level.	DWAF	Start: Jan 1998 End: Dec 1998	Other sectoral policy makers do not appropriately value community forestry resources.
2. Conduct participatory planning at provincial and local levels to determine obstacles to community forestry.	DWAF (with provincial and local government, CBOs, NGOs, communities)	Start: Jan 1998 Ongoing	No risk.
3. Improve understanding of the value of forest resources through establishing an effective system of forest resource accounting which can be used to inform policy makers of the value of community forestry.	DWAF (with provincial and local government, CBOs, NGOs)	Start: Jan 1998 End: Dec 2000	Lack of available expertise within DWAF.
4. Investigate, understand and implement appropriate means to ensure effective participation by women in community forestry.	DWAF (with local and provincial government, NGOs, CBOs, communities)	Start: Jan 1998 Ongoing	No risk.
5. Assist local government and CBOs in developing capacity to support sustainable management of communal properties.	DWAF (with provincial and local government, CBOs, NGOs)	Start: Jan 1998 Ongoing	DWAF lacks capacity to fulfil its mandate.
6. Investigate opportunities for communities to utilise existing legislation and local tradition and customs to establish systems of common property resource management (see also Chapter 24).	DWAF (with provincial and local government, CBOs, NGOs)	Start: Jan 1998 End: Dec 1998	No risk.
7. Pilot common property resource management systems.	DWAF (with provincial and local government, CBOs, NGOs)	Start: Jan 1998 Ongoing	Lessons learnt may not be applicable elsewhere.

7

Urban forestry

What is the issue and why is it important?

7.1 Urban forestry can be defined as an integrated approach to the planting, care and management of trees in urban and peri-urban areas to secure economic, environmental and social benefits for urban dwellers.

7.2 In the South African context, urban forestry can include the use of trees or other woody plants in private gardens, parks and other public spaces, as well as the management of natural forests or woodlands in urban or peri-urban areas.

7.3 Two key factors underlie the importance of urban forestry in South Africa:

- by the year 2000, an estimated 66% of South Africa's population will be living in cities and towns. A large proportion of these people will live in townships and unplanned informal settlements. This will produce negative impacts in terms of air, water and noise pollution
- urban forestry can enhance degraded urban environments, assist in social upliftment and contribute to urban communities' material needs.

7.4 Many households, both in the established townships and in unplanned settlements, take pride in their gardens and neighbourhoods and plant trees to improve their environment. NGOs active in urban forestry have had substantial success in supporting these developments. There is significant opportunity for further progress in urban forestry in South Africa.

7.5 There is, however, currently no strategy for urban forestry. There are ongoing urban forestry activities, but these are often carried out as a fragmented series of projects.

PROBLEM STATEMENT:

Most households in the rapidly expanding urban and peri-urban population of South Africa are poor. Rapid urban development is generally characterised by a lack of environmental planning. Urban forestry can significantly contribute to enhancing urban quality of life. However, the full potential of urban forestry is not being realised due, at least in part, to the lack of an integrated strategy based on thorough knowledge concerning:

- *benefits from urban forestry*
- *people's interests and needs*
- *obstacles to, and opportunities for, urban forestry development.*

Policy context

7.6 The **Green Paper on Urban Development Strategy** clearly identifies the need for effective integrated land-use planning in urban areas.

7.7 The **White Paper on Sustainable Forest Development in South Africa** recognises the role that community forestry can play in improving the environment in urban areas.

7.8 The **White Paper on Agriculture** recognises the importance of agriculture (and community forestry as an implied component of this) to urban economies and quality of life.

7.9 Municipalities are required by the **Development Facilitation Act** to formulate Land Development Objectives and, under the **Local Government Transition Act**, to formulate Integrated Development Plans. Any urban forestry development initiative should be linked to these plans.

Current setting

Role of trees in urban environments

7.10 Urban forestry around the world has been shown to provide many social, economic and environmental benefits that can improve the quality of life in urban communities. These include:

- economic benefits from home consumption, or sale, of forest products including fuelwood, planting material, food, fodder, timber and medicines, and potential energy savings
- environmental benefits, including improved microclimate, soil erosion control, improved air quality, noise reduction, disposal of sewage and waste water, carbon sequestration and wildlife habitat
- social benefits, including improved health and well-being, amenity, shade and shelter, opportunities for recreation and education, and civic pride.

7.11 Urban forestry can, however, also bring disadvantages and problems. These are often the result of poor planning and limited local participation and include, structural damage caused by tree roots, threats to human safety and property caused by dangerously placed trees, the undesirable shading of buildings and the abuse of woodlands as dumping grounds and areas of vandalism.

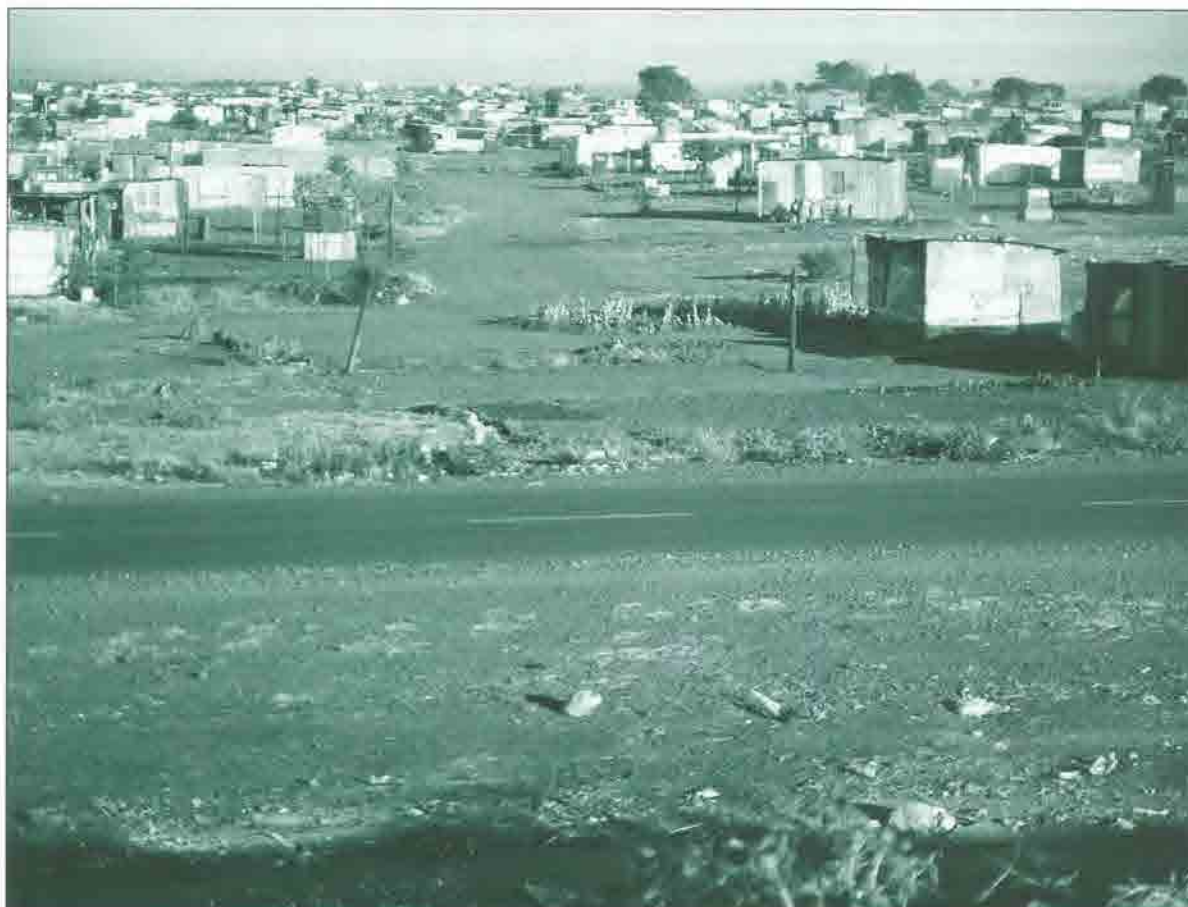
Urban forestry in South Africa

7.12 The South African urban context is a particular heritage of apartheid. White areas were well provided with municipal parks and recreation services through which trees were planted in streets and parks. In contrast, black urban areas were poorly equipped with municipal services which provided no more than the absolute basics.

7.13 Since 1994, most townships and informal settlements have become part of larger municipalities. Many of these have some form of parks and recreation service, but these are limited in their capacity. As a result of the new political dispensation, a number of stakeholders are becoming actively involved in urban community forestry:

- **municipalities** are the most important service provider of urban forestry. The new municipalities cover the historically white and black areas, but often lack the skills and capacity to implement urban forestry
- **DWAF** has recognised a responsibility for the urban environment, but has only one full-time urban forestry extensionist
- **provincial government departments**, such as Environment, which play a role in urban space planning
- **national government departments**, such as Agriculture and Environmental Affairs and Tourism
- **NGOs and CBOs** who act to improve local urban environments through providing training and other services, and through fund-raising
- **the corporate sector and local businesses** contribute to urban development through social investment
- **individuals**, perhaps most importantly, are also planting more trees in and around their houses, probably as a result of increasing home ownership and higher income levels.

7.14 In recent years, both in large and small black urban areas, there has been a proliferation of initiatives relating to urban forestry, particularly by individuals, NGOs and CBOs. However, most organisations involved have no clear strategies and there is a lack of coordination and integration amongst them.



Urban forestry can enhance degraded urban environments, assist in social upliftment and contribute to urban communities' material needs. Photo: Department of Water Affairs and Forestry

Towards effective urban forestry support

7.15 International and local experience has shown that it is necessary to focus the approach to urban forestry on meeting the needs of people in specific urban communities rather than focussing on the tree in the urban environment.

7.16 Effective urban development requires community participation and a recognition of the heterogeneous nature of urban communities in terms of culture and demographics.

7.17 Other factors ("enabling conditions") such as supportive legislation, secure land and tree tenure, local economic opportunities and the strength of community organisations, also

need to be understood and recognised in planning.

7.18 From an institutional perspective it is necessary to establish clear roles and responsibilities among the major stakeholders. Furthermore, urban forestry must become a recognised part of inter-disciplinary urban planning.

Strategic actions

Goal

7.19 Effective support to self-sustaining urban forestry initiatives that secure economic, environmental and social benefits for urban dwellers.

Indicators of achievement

7.20 Achievement of the following would indicate progress towards the goal:

- a thorough understanding by, and wide recognition among, stakeholders of the benefits of urban forestry
- a thorough understanding of the factors that hamper or promote urban forestry development, and how to manage them
- an effective agreed strategy for urban forestry development, including identified roles and responsibilities for potential service

providers at national, provincial and local levels

- alignment of budgets of service providers to the support of self-sustaining urban forestry
- inclusion of urban forestry into urban planning.

Strategy

7.21 To develop and implement a programme for urban forestry development based on improved understanding of needs, institutional roles and capacities and best practice for support service delivery.

Table 7.1: Strategy for urban forestry

GOAL	Effective support to self-sustaining urban forestry initiatives that secure economic, environmental and social benefits for urban dwellers.		
INDICATORS OF ACHIEVEMENT	<ul style="list-style-type: none"> • understanding of the benefits of urban forestry • understanding of the factors that hamper or promote urban forestry • an effective agreed strategy for urban forestry development • alignment of budgets • inclusion of urban forestry into urban planning. 		
STRATEGY	To develop and implement a programme for urban forestry development based on improved understanding of needs, institutional roles and capacities and best practice for support service delivery.		
TASK	RESPONSIBILITY	TIMING	RISKS
1. Apply participatory planning to: <ul style="list-style-type: none"> • improve understanding of the value of urban forestry • identify impeding and promoting factors • link urban forestry development programmes to Land Development Objectives and Integrated Development Plans. 	DWAF (with provincial and local government, CBOs, NGOs and communities)	Start: Jan 1998 Ongoing	No risk.
2. Identify potential urban forestry service providers and agree on roles and responsibilities.	DWAF (with local government, CBOs, NGOs)	Start: Jan 1998 End: Dec 1999	Lack of consensus among service providers on roles and responsibilities.
3. Develop urban forestry strategy for DWAF and align internal structures, budgets and staff.	DWAF	Start: Jan 1998 End: Dec 1998	No risk.
4. Identify, review and evaluate existing and earlier projects and identify and disseminate best practice among all service providers.	DWAF (with local government, CBOs, NGOs and communities)	Start: Jan 1998 Ongoing	Lessons learnt may not be applicable elsewhere.

8

South Africa's natural forests and woodlands: value, status and trends

What is the issue and why is it important?

8.1 Natural forests and woodlands, both in private and communal ownership, form an extensive resource in this country. If appropriately managed, this resource will contribute significantly to sustainable economic development.

PROBLEM STATEMENT:

Forests and woodlands comprise a diverse range of environments which have a significant but often poorly recognised economic, environmental and social value. The resource is declining, but at an unknown rate and as a result of pressures and changes which are not widely understood. Achieving sustainable management will require a marked improvement in our understanding of the value and status of the resource and the pressures that influence its management.

Policy context

8.2 The **White Paper on Sustainable Forest Development in South Africa** recognises the

major contribution made by natural forests and woodlands to economic, environmental and social well-being at national, and particularly at local and household levels. It also emphasises that previous forest policies failed to reflect the value of the resource, particularly the woodlands, and that service provision was limited to the preservation of closed-canopy forests.

8.3 The **White Paper on Environmental Management Policy for South Africa**

focuses on people and their participation in environmental decision-making processes. This is particularly relevant given that the majority of the woodland resource is privately or communally owned.

8.4 The **White Paper on the Conservation and Sustainable Use of Biological Diversity**

identifies as a national priority the necessity for sustainable use of biological resources. This includes the necessity to restore degraded ecosystems, to control the spread of alien organisms and to integrate biodiversity considerations into land-use planning procedures and environmental assessments.

8.5 The **White Paper on Agriculture**

recognises a necessity for participation and coordination with other rural development service providers. It acknowledges that previous policies, which centred on agricultural self-sufficiency (through the use of measures such as tariffs and subsidies), distorted land-use decisions, often to the detriment of natural woodlands.

Current setting

Extent and condition of forests and woodlands

8.6 **Closed-canopy forests:** climate and a history of fires have confined natural closed forests to a relatively small area which has been reduced further by human activities to about 400 000 hectares. This is only about 0.2% of the country's land surface. Of this, about 300 000 hectares are in protected areas, i.e. 58% in State forests and 42% in other legally defined protected areas. The participation of stakeholders in the management of these areas and their access to the benefits of the resource have been limited, or minimal.

8.7 **Open savanna woodlands:** these cover a large proportion of the country and vary in status, ownership and condition. About 42 million hectares (32% of South Africa's total area) originally contained woodland and thicket.

8.8 Much of this has been converted to crops and other land cover such that woodland now extends over just 23 million hectares. A significant fraction of the woodland (about 12% of the arid and 5% of the moist savannas) is contained in protected areas. The condition of these woodlands varies. Where they are protected, they are generally in a good condition. Large areas which occur within the former homelands have, on the other hand, been unsustainably utilised.

8.9 Elsewhere, large areas of savanna woodland habitats owned by commercial farmers have been significantly reduced in size through clearing for agricultural purposes.

8.10 The forest and woodland resource varies greatly from province to province in vegetation type, extent and condition. These provincial variations have economic and managerial implications which need to be considered when planning for the sustainable utilisation of the resource.

The value of forests and woodlands

8.11 Natural forests and woodlands provide a wide range of goods and services. These are,

however, poorly understood and are largely unaccounted for in terms of national accounting (e.g. measures of GDP).

8.12 Forest goods (tangible values of products obtained from forests and woodlands) and forest services from natural forests and woodlands include the following:

Forest goods

8.13 This category includes commodities which are directly consumed. They include:

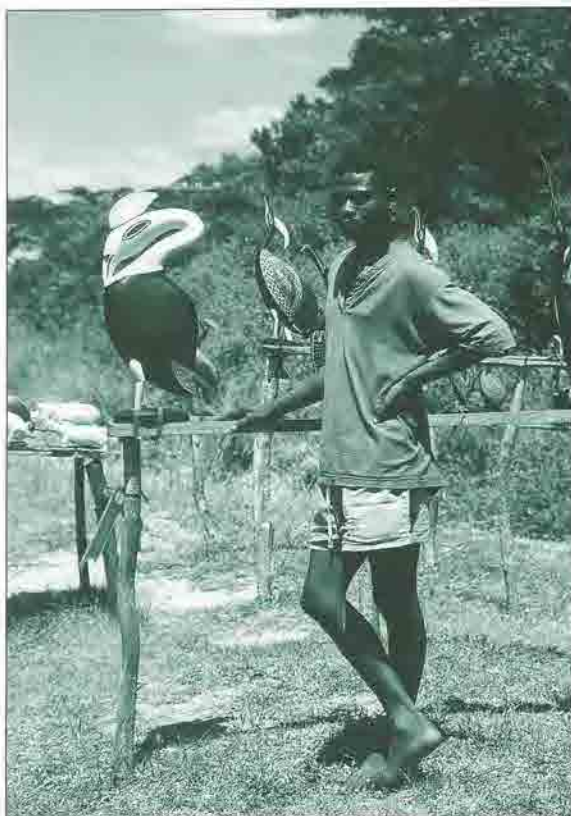
- **fuelwood:** approximately 11 million tonnes of fuelwood (of which 66% is from forests and woodlands) is estimated to be used by rural communities each year. Fuelwood sells at between R100 and R200 a tonne. At an assumed value of R100 per tonne, fuelwood consumption has a value of over one billion rand per annum
- **grazing:** many woodland areas are used for livestock and the value of livestock production could potentially exceed the value of fuelwood production, particularly if livestock is maintained as part of a production, rather than an investment, system
- **food security:** natural forests and woodlands make an important contribution to household food security in many districts by providing:
 - relatively more benefits to households of lower economic status
 - alternative sources of food
 - essential dietary supplements
- **traditional medicine:** although difficult to quantify, this informal industry is estimated to be worth R500 to R1 000 million per year, with 150 000 to 300 000 traditional healers active in the country. Many utilise the resources from natural forests and woodlands
- **curio industry:** a large curio industry is based on forest and woodland products. The retail value has been estimated at R4.89 million per annum from formal woodcarving and R2.48 million from the informal industry. In some districts, this use is now depleting the resource
- **commercial timber and other species:** these are harvested from many forests,

sometimes sustainably, sometimes not. Indigenous hardwoods and ferns are included among these.

Forest services

8.14 This category includes the non-consumptive uses provided by forest and woodland environments. They include:

- **biological diversity:** natural forests and woodlands provide the habitat for a diverse range of fauna and flora whose intrinsic value is increasingly recognised
- **water catchments:** natural forests and woodlands contribute significantly to the maintenance of hydrological regimes
- **soil conservation:** natural forests and woodlands, as a land-use cover, protect the soil surface from erosion and contribute to maintaining soil fertility
- **aesthetics and ecotourism:** natural forests and woodlands provide a visually pleasing environment and a species-rich habitat



A large curio industry based on forest and woodland products generates in excess of R7 million per annum. Photo: Isak van der Merwe

which supports recreation and a thriving ecotourism industry; tourism was worth R12.5 billion to South Africa in 1993 and forests and woodlands are major attractions, e.g. in the Kruger National Park and other reserves

- **cultural and spiritual:** many communities attach high spiritual and cultural values to individual trees or wooded areas
- **carbon sequestration:** natural forests and woodlands play a positive, but limited, role in fixing the carbon dioxide from the air to compensate for carbon emissions.

8.15 South Africa does not yet have a system of natural resource accounts (i.e. a system which would attribute values to forest goods and services other than those captured by market pricing). Consequently, the forest sector, particularly the natural forests and woodlands, is undervalued. Correct valuation is important when considering land-use options, formulating policies and allocating resources to the management of natural forests and woodlands.

Economic potential of forests and woodlands

8.16 The economic potential of forests and woodlands needs to be considered both in terms of alternative management options of the resource and of conversion to an alternative land use, such as dryland or irrigated crops or plantation forestry.

8.17 In converting forests and woodlands to agriculture, the costs of soil and carbon loss, and the loss of other non-use values, are typically not taken into consideration. Similarly, market distortions and direct subsidies are seldom considered in such evaluations. If all these factors were taken into consideration, many agricultural practices would be non-sustainable in terms of both biological and economic criteria. Even without taking these into consideration, agriculture has proved to be unsustainable in many woodland ecosystems.

8.18 Simply maintaining the status of forests and woodlands may, however, not be a sustainable land-use option. An improved understanding of the options available for the utilisation of forests and woodlands is urgently

needed so that the best use may be made of them to achieve optimal economic benefit.

Strategic actions

Goal

8.19 The development of a national strategy for the sustainable management of forests and woodlands, which takes account of conditions and aspirations at national, provincial and local levels.

Indicators of achievement

8.20 Achievement of the following would indicate progress towards the goal:

- definition and determination of the appropriate extent and state of natural forests and woodlands that should be

sustained in South Africa, i.e. the “Permanent Forest Estate” appropriate to the needs of South Africa

- improved systems for the sustainable management of these resources and the goods and services they provide
- national compliance with international conventions, especially with respect to biological diversity, desertification, climate change and forest principles (Agenda 21)
- appropriate allocation of resources to ensure implementation of strategy.

Strategy

8.21 To develop and apply a sound understanding of the value, condition and management requirements necessary for the sustainable management of natural forests and woodlands.

Table 8.1: Strategy for achieving the sustainable development of South Africa's natural forests and woodlands

GOAL	The development of a national strategy for the sustainable management of forests and woodlands, which takes account of conditions and aspirations at national, provincial and local levels.		
INDICATORS OF ACHIEVEMENT	<ul style="list-style-type: none"> • definition and determination of the appropriate "Permanent Forest Estate" • improved systems for sustainable management • national compliance with international conventions • appropriate allocation of resources to ensure implementation of strategy. 		
STRATEGY	To develop and apply a sound understanding of the value, condition and management requirements necessary for the sustainable management of natural forests and woodlands.		
TASK	RESPONSIBILITY	TIMING	RISKS
1. Develop an effective system for monitoring the changes in, and influences on, the extent and condition of the natural forest and woodland resource.	DWAF (with DEAT, DA [Resource Conservation])	Start: Jan 1998 End: Dec 1998	No risk.
2. Improve understanding of the value of the natural forest and woodland resource through developing an effective system of forest resource accounting.	DWAF (with Central Statistical Office, DME, DEAT, DA)	Start: Jan 1998 End: Dec 1999	No risk.
3. Develop and implement guidelines which relate to technical and social aspects for the sustainable management of natural forests and woodlands.	DWAF (with DEAT, provinces, NGOs, CBOs, communities)	Start: Jan 1998 Ongoing	Guidelines are not widely adopted and means to implement them are not provided.
4. Develop provincial and local planning frameworks for the sustainable management of natural forests and woodlands.	DWAF (with provincial and local government, NGOs, CBOs)	Start: Jan 1998 Ongoing	Not all stakeholders prepared to participate and agreement among them cannot be reached.
5. Develop criteria and indicators in support of the sustainable development of natural forests and woodlands.	DWAF (with DEAT, provincial government, NGOs, CBOs)	Start: Jan 1998 End: Dec 2000	No risk.
6. Apply the understanding and information acquired for further improvements in policy and strategy for the management of natural forests and woodlands.	DWAF (with DEAT, provincial government, NGOs, CBOs)	Start: Jan 1998 End: Dec 2000	No risk.
7. Evaluate the need for regulations providing for penalties and incentives for SFM (see Chapter 24).	DWAF (with DEAT, provincial government, NGOs, CBOs)	Start: Sep 1997 End: Mar 1998	No risk.

9

Organising and providing services for the sustainable management of South Africa's natural forests and woodlands

What is the issue and why is it important?

9.1 A considerable number of institutions are involved in the management of natural forests and woodlands in South Africa. These include several national government departments, as well as usually more than one government department in each province. National and provincial conservation agencies are particularly important.

9.2 Although policies are now emerging for a consolidated, holistic approach to the management of natural forests and woodlands, the institutional framework dealing with this resource still reveals gaps, overlaps and divergences in legislation and competence.

PROBLEM STATEMENT:

Clear roles, responsibilities and actions must be agreed upon among institutions involved in the management of natural forests and woodlands, in order to achieve sustainable forest management and an optimal flow of goods and services.

9.3 The roles of these institutions in the past have been uncoordinated. This can be ascribed to the lack of an agreed, single national strategy, despite often clearly defined individual institutional responsibilities. In order to achieve the sustainable management of natural forests and woodlands as a whole in South Africa, a holistic approach, coordinated among institutions, is required.

Policy context

9.4 The **White Paper on Sustainable Forest Development in South Africa** deals both with State forests and forest areas outside public ownership. These forests will be managed "through partnerships with local communities" by a range of government institutions.

9.5 DWAF, representing national government, is ultimately responsible for the proper protection and management of State forests. Responsibility for the administration of State forests lies with the appropriate provincial authorities, where they are willing and able to assume this role. Government will adopt a cooperative governance approach to State forests, with DWAF supporting each provincial authority in appropriate ways to achieve administration of other resources.

9.6 The administration of other forests and woodlands lies in the hands of many agencies but, in all cases, special emphasis should be placed on the development and application of community-based methods of management and resource sharing.

9.7 In terms of the **Constitution**, the "administration of indigenous forest" is identified as a function to be undertaken "concurrently" both by national and provincial governments. This includes State forest land.

Current setting

State forest land

9.8 Prior to 1994, DWAF was responsible for the management of Primary Conservation Areas on State forest land. These areas included nature reserves proclaimed under the Forest Act and areas with no specific statutory conservation status other than being proclaimed State forest.

9.9 In 1986, extensive areas of State forest land (i.e. about 1 million hectares) were devolved to the administration of provincial governments. These areas are now administered by the provincial governments of the Western Cape, Eastern Cape, KwaZulu-Natal, Mpumalanga and the Northern Province. By law, these areas must still be managed to satisfy the purposes of the Forest Act. Furthermore, many contain nationally important forest and woodland habitats, even though most of the land was originally set aside for the protection of water resources.

9.10 The role of NGOs and CBOs in the management of State forests has been practically non-existent.

9.11 Many of the State forests were set aside during the nineteenth century and, in some provinces, this involved negotiation with local communities about the use and protection of the resources. In some cases, agreement about the use of the resources by local communities has influenced their management, even up to the present. The Forest Act provides, furthermore, for continued use of such land, both through licences and the collection of

"theza wood" (wood by the headload). However, in many instances, no agreed relationship between the administering authority and affected local communities existed, and where agreements existed, many were abrogated over time.

9.12 In 1994 DWAF was given responsibility for the management of all State forests (both natural and commercially planted areas) which were previously within the borders of the former homelands. The total area for which DWAF is responsible has increased from approximately 84 000 hectares to 230 000 hectares with the inclusion of forest assets of the former homeland administrations. Management activities currently executed on these areas include weed control, burning, recreation, information services and research.

9.13 In certain parts of the country, particularly the Eastern Cape and KwaZulu-Natal, communities living on the perimeter of State forests are in dispute with DWAF over access to land and forest resources. In some cases this has resulted in illegal occupation, damage to resources, and conflict.

9.14 In many parts of the world, the rights of people neighbouring State-owned forests are increasingly recognised and accommodated through their involvement in the management of these areas. This approach – known as joint forest management (JFM) – has potential in South Africa. DWAF is actively reviewing the establishment of several pilot JFM schemes in the Eastern Cape and KwaZulu-Natal.

Land outside State forests

9.15 Most of the forests, and almost all of the woodlands, however, fall outside the administration of DWAF. These areas are either the responsibility of the National Parks Board, provincial administrations and conservation agencies (e.g. nature reserves), local authorities (communal land), or are on privately owned commercial farms (often as nature reserves or safari ranches).

9.16 Management of land outside State forests has been determined by its ownership and subsequent use. Several different

authorities, each with its own set of objectives, have responsibility for these areas. Since 1994 these authorities have been directed to serve the interests of a far wider set of stakeholders than was previously the case.

9.17 In communally owned areas of forest and woodland, many of the traditional management systems based on regulated access have weakened. Many people, however, wish to see these areas sustainably managed so that they can continue to enjoy the goods and services thereby provided.

9.18 Legislation, such as the Communal Property Association Act, as well as local by-laws, provides a framework for communities to reassert control and sustainably manage these

communal areas. Internationally, attention has focussed on ways of assisting communities to achieve this. Much experience has been gained in these community-based forest management (CBFM) approaches in South Africa and elsewhere. These CBFM systems are being reviewed by DWAF with a view to testing them in selected cases.

Evaluation of existing institutional framework

9.19 The institutions currently involved in the management of natural forests and woodlands have different levels of capacity. The reason for this can partly be ascribed to past responsibilities which addressed different objectives (see Table 9.1).

Table 9.1: Competencies and capacity in the management of natural forests and woodlands

INSTITUTIONS	STATE FORESTS	LAND OUTSIDE STATE FORESTS
National government: DWAF	Strong technical, but weak social capacity and skills. Will require review and reorientation.	Minimal former involvement. Future area of increased focus. Technical and social skills inadequate.
National government: other than DWAF	Not involved – unlikely to become so. The Department of Environmental Affairs and Tourism will administer the policies of the White Paper on the Conservation and Sustainable Use of Biological Diversity and will have an indirect interest.	The Department of Environmental Affairs and Tourism (DEAT) and the Department of Agriculture (DA) have been extensively involved. Competence in participatory management needed to complement technical competence. National government, especially DEAT, will be responsible for implementing several relevant policies and conventions such as those on biological diversity and desertification.
Provincial government departments concerned with environment, natural resources, agriculture and rural development, as well as conservation agencies	Currently, provincial government administers extensive State forests. Further direct involvement arises from provisions of the new Constitution. Capacity varies between provinces.	Good technical level of competency in many provinces, with high involvement on provincial reserves. Levels of social involvement vary greatly between provinces. (Future scope expected to include greater community involvement.)
Local government	Previously not involved. Future involvement expected in the role of coordinating local development planning. Capacity is limited. Restructuring of the forest resources of the former homeland administrations is likely to devolve some resources to local government.	Limited involvement in the past, which was largely through the Traditional Authorities of the former homelands. Future involvement expected in the role of coordinating local development planning. Capacity limited.
NGOs	Previously not involved. Future involvement expected through representation of interest groups.	Occasional strong involvement through local development initiatives. Greater involvement expected.
CBOs	Previously not involved. Future involvement expected similar to local government and NGOs.	Occasionally strong involvement through local development initiatives. Greater involvement expected.

9.20 The existing links between national and provincial government are strong in some aspects (e.g. trees protected under the Forest Act) but lacking in others. The links between these two levels of government and local government are still developing with respect to the forest sector.

9.21 Links between NGOs and CBOs and government at all tiers are poorly defined in this sector.

9.22 Services need to be provided to support the sustainable management of natural forests and woodlands, both within State forests and on land outside State forests.

State forest land

9.23 Based on the principle of concurrent competency as prescribed in the Constitution, the following roles exist for national and provincial government:

- provincial government: responsibility for day-to-day administration of indigenous forests
- national government: to support provincial governments in performing this task; to monitor management performance and its compliance with national standards and international obligations.

9.24 Initial discussions with provincial governments have indicated a varying degree of capacity to assume their roles as defined in paragraph 9.23. Consequently, a phased approach to the achievement of concurrent competence, as envisaged by the Constitution, will have to be adopted.

9.25 Where provincial capacity is strong, day-to-day administration can be assumed quickly by the designated provincial authority. DWAF's role will be to provide technical support and to monitor performance as defined in paragraph 9.23.

9.26 Where provincial capacity is not strong, DWAF will continue the day-to-day administration, but with a progressive transfer of capacity and skills to the designated provincial authority.

9.27 The necessity and logic therefore remain to maintain a core of technical expertise in the management of natural forests and woodlands at national level. In practice, it would not be economically viable to replicate this capacity in each province and dispersal of skills would result in the loss of critical mass in a small, specialised field of expertise. In addition, there are certain national obligations which can best be met centrally, such as monitoring and reporting on the state of the resource, research, natural resource accounting and the introduction of new concepts (such as JFM and CBFM).

Land outside State forests

9.28 Providing and coordinating services for the sustainable management of natural forests and woodlands outside State forest land is complex, given the diversity of land ownership and agencies involved. In communal areas, extension services will take a lead (as discussed in Chapters 4 and 5), and provincial governments will remain major role players on private land and in provincial reserves.

9.29 A coordination structure for each province may be necessary to address the particular needs of, and circumstances in, each province with regard to local economic development. Such a structure would probably need to include representatives of national and provincial government and other affected stakeholders.

9.30 Nevertheless, there remains an essential role for national government similar to that for State forest land and described in paragraph 9.23.

9.31 Due to the past emphasis on management of closed-canopy forests for biological conservation, it is necessary to develop capacity within conservation agencies to support participatory planning and management, including community-based forest management, particularly in woodland management.

9.32 A wide body of legislation and many enforcing agencies apply to natural forests and woodlands. This body of law often contains overlapping and, in some cases, contradictory provisions.

Strategic actions**Goal**

9.33 To establish an institutional framework for cooperative governance which provides efficient administration and delivers effective services towards the sustainable management of natural forests and woodlands.

Indicators of achievement

9.34 Achievement of the following would indicate progress towards the goal:

- encompassing of all relevant institutions at the national, provincial and local levels
- a national forest authority with a clear mandate of goals and objectives (see Chapter 25)
- a core staff at national level with technical and scientific expertise to support provincial service providers
- provincial authorities competent and clearly tasked to administer State forests and

deliver services in respect of land outside State forests

- a coordinated approach between all the role players with responsibilities in terms of comparative institutional advantage
- active participation of local communities in the management of State forests
- service provision to all land owners, managers and communities
- an effective and consistent body of legislation to support the sustainable management of natural forests and woodlands.

Strategy

9.35 A province-by-province approach to achieve concurrent competency and a coordinated system through which government and non-government institutions can offer effective and complementary services for the sustainable management of natural forests and woodlands.

Table 9.2: Strategy for organising for the sustainable management of natural forests and woodlands

GOAL	To establish an institutional framework for cooperative governance which provides efficient administration and delivers effective services towards the sustainable management of natural forests and woodlands.		
INDICATORS OF ACHIEVEMENT	<ul style="list-style-type: none"> • encompassing of all relevant institutions at the national, provincial and local levels • a national forest authority with a clear mandate of goals and objectives • a core staff at national level with technical and scientific expertise to support provincial service providers • provincial authorities competent and clearly tasked to administer State forests and deliver services in respect of land outside State forests • a coordinated approach between all the role players with responsibilities in terms of comparative institutional advantage • active participation of local communities in the management of State forests • service provision to all land owners, managers and communities. • an effective and consistent body of legislation to support the sustainable management of natural forests and woodlands. 		
STRATEGY	To develop a province-by-province approach to achieve concurrent competency and a coordinated system through which government and non-government institutions can offer effective and complementary services for the sustainable management of natural forests and woodlands.		
TASK	RESPONSIBILITY	TIMING	RISKS
1. Clearly identify mandate, roles and objectives of DWAF in the sustainable management of natural forests and woodlands.	DWAF	Start: Jan 1998 End: Dec 1998	No risk.
2. Equip forest authority with necessary skills and personnel to fulfil identified mandate with respect to natural forests and woodlands.	DWAF	Start: Jan 1998 End: Dec 1999	No risk.
3. Clarify and implement concurrent competence between DWAF and each province.	DWAF (with provinces)	Start: Jan 1998 End: Dec 1998	Lack of agreement between DWAF and provinces on the implications of concurrent competence.
4. Initiate pilot projects for joint forest management (JFM) on State forest land.	DWAF (with provinces, NGOs, CBOs and communities)	Start: Jan 1998 Ongoing	Lack of agreement between stakeholders inhibits introduction of JFM.
5. Initiate pilot projects for community-based forest management (CBFM) on communal land.	DWAF (with provinces, NGOs, CBOs and communities)	Start: Jan 1998 Ongoing	Lack of agreement between stakeholders inhibits introduction of CBFM.
6. Commence development of province-level skills and competence to fulfil new role in concurrent management of natural forests and woodlands.	DWAF (with provinces, local government, NGOs and CBOs)	Start: Jan 1998 Ongoing	Budgetary constraints inhibit assumption of full role.
7. Pilot consultative planning processes for identification of needs and matching services at all levels within a province.	DWAF (with province, local government, NGOs, CBOs and local communities)	Start: Jan 1998 Ongoing	Local government not sufficiently strong to participate in effective planning for the sustainable management of forests and woodlands.
8. Design, agree on and implement a system for reporting on the state of South Africa's natural forests and woodlands and achievement of the objectives of SFM.	DWAF (with province, local government, NGOs, CBOs and local communi-	Start: July 1998 End: Mar 1999	Stakeholders fail to agree.

10

Enabling the sustainable management of South Africa's natural forests and woodlands

What is the issue and why is it important?

10.1 The importance of natural forests and woodlands has been discussed in the previous two chapters. These chapters include proposals relating to improving our understanding of the resource and making effective institutional arrangements for its management.

10.2 Nevertheless, the future of South Africa's natural forests and woodlands will be determined largely by the decisions users make concerning the resource. These decisions are

PROBLEM STATEMENT:

The sustainable management of South Africa's natural forests and woodlands has been undermined and hindered by local and national factors such as:

- *economic incentives*
- *tenure arrangements*
- *government policies.*

Addressing these factors is necessary so that they support, rather than hinder, SFM.

influenced by a wide range of factors which can either encourage or discourage sustainable management of the resource. These conditions may apply at the local or the national level.

Policy context

10.3 The **White Paper on Sustainable Forest Development in South Africa** recognises that natural forests and woodlands play a crucial role in the household economies of many rural communities. Special emphasis is placed on the application of community-based methods for managing these resources together with local incentive structures.

10.4 The **White Paper on the Conservation and Sustainable Use of Biological Diversity** recognises the role of and need for incentives which support the maintenance of biological diversity at user level.

10.5 The **White Paper on Agriculture** recognises the need for an efficient market-driven farming sector which will facilitate the sustainable use of natural resources and allocate resources on the basis of rational values.

10.6 The **White Paper on Rural Development** presents five strategic themes which are designed to create an enabling environment for rural development. These

include broadening access to basic factors of production and the provision of appropriately targeted support services.

10.7 The **Development Facilitation Act** provides for local, people-driven development planning according to a set of economic, social and environmental principles, and in support of local development objectives. Some provinces have adopted this Act, others have developed and implemented equivalent policies and laws, or are doing so. Planning will have to be based on agreed Land Development Objectives, or their equivalent.

10.8 The Department of Environmental Affairs and Tourism has published suggestions for economic instruments designed to support sustainable development.

Current setting

10.9 The most pertinent enabling conditions relating to the sustainable management of South Africa's natural forests and woodlands are discussed below.

Local participation in decision-making

10.10 Participatory approaches to forest and woodland management acknowledge the roles, rights, responsibilities and aspirations of a wide range of stakeholders. Forest management should be a shared responsibility between individuals within a community and other players, such as the State. This implies the necessity to develop systems of joint forest management (JFM) in State forests and of community-based forest management (CBFM) elsewhere.

10.11 Experience has shown that sustainable management of any resource will be achieved only with the direct involvement of those who utilise the resource. This level of participation by all stakeholders has been recognised internationally in concepts such as JFM and CBFM.

The role of women in sustainable forest management

10.12 In rural districts in particular, women can play the key role in achieving progress in

SFM, but they are often marginalised by custom and inappropriate institutional arrangements. Freeing women to play their proper role can mobilise resources that would allow much faster progress in resource management than could otherwise be achieved. Recognising their role and establishing it in systems for SFM are vital for enabling the sustainable management of natural forests and woodlands.

Tenure

10.13 Property rights (or tenure) are the rights which individuals or groups enjoy over the use of an asset or resource, such as land or trees. Tenure is central to resource management and applies not only to land but also to use rights over assets such as trees.

10.14 Tenure does not necessarily require ownership of the resource, but can be based on securing benefits from the resource. Tenure is often based on local agreement rather than formal law. Experience has shown that a combination of formal and informal rights can effectively ensure benefits to stakeholders.

Effective communal property management systems

10.15 Worldwide, many areas of forest and woodland are a common property resource, managed through systems often based on custom. A large area of South Africa's forests and woodlands remains under communal ownership and the efficiency of the traditional systems to manage the resource is central to achieving sustainable forest management.

10.16 In the districts of the former homelands, custom and Traditional Authorities often continued as a basis for the management of natural forests and woodlands. However, the strength of these institutions varied. In some places they were strong but in others they were undermined by resistance to apartheid and, lately, by uncertainty during the transition to local government.

10.17 Although the institutions may no longer be relevant in all areas, the customary arrangements for resource management still provide a useful basis for new SFM systems.

Local-incentive structures

10.18 A decision by those who utilise the forest resource to maintain and conserve forests and woodlands (as opposed to degrading them through over-exploitation, or converting them to a completely different land use) reflects the perception of relative benefits available from alternative actions. Perceived benefits can be altered by applying incentives or disincentives to encourage or discourage particular actions.

Favourable economic policies

10.19 Macro-economic policy can affect relative prices of products which influence the management of forest resources, e.g. subsidies on paraffin may encourage its wider substitution for fuelwood.

National land-use planning and resource management systems

10.20 The conversion of forests and woodlands to agricultural and other purposes

is an inevitable consequence of economic and social development. Sound national, provincial and local planning of land and resource use can minimise the adverse impacts of conversion and ensure optimum land use.

National forest policy framework

10.21 A supportive forest policy is increasingly recognised as being fundamental to the achievement of sustainable forest management. To be effective, such a policy should:

- recognise the rights and responsibilities of individuals with regard to their forest resources
- set the context for a supportive legal framework
- direct the allocation of resources and appropriate services to achieve objectives.

Agricultural and other policies

10.22 The conversion of forests and woodlands to agriculture is the primary cause



The forests of South Africa are fairly well protected in some areas, but in other areas the destruction of natural forests through over-utilisation of the resource or through clearing for agriculture is happening at an alarming rate. Photo: Department of Water Affairs and Forestry

of degradation of forests and deforestation worldwide. Generally, agricultural policies have had negative impacts on forests and woodlands in four main areas:

- through subsidies which artificially increase the profitability of crops
- through legislation identifying land clearance as a means to establish or secure tenure
- through land reform which allocates forest land to the landless, thereby extending agriculture
- through biases in service delivery which have denied poor farmers access to yield-improving technology, thus requiring them to increase the area under cultivation to increase production.

10.23 Several policies are currently being developed in South Africa which may impact on the management of natural forests and woodlands. For example, the White Paper on a National Water Policy for South Africa, with its emphasis on optimum water resource allocation, could support the preservation of areas of indigenous vegetation. Economic instruments proposed by DEAT also need to be evaluated for their possible contribution to achieving SFM.

Legislation

10.24 Legislation, in terms of forest resources and tenure and property rights, provides the supporting framework for sustainable forest management. While legislation should reflect the perceptions and norms of society as a whole, it often serves the needs of powerful and influential élites, resulting in the disenfranchisement of the weak and poor. Getting the legal framework right is therefore a case of making it popular, representative, efficient and accessible.

Strategic actions

Goal

10.25 Implementation of measures which support the creation of an enabling environment for the sustainable management of natural forests and woodlands.

Indicators of achievement

10.26 Achievement of the following would indicate progress towards the goal:

- all relevant stakeholders, including women, are involved in the sustainable management of natural forests and woodlands
- tenure rights to natural resources are secured by those entitled thereto, including women
- areas under communal property management are managed sustainably through appropriate systems
- macro-economic policies enable people to pursue sustainable long-term land-use practices
- stakeholders make effective and beneficial decisions concerning conversion from forests and woodlands to other uses
- commitment shown by budgetary allocation to the implementation of national forest policy
- legislation supportive of the sustainable management of natural forests and woodlands
- policies from other sectors, such as agriculture, facilitate the sustainable use of natural resources.

Strategy

10.27 The mobilisation of resources at national, provincial and local levels to remove obstacles to the sustainable management of natural forests and woodlands.

Table 10.1: Strategy to remove obstacles to the sustainable management of natural forests and woodlands

GOAL	Implementation of measures which support the creation of an enabling environment for the sustainable management of natural forests and woodlands.		
INDICATORS OF ACHIEVEMENT	<ul style="list-style-type: none"> • all relevant stakeholders, including women, are involved in SFM • tenure rights to natural resources are secured by those entitled thereto, including women • areas under communal property management are managed sustainably • macro-economic policies enable people to pursue sustainable long-term land-use practices • stakeholders make effective and beneficial decisions concerning conversion from forests and woodlands to other uses • commitment shown, by budgetary allocation, to the implementation of national forest policy • legislation supportive of the sustainable management of natural forests and woodlands • policies from other sectors facilitate the sustainable use of natural resources. 		
STRATEGY	The mobilisation of resources at national, provincial and local levels to remove obstacles to the sustainable management of natural forests and woodlands.		
TASK	RESPONSIBILITY	TIMING	RISKS
1. Develop local-level planning frameworks for the management and development of natural forests and woodlands and promote SFM objectives in Land Development Objectives.	DWAF (with local government, provincial government, NGOs, CBOs)	Start: Jan 1998 Ongoing	i. Effective local government structures do not emerge ii. Lack of consensus at local level between stakeholders impedes implementation of JFM.
2. Review potential of existing legislation relating to cooperatives and companies to provide a framework for community management of natural forests and woodlands.	DWAF	Start: Aug 1997 End: Mar 1998	No risk.
3. Investigate, understand and implement appropriate means to ensure an effective role for women in SFM.	DWAF (with local and provincial government, NGOs, CBOs, communities)	Start: Jan 1998 Ongoing	No risk.
4. Pilot approaches to JFM in at least three State forests and network results widely.	DWAF (with local and provincial government, NGOs, CBOs, communities)	Start: June 1999 Ongoing	i. Stakeholders are not interested in developing JFM. ii. Lessons learnt from pilot areas cannot be applied elsewhere.
5. Pilot approaches to CBFM in at least two situations in each province and network results widely.	DWAF (with local government, provincial government, NGOs, CBOs, communities)	Start: Jan 1999 Ongoing	i. Stakeholders not interested in developing CBFM. ii. Lessons learnt from pilot areas cannot be applied elsewhere. iii. Lack of local incentives to sustainable management of natural forests and woodlands.
6. Establish system of National Forest Resource Accounting to improve understanding of the value of South Africa's natural forests and woodlands.	DWAF (with Central Statistics Office)	Start: Jan 1998 End: Dec 2000	No risk.
7. Clarify rights and responsibilities regarding tenure under existing legislation and traditional law under different tenurial arrangements in South Africa.	DWAF	Start: June 1998 End: Dec 1999	No risk.
8. Inform stakeholders of their rights and responsibilities under existing legislation so as to contribute to the successful management of forests and woodlands.	DWAF	Start: Jan 1998 End: Dec 1999	No risk.
9. Inform and contribute to other policy processes which will impact on natural forests and woodlands.	DWAF	Start: Jan 1998 Ongoing	Other policy processes do not recognise the importance of natural forests and woodlands.

11

The industrial forest sector: its current and potential contribution to national goals

What is the issue and why is it important?

11.1 In a little over one hundred years, the industrial forest sector (the growing and primary processing of wood and its subsequent manufacture into finished products) has emerged as a major component of the South African economy, supporting the livelihoods of thousands of households, mainly in rural areas. The sector has the advantage of being based on a renewable resource.

11.2 Approximately 40% of the industry's output (in terms of value) is exported and South Africa's major companies are large overseas investors, particularly in the pulp and paper industry.

11.3 The industry makes an important contribution to the country's economy, and significant potential exists for future growth. However, the extent to which future growth will be realised depends on four factors:

- the degree to which South Africa's forest-products industries remain competitive
- the availability of wood fibre to permit further industry expansion
- the implications of the demands that expansion would place on the environment and resources (principally water) relative to the economic benefits it would offer, and the social consequences thereof
- the nature of the investment climate.

11.4 The national perspective must also be tempered by:

- local perspectives on the costs and benefits of expansion
- any divergence of public and private costs and benefits
- situations where public interests may need to override private-sector priorities.

11.5 The new forest policy requires that the forest industry must not only be internally efficient and profitable, but also rational in its use of resources, equitable in its development, and environmentally sustainable. The debate around water usage and environmental factors has intensified in recent years as divergent views have emerged among stakeholders.

11.6 It is therefore necessary to achieve consensus as to the best future path for the sector in relation to its contribution to national goals.

PROBLEM STATEMENT:

Future progress in the development of this sector is inhibited by a lack of adequate informed consensus as to its future contribution in relation to resource use (human, financial and natural) and environmental and social costs and benefits.

Policy context

11.7 The **Reconstruction and Development Programme (RDP)** has as its central concept the achievement of sustainable development. It recognises the necessity to develop an open, internationally competitive industrial sector to generate wealth and employment. Within the Rural Development Strategy, the forest sector is identified as an important element contributing to better living conditions and economic opportunity.

11.8 The **White Paper on Sustainable Forest Development in South Africa** commits the government to ensuring the development of a sustainable forest sector which contributes to national economic goals and which remains competitive within the bounds of acceptable environmental and social costs.

11.9 The **Macro-economic Strategy** identifies rapid economic and employment growth as the cornerstone of reconstruction and development. This necessitates shifting policy away from protecting and subsidising industries towards measures aimed at improving efficiency and encouraging value addition.

11.10 The **White Paper on Environmental Management Policy for South Africa** focusses on people and their participation in environmental decision-making processes, taking into account wider macro-economic perspectives. Participation in environmental decision-making must be incorporated into assessing the forest industry's future direction.

11.11 The **White Paper on the Conservation and Sustainable Use of Biological Diversity** identifies as a national priority the necessity for the sustainable use of biological resources. This includes the necessity to restore degraded ecosystems, to control the spread of alien organisms and to integrate biodiversity considerations into land-use planning procedures and environmental assessments.

11.12 The **White Paper on a National Water Policy for South Africa** recognises the critical role that water resources will play in determining South Africa's ability to achieve

national goals. The White Paper establishes the overall objective that water resources be allocated (after allowance has been made for the water reserve) according to the policy of optimum allocation. Emphasis is also placed on the creation of systems for better management and planning of water allocation at catchment level and on the necessity to give water a monetary value through mechanisms such as user charges.

Current setting

11.13 Purposeful afforestation efforts commenced in the late 1870s to provide an alternative to the fast-disappearing natural local resource and costly imported timber. The years following the Second World War were characterised by continued expansion of the afforested area, with the increased involvement of the private sector and the emergence of the domestic pulp and paper industry as the industry's major driving force. More recently, the industry has become more internationally focussed through increasing export sales and the acquisition of overseas production capacity.

11.14 A number of factors have contributed to the sector's development:

- a strong local demand for forest products combined with limited overseas competition
- the availability of suitable land to permit rapid expansion of plantations yielding high-quality wood at low cost
- favourable climatic conditions
- early emphasis by government and companies on good forest and forest products research
- a policy which emphasised self-sufficiency and industrial development through import controls and export incentives
- the initial direct investment role played by the State, which formed a basis for the development of processing industries and subsequent investments in processing plants through, for example, the IDC.

11.15 In 1995, total industrial (plantation) forest resources were estimated at around 1 487 000 hectares (DWAF 1996), of which:

- the public sector owns 30%, through SAFCOL (270 400 hectares), the plantations of the former homelands (156 700 hectares) and local government
- four large private companies together own 47%
- 23% is owned by other, smaller, private companies and individuals, including an estimated 14 000 hectares established under outgrower and other small-scale grower schemes.

11.16 Most industrial plantations are located where climatic conditions are suitable for afforestation: in Mpumalanga (41%), KwaZulu-Natal (37%), the Eastern Cape (11%), the Western Cape (6%) and the Northern Province (5%).

11.17 Currently, afforestation is occurring at a rate of around 10 000 to 12 000 hectares per annum, with the greatest potential for further afforestation in KwaZulu-Natal and, particularly, in the Eastern Cape.

11.18 The forest products industries currently consume about 19 million cubic metres of roundwood, of which an estimated 43% is hardwood (eucalypts and wattle), and the rest softwood pines. About 69% of the total roundwood production is consumed in pulp, paper and composite board manufacture, 21% as sawn timber and about 17% as mining timber. Around 40% of the value of the forest industry's net output is exported.

11.19 The forest products industries have grown rapidly over the last two decades, based largely on South Africa's ability to produce wood fibre at competitive prices. The pulp and paper sector has grown the fastest and mining timber products have declined steadily over the past ten years. The solid-wood products sector has remained static.

11.20 Over the last two decades, South Africa has made the transition from a net importer to a net exporter of forest products with an industry of international size and competitiveness.

11.21 In terms of its contribution to the national economy (1995/6) the sector:

- meets about 90% of domestic demand for forest products
- contributes 1.8% to the country's GDP
- contributes 8.1% of the output of the country's manufacturing sector
- provides 4.7% of total export earnings and about 10% of manufactured exports
- employs approximately 110 000 people.

11.22 The economic contribution of the industry at provincial and local levels is considerably higher than national indicators suggest. In Mpumalanga, for example, the industry contributes over 7% to provincial Gross Geographical Product (GGP), while over 10% of the province's households derive some benefit from employment in the industry.

11.23 The development of successful forest industries in South Africa has depended on the availability of competitively produced wood fibre. This has been achieved through substantial and rapid afforestation.

11.24 Afforestation makes a claim on natural resources (principally land and water) and has a number of environmental and social consequences, some of which can be mitigated. Measuring the costs of these consequences is problematic since valuation techniques are difficult to apply, and the use of these resources needs to be weighed up against the relative costs and benefits of realistic alternative uses. A divergence may also exist between benefits accruing to individuals (or companies) and the environmental and resource costs which are often publicly borne.

11.25 Biophysical conditions conducive to afforestation occur in just 15% of South Africa. Areas of high forestry potential are also frequently areas of high agricultural, water yield or conservation potential. These are the conditions that have led to strong competition for resources and environmental values among the various sectors.

11.26 Growing domestic and overseas markets will support continued growth in the industry, but this expansion will at some stage be constrained by wood supply, the industry's ability to remain competitive, and the level of investment. Even with these constraints, the sector could grow for the next two to three

decades at the rate recently achieved. This growth would be a significant contribution to achieving national goals.

11.27 The future yields from currently afforested land would probably support a net increase of 50% in the sector's output, equivalent to an annual growth rate of 1.3% over the next 30 years. Possible future growth exceeding 1.3% per annum implies the necessity for future afforestation.

11.28 Beyond this, additional growth can only be sustained through the provision of additional fibre. A number of alternative potential sources of this exist.

11.29 At this stage, importing raw fibre does not appear to be economically viable, given the high costs of transportation. Importation of semi-finished products may, however, be viable and is worthy of investigation.

11.30 Recycling of paper offers some opportunities to reduce the pulp and paper

industry's demand for new wood-based fibre. Altogether, 38% of paper in South Africa is recycled and provides around 27% of material input used by the paper industry after losses through reprocessing are taken into account. Increased rates of waste paper recovery are possible, as is shown by the experiences of other countries which have introduced measures to encourage it. However, the extent of feasible recycling is constrained by the cost of transport and the relative cost of wood-based fibre. Furthermore, there are technical limits to the percentage of recycled paper which can be used in making new paper.

11.31 New alternative fibre sources (in addition to bagasse, which already provides around 5% of furnish for the pulp and paper industry), such as hemp, kenaf and straw, are being investigated in many countries as substitutes for wood-based fibre. Their success will not only depend on technical factors such as fibre properties, but ultimately on their costs relative to wood-based fibre.



*The forest products industries currently consume about 19 million cubic metres of roundwood per annum.
Photo: TFJ van Rensburg, Department of Environmental Affairs and Tourism, 1988*

11.32 Kenaf and esparto grass, as well as sisal, have been investigated as alternatives in South Africa, but indications are that they will not match wood as an economical source of fibre. Hemp has the disadvantages of yielding less fibre per unit area than trees, as well as requiring an environmentally less desirable pulping process.

11.33 Further growth will almost inevitably require consideration of new afforestation. The future course of afforestation in South Africa will have to be influenced by:

- the benefits to be gained for the economy from further industry expansion
- the fibre demands generated by expansion
- the feasibility of alternative national and regional strategies to meet increased fibre demand
- the resource and environmental implications of meeting additional fibre demands through afforestation, particularly with regard to impacts on water resources
- the costs and benefits of forestry compared to realistic alternative land uses.

Strategic actions

Goal

11.34 To put in place those measures which promote the development of the industrial forest sector so that it contributes fully to the future economic and social well-being of South Africa, within the parameters of acceptable social and environmental impacts.

Indicators of achievement

11.35 Achievement of the following would indicate progress towards the goal:

- a clear strategy for growth for the sector, based on a thorough understanding of the relative costs and benefits of sector development, including a comprehensive fibre-supply strategy that addresses all sources (including recycling and fibre imports)
- sufficient agreement among stakeholders on the measures needed to achieve the desired growth path, and the elimination of unnecessary constraints to growth

- coherence between strategy and initiatives for the forest sector, and strategy and initiatives for industrial development, in a way which reflects macro-economic policy (e.g. in Spatial Development Initiatives)
- a favourable climate for investment in the forest sector, including market-based roundwood prices
- agreement on effective and credible environmental management systems for the forest sector (see Chapter 12)
- the identification and promotion of the industry structure that maximises the sector's net economic contribution (see Chapter 13)
- mechanisms that favour investment in new, value-adding forest industries that achieve net economic gain for South Africa are developed and implemented (see Chapter 14)
- establishment of conditions that assist the sector to realise its full potential in the global market (see Chapter 15)
- substantial progress in minimising conflict between forest-sector enterprises, neighbouring communities and other rural stakeholders from the previously disadvantaged groups and in the degree of satisfaction expressed by rural stakeholders about equity of access to sector benefits (Chapter 16)
- substantial progress in addressing needs of sector-based institutions for dealing with human resources development and labour relations (Chapters 19 to 22)
- agreement on appropriate regulatory instruments for water use by plantation forests
- substantial progress in improving the research, technology and innovation system to support sustainable development of the sector (Chapter 23).

Strategy

11.36 Identify, promote and institutionalise stakeholder fora for negotiating and promoting the agreed course for forest-sector growth, and ways of eliminating constraints to growth, on the basis of sound evaluation of the relative costs and benefits of industrial forestry.

Table 11.1: Strategy to promote the sustainable development of the industrial forest sector

GOAL	To put in place those measures which promote the development of an industrial forest sector so that it contributes fully to the future economic and social well-being of South Africa, within the parameters of acceptable social and environmental impacts.		
INDICATORS OF ACHIEVEMENT	<ul style="list-style-type: none"> • a clear strategy for growth for the sector • sufficient agreement among stakeholders on the measures needed to achieve the desired growth path, and the elimination of unnecessary constraints to growth • coherence between strategy and initiatives for the forest sector and industrial development • a favourable climate for investment in the forest sector • agreement on effective and credible environmental management systems • the identification and promotion of the industry structure that maximises the sector's net economic contribution • mechanisms that favour investment in new, value-adding forest industries • establishment of conditions that assist the sector to realise its full potential in the global market • substantial progress in minimising conflict between forest-sector enterprises, neighbouring communities and other rural stakeholders • progress in addressing human resources development and labour relations • agreement on appropriate regulatory instruments for water use • Improved research, technology and innovation system. 		
STRATEGY	Identify, promote and institutionalise stakeholder fora for negotiating and promoting the agreed course for forest-sector growth, and ways of eliminating constraints to growth, on the basis of sound evaluation of the relative costs and benefits of industrial forestry.		
TASK	RESPONSIBILITY	TIMING	RISKS
1. Create a national stakeholder forum for debate on forest-sector, industrial and macro-economic policy and strategy and the identification and elimination of unnecessary constraints to growth.	Minister (with industry, provincial and local government, unions, NGOs)	Start: Sep 1997 End: June 1998	Some stakeholders may not participate in forum.
2. Strengthen support to the National Forestry Advisory Council as a forum for forest policy debate.	DWAF	Start: July 1997 End: Apr 1998	No risk.
3. Support and ensure province-level framework planning for forest-sector development through strategic environmental assessment.	DWAF (with industry, provincial and local government, NGOs)	Start: July 1997 End: June 1998	Sufficient capacity does not exist at provincial level to undertake planning.
4. Establish adequate, competent capacity in DWAF to support progressive forest policy analysis and debate and to disseminate the information required to do this.	Minister	Start: July 1997 End: Mar 1999	Budgetary constraints inhibit DWAF's ability to assume its role.
5. Ensure national government funding for research towards national resource accounting and cost-benefit analysis.	DWAF	Start: Jan 1998 End: Dec 2000	Budgetary constraints inhibit assumption of new research role and lack of available expertise within DWAF.
6. Implement strategies outlined in Chapters 12 to 16, 19 to 21 and 25.	DWAF	Start: July 1997 End: Mar 2000	Risks as identified.
7. Complete an economic study of opportunities for growth in the forest sector, the fibre supply options to support this growth and the economic, social and environmental costs and benefits of alternative growth paths.	DWAF (with DTI, IDC, DEAT, industry, unions)	Start: Sep 1997 End: Mar 1998	No risk.
8. Identify and promote an agreed strategy for the growth of the industrial forest sector.	DWAF (with industry, provincial and local government, unions, NGOs)	Start: Sep 1997 End: Mar 1998	Stakeholders cannot reach consensus.

12

Managing for sustainable industrial forest development: water and the environment

What is the issue and why is it important?

12.1 More than 2 million hectares of land are involved in industrial forestry in South Africa. Of these, around 1.5 million are currently afforested. Most afforestation has taken place on the former grasslands of the country.

12.2 Because afforestation is carried out mainly in regions with between 800 and 1 000 mm of rainfall per annum, and South Africa has an average rainfall of about 450 mm, water resource considerations are highly significant.

12.3 The high levels of biological diversity in South Africa mean that the conversion of natural land to new uses always involves environmental impacts. Afforestation is no exception.

12.4 Plantation forests bring new employment opportunities and other social benefits. However, because forestry tends to be an exclusive land use, there are both real and perceived social costs involved.

12.5 It is broadly accepted that the economic benefits of industrial forestry need to be balanced against the cost of water resources and environmental and social impacts.

12.6 In South Africa, afforestation does not always involve the complete conversion of land. On any forest estate, i.e. forest

management unit, there is significant opportunity for the protection of habitats, conservation of biological diversity and mitigation of the water resource and social impacts of large-scale afforestation.

12.7 The South African forest sector must establish sustainable forest management at all levels to contribute to national goals and meet international obligations.

PROBLEM STATEMENT:

Sustainable development of the industrial forest sector will require stakeholder agreement on the assessment and management of environmental and social costs against economic benefits to ensure that they are adequately balanced, and the implementation of appropriate systems to achieve sustainable forest management.

Policy context

12.8 The **White Paper on Sustainable Forest Development in South Africa** commits the government to environmental protection to:

- counter adverse effects of industrial forestry on water resources and biodiversity

- continually monitor and assess forest health
- facilitate the development of criteria which will promote the sustainability of industrial forestry
- ensure that these criteria adhere to international standards, yet are suited to local needs
- facilitate the management of conflict concerning the use of land and water.

12.9 The **White Paper on a National Water Policy for South Africa** provides the direction for the development of new water law and water management systems for South Africa. Aspects of special relevance to forest policy and sector strategy are the recognition of only those water uses (other than the Water Reserve) that are beneficial in the public interest. Allocation of water uses, over and above the Water Reserve, must be on the policy of optimum water use, i.e. allocation that achieves equitable and sustainable economic and social development.

12.10 User charges for water consumed are to be instituted to promote the efficient use of water. The White Paper identifies afforestation as requiring licensing and being subject to charges (the "interception levy"), which, among other user costs, should be employed to cover water resource management costs and a resource conservation charge for each relevant catchment. Furthermore, the White Paper identifies the need for each major water-use sector to develop a water use, conservation and protection policy which would be supported by regulation to ensure compliance with policy. Finally, the White Paper provides for integrating the afforestation permit system with the new water resource allocation system.

12.11 The **White Paper on Environmental Management Policy for South Africa** focusses on people and their participation in environmental decision-making, taking into account the wider macro-economic perspectives. This also needs to be incorporated into assessing the forest industry's future direction. The policy of integrated environmental management provides for a coherent set of planning and

decision procedures where development is intended.

12.12 Regulations in terms of the Environment Conservation Act provide for environmental impact assessments where land-use change will involve a conversion from natural habitat to a new cover type. Introduction of new plant or animal species from elsewhere will also require environmental impact assessment.

12.13 The **White Paper on the Conservation and Sustainable Use of Biological Diversity** identifies as a national priority the necessity to sustainably use biological resources and maintain diversity to serve the national interest. This embraces the necessity to restore degraded ecosystems, to control the spread of alien organisms and to integrate biodiversity considerations into land-use planning procedures and environmental assessments.

12.14 The **United Nations Conference on Environment and Development (UNCED)**, held in Rio de Janeiro in 1992, marked a milestone in international cooperation to promote sustainable development. The documents produced following UNCED, and which are relevant to South African forestry, are:

- **The Rio Declaration:** a statement of broad principles to guide national conduct on environmental protection and development
- **Agenda 21:** which presents work plans for sustainable development including goals, responsibilities and estimates for funding
- **The Forest Principles:** for a global consensus on the management, conservation and sustainable development of all types of forests
- **The Convention on Biological Diversity:** which aims to conserve biological diversity, to ensure that components are used sustainably and that the benefits arising from the utilisation of genetic resources are fairly and equitably shared
- **The Framework Convention on Climate Change:** which aims to stabilise greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system

- **The Convention to Combat Desertification:** which aims to combat desertification and mitigate the effects of drought through recognition of the physical, biological and socio-economic aspects of desertification.

12.15 Since UNCED, an open-ended *ad hoc* Intergovernmental Panel on Forests (IPF) has been established by the United Nations Commission on Sustainable Development (CSD) to pursue consensus and the formulation of coordinated proposals for action to support the management, conservation and sustainable development of forests. The IPF has completed its work and has recommended various measures for enhancing progress towards SFM worldwide. These measures will now be considered and implemented by international organisations such as the FAO, and overseen by the Intergovernmental Forum for Forests (IFF).

Current setting

Impact on water resources

12.16 The effects of afforestation on water resources vary according to rainfall, forest distribution and silvicultural system. In South Africa, plantation forests are established mainly in zones with rainfall of 800 to 1 000 mm per annum. In these zones, the natural river flow ("unit runoff", in technical terms) would amount to 150 to 170 mm rainfall equivalent per annum under natural conditions. Afforestation is estimated to reduce this flow to about 50 to 70 mm per annum.

12.17 The estimate in the *Overview of Water Resources, Availability and Utilisation in South Africa* (DWAF 1997) of the total annual natural river flow in South Africa is 50.15 billion m³, of which about 20.35 billion m³ (41%) was already in use by 1996. An additional 13.25 billion m³ (26%) of this 50-plus billion could be made available for further use and would all be required for development by 2020. The remaining 33% represents water lost to evaporation from reservoirs and conveyance systems, as well as spills of flood waters.

12.18 A study by Environmentek, CSIR (1997), commissioned by DWAF, indicated the

total reduction in average natural river flow by the 1.49 million hectares of plantation forests in South Africa at 1.42 billion m³/a, i.e. a reduction of 2.8% of the total annual natural river flow.

12.19 Spatially, however, the afforested area tends to be concentrated so proportionate reduction in flows in specific river systems can be much greater. In the Great Usutu (running into Swaziland) and the Crocodile and Sabie/Sand (running into Mozambique), for example, annual river flow reductions reach 17%, 20% and 22% respectively.

12.20 Plantation forestry's reduction in runoff was equal to 7% of the total water use in South Africa in 1996, and 4.2% of the utilisable average runoff in the country.

12.21 The water consumed by industrial plantations is equivalent to 13% of the water consumed in irrigation (10.9 billion m³ per year), and comparable to the quantity consumed every year by the mining and industry sectors together (1.6 billion m³ per year). The consumption therefore constitutes an important fraction of the country's water use.

12.22 These impacts are acutely felt at provincial and local (catchment) levels, where the proportion of water used by forests is higher and the impact on river flow greater. Therefore, competition between forestry and other sectors, and comparisons between alternative water uses, should be analysed at catchment rather than national level.

12.23 Timber processing also uses relatively large quantities of water and can impact negatively on water quality. The volume of water used by the pulp and paper industry amounts to about 250 million cubic metres per year. Much of this (85 to 90%) is returned to streams or the ocean.

12.24 Generally, plantation forestry tends to have a positive effect on water quality by reducing surface runoff and loss of topsoil. Management standards in South Africa are generally very high; however, poor management of certain forest operations (e.g. road construction, timber extraction, site preparation) can result in large quantities of suspended sediment being discharged into river systems. Plantation fires, although

infrequent, can also result in the release of sediments to streams raising sediment yields by up to 20 times.

12.25 Processing operations also contribute to reduced water quality through pollution and changing the chemistry of water (acidification, reducing oxygen levels, etc.). Pulp and paper mills are the largest users of water among the forest industry processing plants and also produce the largest volume of waste.

12.26 Afforestation permits are currently issued by DWAF's Water Affairs Directorate. Permits are now administered at the quaternary catchment level and applications are screened by a multi-party afforestation review panel in each province. Decisions are based on estimated reductions in streamflow that may arise from the proposed afforestation as well as on social and environmental considerations, where appropriate. An environmental impact assessment may be required where requested by interested and affected parties.

12.27 The current afforestation permit system is the focus of much debate and concern. Many voices in the industry feel that its criteria are not consistently applied and are failing to determine the most beneficial use of water. In addition, there is much concern about long delays in the processing of applications.

Impact on the environment

12.28 Despite the positive effect of plantation forests on soil erosion rates, they can have negative soil impacts in terms of acidification, nutrient depletion and compaction. Conversion of land to plantations also tends to impact negatively on biological diversity, despite the retention of unplanted areas within forest estates. Plantations can also present a higher fire risk than other land uses. To many, they have a negative impact on the landscape.

12.29 The development of forestry in South Africa, as in the case of agriculture and horticulture, has involved the introduction of plant species from other continents. Many of these species have adapted well to their new environments here, and spread and grow unaided in landscapes adjoining the forest enterprise. Several of the invasive plant species in South Africa, but not all, come from, or are

associated with, industrial forests. Some of these plant invasions arose from amenity, protection and commercial plantings many years ago and are not ascribable to current plantation establishment. However, in other cases, invasions continue to occur from existing industrial forests, both of trees used for the plantations and of other plants that occur together with plantation species.

12.30 Important invasive species are pines (cluster pine, patula pine, radiata pine and slash pine), many wattle species and a variety of shrubs. Because these invasive plants affect water resources much as plantations do, and reduce natural biological diversity, there is widespread concern about the problem. The Working for Water Programme is a drive to eliminate and control these invasive plants. It was introduced by the new government after many years of hesitation on the issue. Additional measures will be needed to combat this problem, and the forest sector will continue to play its part in these.

12.31 Most companies have instituted some form of environmental management into their operations, over and above the forest management systems required to maintain sustainable yields of wood. Several of the large industrial forestry companies have detailed environmental codes of practice. Others use the *Guidelines for environmental conservation management in commercial forests in South Africa* to set environmental standards for field operators.

12.32 These codes of practice and guidelines advocate conducting environmental impact assessments, developing proper environmental management plans and undergoing regular environmental audits. They also provide recommendations for specific practices in silviculture, harvesting, road building, fire management, contract work and conservation.

12.33 Nevertheless, given the understood environmental impacts of industrial forestry in South Africa, the following gaps still need to be addressed:

- the necessity for province-wide, district or catchment-level planning processes
- replanning plantations to be more environmentally or ecologically sound

- continuous improvement in environmental management plans and systems
- greater reliance on independent audits of environmental performance
- credible and agreed criteria and standards for sustainable forest management.

Sustainable forest management

12.34 Since development of the forest sector, as with others, comes with certain environmental and social costs as well as benefits, it needs to be guided and directed by appropriate and effective environmental management systems, procedures, standards and regulations. This is in conformance both with South Africa's environmental policy and best practice internationally. Furthermore, since the forest sector is distinguished from others by its own characteristics, sustainable forest-sector development cannot be left to generic environmental management principles and criteria.

12.35 Sustainability is a key element underpinning the new forest policy, i.e. "the stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems." This definition supplies enough detail to be applied to the South African forest sector.

12.36 In the South African industrial forest sector, sustainable forest management begins with planning forest-sector development. Resource use is best regulated by means of effects-based planning measures, as opposed to prescriptive methods. These provide a framework within which the most beneficial option is chosen, based on participatory appraisal of available options. These planning processes are then supported by environmental management systems.

12.37 Criteria and indicators for sustainable forest management will guide the development and revision of policies, legislation and national forest programmes. They can be applied to improve resource-use planning, to assess the

outcome of forest management, to provide a basis for continuous improvement and to assist with communicating the state of our forests. It is important that South Africa immediately start developing and implementing criteria and indicators if the new forest policy is to achieve the desired goal of sustainable forest development.

12.38 Whether or not a forest is regarded as sustainably managed will depend on agreement between stakeholders on reasonable standards and how close the current management matches these norms. Ideally, the standards identified would be drawn from agreed criteria and indicators of sustainability.

12.39 There is broad consensus that developing sustainable forest management should be a process of continuous improvement in forest practice, towards achieving desired standards. Environmental management systems to support improvement of practice have been devised to facilitate adaptation of this kind. However, certain minimum standards need to be identified, adhered to, and enforced through regulation.

12.40 Where a forest management unit has been certified as being sustainably managed, the products qualify to be identified accordingly. Labelling (green labelling, eco-labelling) allows these forest products to be recognised by buyers and consumers as originating from sustainably managed forests.

12.41 A forest manager needs to identify best practices for different forest operations under different conditions. These best practices will have to be set out as procedures to be followed under given conditions, eventually to be codified for the forest enterprise.

12.42 Worldwide experience in approaches to sustainable forest management indicates that the principle of subsidiarity should apply, i.e. decisions should be taken at the lowest appropriate level.

Roles and responsibilities

12.43 In implementing ways and means of achieving sustainable forest management we

need to resolve a difference between parties who prefer an approach based on self-regulation on one hand, and others who argue for some significant degree of enforcement of standards through legal means.

12.44 Self-regulation is generally seen as an approach where firms in the private sector decide for themselves whether or not to apply environmental management, and which approaches they prefer to follow. The standards to apply, and the environmental management systems to employ to achieve standards, are also a matter of choice. The approach is driven by the force of the market, i.e. where buyers and consumers of forest products demand high environmental standards, only those firms which succeed in achieving these standards will be financially successful and survive. Market demands for forest products certified to originate from sustainably managed forests are seen to oblige firms to conform to environmental standards. Controls come from independent auditing or certification according to acknowledged standards and procedures, such as those of the Forestry Stewardship Council, or ISO 14000. Government's role is, in any event, very limited because it does not have the capacity to police the implementation of environmental standards and procedures. This view is strongly espoused in the organised forest industry in South Africa.

12.45 Parties supporting legal regulation argue that voluntary environmental management systems and standards, even if sanctioned by standards authorities or international non-government institutions such as the Forestry Stewardship Council, remain open to abuse, or address the problem only in the case of responsible firms, or both. They also claim that forest certification cannot always be relied on to ensure that sustainable forest management has been achieved. Market forces acting in favour of environmental responsibility apply only to a small fraction of goods traded. Some minimum level of statutory regulation is needed to achieve the broad compliance required to ensure that the sector as a whole is sustainable. This view is promoted among environmental NGOs and government agencies in South Africa.

12.46 There is some common ground between these points of view, however. Generally, there is a body of opinion that supports the need to identify a set of minimum standards that should be enforced by statutory regulation. This would be a minimum set, sufficient to ensure a reasonable level of compliance with basic environmental norms across the sector, and enforceable through appropriate penalties. These minimum standards should be established by way of negotiation among the parties. However, the statutory minimum standards would, in themselves, not be sufficient to achieve high standards of environmental management. Performance exceeding these standards would need to be achieved through identification of, and agreement among the stakeholders on, additional standards, which would be pursued by choice by the various firms or institutions engaged in the sector, under the influence of consumer and market forces, corporate responsibility and stakeholder and government persuasion. The debate then would become one of choosing between the set of minimum enforceable standards and the additional, market-determined, higher standards, rather than about self-regulation as such.

12.47 Certification of forest products is also sometimes used to a greater or lesser degree as a trade barrier. However, this is governed by the provisions on trade and the environment of the World Trade Organisation. South Africa will need to be vigilant regarding these provisions and their enforcement.

Procedure for reaching agreement on criteria and indicators of sustainability and on appropriate management systems

12.48 Approaches to the development of a procedure for establishing national criteria and indicators of sustainability were discussed at a workshop in March 1997, involving an expert group drawn from a range of interested parties. Participants in this workshop endorsed a process based on criteria and indicators of sustainability. A step-by-step process was recommended, involving progressive interaction between technical development and stakeholder negotiation to reach agreement.

12.49 The objectives of the procedure outlined here would be to:

- reach agreement on criteria and indicators of sustainable forest management
- influence all management systems and current certification systems through the authority of a nationally agreed set of criteria and indicators
- examine the need for further information.

12.50 A Technical Committee for the development of criteria and indicators would have to be formed. This should include representatives from NGOs and CBOs, government departments (national and provincial), industry, organised labour, consumer groups and the South African Bureau of Standards (SABS), as well as individual specialists. The task of this group would be to develop principles and criteria, indicators and methods for their assessment, and a framework for implementation. The material prepared by this group would be used as a basis for seeking agreement with stakeholders. This process would probably require three years to complete.

12.51 The principles listed below were identified to form a basis for the forest strategy. The corresponding criteria are also available for each of the suggested principles. An appropriate set of indicators must still be developed to:

- maintain the resource base
- maintain the sustained yield of goods and services
- maintain or enhance biodiversity
- ensure wise use of water
- optimise the socio-economic impacts of forestry
- develop supportive institutional frameworks and policy.

12.52 These principles and the corresponding criteria, once agreed on, should be integrated into planning and management systems applied in the sector.

12.53 The testing of criteria and indicators would probably be handled by the Technical Committee (paragraph 12.50). The tests under way internationally by the Centre for International Forestry Research should be



*A forestry village amongst a mosaic of pine plantations, firebelts, open riparian and grazing lands.
Photo: TFJ van Rensburg, Department of Environmental Affairs and Tourism, 1990*

considered as they may be able to provide a sound methodology for evaluating the criteria and indicators that are to be developed.

12.54 The new Forest Act should create enabling legislation to promote and support recognition of appropriate criteria and indicators of sustainability, and for the enforcement of agreed minimum standards. The principles for sustainable forest management should be central to the new Forest Act. The Act should also provide for minimum standards, where not appropriately provided for in the Environment Conservation Act or elsewhere.

12.55 At this stage, the following is needed:

- identification of optional instruments for achieving sustainable forest management, with the focus on criteria and indicators of sustainability at the core of sustainable forest management systems and performance standards
- appraisal of these options in terms of relevance, feasibility and affordability
- recommendations for future actions.

12.56 These outputs should be achieved through a process of review, from consultation and from discussion by experts.

Strategic actions

Goal

12.57 The goal to be achieved is to establish effective, equitable and agreed systems for managing the environmental and water resource impacts of industrial forestry.

Indicators of achievement

12.58 Achievement of the following would indicate progress towards the goal:

- agreement among stakeholders on a system for managing the environmental and social

dimensions of forest-sector development, including a set of criteria and indicators of sustainable forest management, and an appropriate set of tools for assessment and management at national, provincial, catchment and forest management unit levels which would satisfy local, national and international norms and expectations and apply to all levels, from the national to the local community or enterprise

- implementation in planning forest development, taking into account local requirements for development and environmental protection, as well as in forest management
- implementation of consistent criteria and indicators that would apply to regulations in the water law and Environment Conservation Act that affect the forest sector
- provision for fast-track, low-cost decision-making in districts or catchments identified for small-scale grower development
- credibility among stakeholders, a high standard of quality in environmental management on forest management units and full transparency in the application, assessment or auditing of sustainable forest management
- agreement on an equitable and effective basis for progress in controlling invasive alien trees and shrubs
- an agreed water use conservation and protection policy
- an agreed policy for the conservation of biological diversity in the sector.

Strategy

12.59 Convene, facilitate and support a forum for investigating, clarifying and agreeing on the required management system and identifying instruments to ensure its implementation, including market-based instruments and statutory regulations.

Table 12.1: Strategy for achieving an agreed basis for managing the impacts of forest sector development on water resources and the environment

GOAL	Establish effective, equitable and agreed systems for managing the environmental and water resource impacts of industrial forestry.		
INDICATORS OF ACHIEVEMENT	<ul style="list-style-type: none"> • agreement among stakeholders on a system for managing the environmental and social dimensions of forest sector development • implementation in planning forest development, taking into account local requirements for development and environmental protection • implementation of consistent criteria and indicators of SFM • provision for fast-track, low-cost decision-making in districts or catchments identified for small-scale grower development • credibility among stakeholders; a high standard of quality in environmental management • agreement on an equitable and effective basis for progress in controlling invasive alien trees and shrubs • an agreed water-use conservation and protection policy • an agreed policy for the conservation of biological diversity. 		
STRATEGY	To convene, facilitate and support a forum for investigating, clarifying and agreeing on the required management system and identifying instruments to ensure its implementation, including market-based instruments and statutory regulations.		
TASK	RESPONSIBILITY	TIMING	RISKS
1. Identify and brief stakeholders and stakeholder representatives.	DWAF	Start: Aug 1997 End: Oct 1997	No risk.
2. Constitute the required forum from relevant stakeholders (i.e. industry, conservation bodies, NGOs, provincial and local government) and agree on working methods and timetable.	Minister	Start: Oct 1997 End: Oct 1997	Some stakeholders not willing to participate in forum.
3. Promote and support the formulation and implementation of criteria and indicators of sustainable forest management developed by the forum, at all levels of planning and management.	Forum, DWAF	Start: Oct 1997 End: Mar 2000	No risk.
4. Identify possible regulations for minimum standards and for enabling the implementation of sustainable forest management.	Forum, DWAF	Start: Sep 1999 End: Feb 2000	No risk.
5. Pass the required regulations.	Minister	Start: Feb 2000 End: Apr 2000	Some stakeholders disagree with proposed regulations.
6. Develop a policy for forest-sector water use, conservation and protection through stakeholder participation and agreement.	DWAF, forest industry, stakeholders	Start: Jan 1998 End: Dec 1998	No risk.
7. Develop a policy for the conservation of biological diversity in the forest sector through stakeholder participation and agreement.	DWAF	Start: Jan 1999 End: Dec 1999	No risk.
8. Support debate on a strategy for forest certification.	DWAF, Forum	Ongoing	Stakeholders not prepared to participate.
9. Establish and implement reports on the state of the forest sector in South Africa.	DWAF	Start: Sep 1997 End: Mar 1998	No risk.

13

Structure and concentration in the industrial forest sector: implications for competitiveness, consumers and opportunities for new enterprises

What is the issue and why is it important?

13.1 There may be certain elements of South Africa's forest and forest products industries which, in terms of concentration and vertical integration, could be seen as incompatible with the achievement of an efficient, sustainable and equitable forest sector if those elements have a negative impact on:

- consumers' interests in terms of price, quantity and quality of products produced
- the industries' efficiency and competitiveness
- opportunities for the previously disadvantaged.

PROBLEM STATEMENT:

There is concern that the existing pattern of ownership in the industrial forest sector may be incompatible with the achievement of an efficient and competitive industrial sector which fully contributes to national goals and provides new economic opportunities, particularly for the previously disadvantaged.

Policy context

13.2 The **RDP** commits government to assisting small and medium-size enterprises. It also declares government's intention to prevent the abuse of economic power caused by excessive concentration which may harm consumers and limit participation in the economy.

13.3 The **White Paper on Sustainable Forest Development in South Africa** advances the vision of a sector characterised by diversity and competitiveness, which benefits consumers and widens access to economic opportunities, particularly for the previously disadvantaged.

13.4 The **White Paper for the National Strategy for the Development and Promotion of Small Business** recognises the potential of small, medium and micro-enterprises to contribute to national economic and development goals and the problems which small businesses face in becoming established.

Current setting

Plantation resources

13.5 A substantial degree of concentration exists within the roundwood-growing sector of

the industry, with three companies controlling more than two-thirds of the total plantation area and two companies controlling most of the processing capacity.

13.6 Government remains a major owner of forest resources. SAFCOL and DWAF currently supply 60% of the softwood sawlogs produced in South Africa. Sawlogs have been supplied from these sources on long-term contracts at prices often below market levels. Softwood sawlog prices thus continue to be influenced by non-market factors.

13.7 These contracts distort the sawlog market, not only through the influence on prices overall, but also through their effect on value addition. The contracts tie delivery of logs of all kinds to a given processor who processes a wide range of logs instead of concentrating on an optimum size class for his or her specific market. This results in unnecessary waste and low value and volume recovery, which in turn tends to contribute to depressed log prices.

The pulp and paper industry

13.8 Pulp and paper production in South Africa is essentially concentrated in the hands of two large corporations, Sappi and Mondi. These are, in turn, owned by larger conglomerates. The industry exhibits a high level of vertical integration – companies own the land and the plantation resources and the capacity to undertake processing to an end product.

13.9 While consumers are potentially vulnerable to monopolistic behaviour, two important factors limit the ability of pulp and paper companies to exploit their market positions unfairly:

- ownership is significantly less concentrated at the distribution end of the product chain, thereby creating greater pressure to provide consumers with competitive products and services
- imported finished products are easily accessible from international suppliers in the event of uncompetitive behaviour by domestic producers.

13.10 In terms of competitiveness, South Africa's pulp and paper industry has achieved

world levels of excellence. Large-scale production (itself dependent on the availability of capital for very large investments) ensures the necessary economies of scale which competitive paper production requires. The ownership structure of South Africa's pulp and paper industry has thus facilitated the large investment necessary to achieve a successful sector to date.

13.11 South Africa's two main pulp and paper manufacturers are increasingly part of an internationally very competitive sector. Competitive pressures to invest and innovate come as much from outside South Africa as from within. In this context, the introduction of another major player in the domestic market would be unlikely to add any significant competitive pressure in the domestic market for pulp and paper products.

13.12 Opportunities to achieve broader participation in the large-scale primary and secondary processing industries are limited, given the high level of investment required. This effectively precludes small and medium-size enterprises from participating in this end of the product chain. More realistic opportunities for widening participation exist in less capital-intensive areas such as growing trees, transport, paper recycling and contracting within the growing sector.

13.13 Opportunities for wider representation by individuals from previously disadvantaged groups exist through increased numbers employed in management positions in the large companies.

13.14 In summary, the existing ownership structure of the pulp and paper sector has enabled it to achieve the growth and development witnessed to date. Consumers' interests are relatively well protected and increasing exposure to international markets ensures that the industry remains competitive.

13.15 One important consequence of this concentration, however, is that roundwood prices can be determined largely by the behaviour of two very large buyers, possibly to the detriment of growers. A diversified market for roundwood is therefore imperative in South Africa.

The sawmilling industry

13.16 The sawmilling industry exhibits less concentration and vertical integration than the pulp and paper sector, although the level of concentration has risen in recent years as a large number of smaller sawmills have closed down or have been taken over by larger firms.

13.17 Although very significant improvements in performance have been achieved of late, this industry has largely stagnated and has failed to achieve its full potential.

13.18 Trends in this sector have been marked by the following:

- domestic timber consumption has remained static for nearly 20 years
- there has been a decline in the number of small-scale and medium-scale millers
- only a small minority of firms have entered into export markets for sawn board products
- there is a backlog of technological innovation and a weak research and development base.

13.19 The range of products available, particularly for downstream processing industries such as furniture manufacture, has been limited. Prices paid have, nevertheless, been at more or less world parity levels. To a certain extent, consumers have, however, had the opportunity to use substitute (non-wood) products or imports.

13.20 With respect to competitiveness, sawmilling firms in South Africa compare unfavourably with international benchmarks in terms of profitability and value recovery from sawlogs and other resources. However, there is a wide range in performance within the sector and several firms are reversing past trends through investment in technology.

13.21 This situation stems mainly from the industry's historical development which saw it protected and isolated from overseas competition until 1990. Furthermore, a marketing cartel which existed from 1979 to 1988 fixed prices for sawn timber. These factors have contributed greatly to inefficiency although they were essentially independent of industry structure.

13.22 Access to the industry is relatively open in comparison to the pulp and paper industry, although the cost of capital, limited access to raw material, and regulation through the use of standards are factors that limit access to some extent. Opportunities do, however, exist for small-scale millers to assume a significant role within the sector.

Panel products

13.23 Production of wood-based panels in South Africa remains comparatively small. In terms of the industry's structure, it is significantly more concentrated than the sawmilling sector, although less so than the pulp and paper industry. The main features of this industry segment are:

- consumers' interests are not directly threatened by the ownership structure because, through the furniture and construction industry, there are opportunities for substitution of alternative products or imported material
- in terms of competitiveness, existing inefficiencies in the industry are the result of a protected domestic-market focus and not of the ownership structure as such
- there is, once again, a trade-off between ownership structure involving small business and scale-efficient international competitiveness.

Woodchips

13.24 The existing capacity for chip processing is divided between the Central Timber Cooperative (CTC) plant at Richards Bay (800 000 tonnes per year) and the Mondi-owned SilvaCel plant (700 000 tonnes per year). The main features of this ownership structure are:

- consumers' interests are not affected because the entire production is exported to Asian markets
- in terms of competition, CTC and SilvaCel successfully compete for fibre with other domestic fibre-consuming industries; this additional competition for fibre has tended to encourage roundwood prices to rise and has provided smaller, non-corporate growers with improved marketing opportunities for their timber

- the cooperative ownership structure of part of the processing capacity has enabled small-scale growers to enter a capital-intensive scale-economy industry. In addition, the cooperative nature of the growing sector has provided opportunities for greater involvement by emerging small-scale fibre producers, including those from previously disadvantaged groups.

13.25 The matter of adding value to these raw materials is addressed in Chapter 14.

Mining timber

13.26 The declining demand for mining timber makes it unlikely that producers can exploit monopoly power.

13.27 Substitution of wood with steel and concrete is evidence of competitive pressure on the industry. This is also being manifested in innovative combinations of wood with other materials and in efforts to improve efficiency.

13.28 There are opportunities for small-scale grower involvement in the production of mining timber. These are made attractive by short rotations, low processing requirements and the option to divert material to pulp processing if demand and prices dictate.

Wattle and charcoal industries

13.29 The wattle industry has been successful in challenging competing products in international markets. The broad ownership structure has not hindered international competitiveness.

13.30 Opportunities for wider access to small business exist at plantation level and in the processing of charcoal, rather than wattle bark.

Restructuring of State-owned assets

13.31 Through its shareholding in SAFCOL and its ownership and management of the plantations of the former homelands, government continues to play a major ownership role in the forest sector.

13.32 The White Paper on Sustainable Forest Development in South Africa affirms government's commitment to withdraw from this function, which is incompatible with the

regulatory and advisory role envisaged for government.

13.33 To be effective in contributing to the goal for the forest sector, restructuring must not only consider financial issues, but must also consider the wider impact of ownership and concentration on the forest sector. This is especially important in terms of SAFCOL and the resources of the former homelands which, together, supply over 60% of softwood sawlogs and 10% of sawmilling capacity.

13.34 The restructuring of SAFCOL, in line with the National Framework Agreement on Restructuring State Assets, is well under way and should be completed towards the middle of 1998.

13.35 Restructuring of the forest assets of the former homeland administrations is envisaged as a two-phase process. Phase I, the identification of strategic options for the resource, has just commenced and is expected to be completed by the end of 1997. Phase II, the implementation of restructuring options, should commence immediately thereafter and be completed within three years.

13.36 This process will be guided by the National Framework Agreement, current policies on competition and rural development, and the relevant Spatial Development Initiatives.

13.37 One outcome of the restructuring should be increased participation by previously disadvantaged groups, both in the ownership and management of industrial corporations that may arise, and through their being owners of a wider array of smaller businesses.

13.38 In the case of both SAFCOL and the forest assets of the former administration, government intends to give serious consideration to retaining land in public ownership.

Strategic actions

Goal

13.39 To establish the conditions that will ensure an ownership structure which leads to an efficient, sustainable and equitable forest

sector in South Africa, with enhanced opportunities for wider ownership, particularly by members of previously disadvantaged communities, and participation by small businesses.

Indicators of achievement

13.40 Achievement of the following would indicate progress towards the goal:

- reduced opportunities for the abuse of concentrated power by exposing companies to increased world or local competition
- roundwood prices that follow the market
- increased private fixed investment in forest and forest-product enterprises
- increased levels of efficiency and value adding within the forest-products sector

- easy access to the industry by small-scale producers (including outgrowers and contractors)
- increased employment of individuals from previously disadvantaged communities in management positions within the major companies
- increased participation of small businesses in the forest-products sector.

Strategy

13.41 Inform and lead debate about, and facilitate the focussing of, appropriate supply-side incentives to promote new investment in the forest sector that would result in new enterprises where ownership can be broadened.

Table 13.1: Strategy for achieving wider ownership and participation in the industrial forest sector

GOAL	To establish the conditions that will ensure an ownership structure which leads to an efficient, sustainable and equitable forest sector in South Africa, with enhanced opportunities for wider ownership, particularly by members of previously disadvantaged communities, and participation by small businesses.		
INDICATORS OF ACHIEVEMENT	<ul style="list-style-type: none"> • reduced opportunities for the abuse of concentrated power • roundwood prices that follow the market • increased private fixed investment in forest and forest-products enterprises • increased levels of efficiency and value adding within the forest-products sector • easy access to the industry by small businesses • increased representation in large companies by individuals from previously disadvantaged groups • increased participation of small businesses in the forest-products sector. 		
STRATEGY	Inform and lead debate about, and facilitate the focussing of, appropriate supply-side incentives to promote new investment in the forest sector that would result in new enterprises where ownership can be broadened.		
TASK	RESPONSIBILITY	TIMING	RISKS
1. Support research to evaluate optional industrial structures in terms of their technological and economic feasibility.	DWAF (with DTI, IDC, unions and industry)	Start: Apr 1997 End: Mar 1998	No risk.
2. Establish eligibility of the preferred options for supply-side incentives in terms of industrial policy; identify needed incentives and geographical focus.	DWAF (with DTI, IDC and industry)	Start: Jan 1998 End: Mar 1998	Industry may not be prepared to utilise incentives.
3. Complete the options study for the restructuring of the forest resources of the former homelands.	DWAF	Start: June 1997 End: Dec 1997	No risk.
4. Promote a favourable business model for the restructuring of SAFCOL.	DWAF	Start: July 1997 End: Nov 1997	No risk.
5. Implement the plan for the restructuring of the forest resources of the former homeland administrations.	DWAF (with Department of Public Enterprises and industry)	Start: Jan 1998 End: Mar 2001	No risk.
6. Establish and disseminate a plan to promote investment through appropriate means.	DWAF (with DTI, IDC and industry)	Start: April 1998 End: Mar 1999	Some stakeholders may not wish to participate.

14

Adding value to wood resources

What is the issue and why is it important?

14.1 Value addition involves increasing the value of a raw or partly processed product through processing it into a more valuable item.

14.2 Where the individual firm is concerned, *financial value addition* is the measure given to the increase in a product's value achieved through processing and after account has been taken of the goods and services used in its production. Such a measure may not be entirely relevant when viewed from the perspective of the country as a whole and the alternative uses to which resources could be put.

14.3 To address the public interest we need to approach value addition in terms of *net economic gain*. This measure indicates the benefit to the economy, in terms of new wealth, created through value-adding, relative to the alternative uses to which the resources could be put. In the South African context, the resources involved include labour, capital, water and land.

14.4 Financial value addition and net economic gain can diverge if an activity which is profitable for the individual company fails to achieve the same level of gain for the country. This could occur if processing in one sector uses more resources than would be necessary to achieve a similar level of new wealth in another sector.

14.5 Value addition creates employment, income and higher foreign exchange earnings.

It is, therefore, an important aspect of industrial development. Forest industries already make a very significant contribution to South Africa's economy. However, opportunities exist for further value addition which would offer significant benefits, namely:

- the opportunity to increase the industry's contribution towards national economic goals; particularly creating employment and building on South Africa's ability to produce wood cost-effectively
- the potential to further increase the industry's contribution to the national economy by generating greater gains per unit of scarce resources used, such as land, water and the environment.

14.6 The export of unprocessed logs or semi-processed forest products (woodchips and pulp) is often regarded as a missed opportunity to achieve further value addition and a greater net economic gain. Similarly, the apparent paradox of the South African industry's strategy of buying capacity overseas to effect-value addition to relatively unprocessed material has attracted attention and has been the focus of considerable debate.

PROBLEM STATEMENT:

Further opportunities exist to add value to the forest resources of South Africa to meet national economic goals and these are not, in all instances, being realised.

Policy context

14.7 The **White Paper on Sustainable Forest Development in South Africa** identifies value addition as an important means of enhancing the contribution of industrial forestry to the economy by achieving greater employment, increased foreign exchange earnings and well-paid employment.

14.8 The **RDP** identifies the necessity for an open, competitive industrial sector which competes in the global economy to generate wealth and well-paid employment. Within this context, the forest sector is identified as an important element that can contribute to economic opportunities.

14.9 The **Macro-economic Strategy** identifies rapid economic growth that generates employment as the cornerstone of reconstruction and development. For the industrial sector, this necessitates a policy of creating internationally competitive industries. Achieving this goal requires a shift of policy away from formerly applied "demand-side interventions" (such as tariffs and subsidies) which protected local industries at the expense of consumers, towards "supply-side measures" such as investment incentives and training designed to lower unit costs and encourage value addition.

Current setting

14.10 Generally, South Africa's forest industries are value-adding both in terms of financial value and net economic gain. The industries contribute around 8.1% to the country's manufacturing input and provide 4.7% of export earnings.

Pulp and paper

14.11 Considerable value addition occurs within South Africa's pulp and paper sector, although the industry continues to specialise in lower-value products such as pulp, newsprint and packaging papers, where wood fibre costs constitute a significant part of the overall product cost.

14.12 Paradoxically, the main producers are effecting value addition by transferring partly

processed raw material (pulp) from operations in South Africa to corporate divisions in other countries. Underlying this trend is a series of cost and market factors which have influenced investment decisions. These include:

- the high cost of capital in South Africa
- escalating tariffs which discriminate against the export of higher-value products
- the economies achieved by transporting bulk raw material, rather than finished products, to main markets
- the impact of tariffs on the cost of importing machinery and plant required in value-adding processing, a factor aggravated by the recent depreciation of the rand.

14.13 Reversal of this trend will require conditions which will encourage companies to invest in order to add value within South Africa.

Solid-wood products

14.14 In terms of solid-wood products, less progress has been made in value addition despite a high-quality raw material which could form the basis for a world-class industry producing a wide range of high-quality, high-value products.

14.15 Measures to support the industry, such as protection from imports until 1990, and the artificial suppression of raw material (roundwood) prices until 1993, have resulted in the creation of an inefficient industry which has failed to capitalise on factor cost advantages to the country's benefit.

14.16 Developing value addition further will depend on the establishment of conditions which encourage, or even require, value addition to ensure a firm's survival. These include the establishment of competitive market pricing for roundwood.

Downstream processing

14.17 A significant local value-adding furniture industry exists. The industry has, however, been constrained by the poor quality and relatively high cost of the inputs it uses, i.e. the outputs from the solid-wood primary processing sector, as well as the traditional concentration by the sawmilling sector on supplying the building industry.

14.18 The industry's long-term future will depend on its ability to enhance competitiveness in the face of likely rising raw material costs – previously its only significant cost advantage.

14.19 A number of important conclusions relevant to the development of value-adding industries in the South African forest sector can be drawn from other countries:

- the successful development of efficient processing industries depends on cost advantages and responsiveness to market demands
- industries which have been protected from international market pressures have generally failed to achieve international competitiveness; those that have participated in the world market demonstrate greater efficiency and competitiveness, e.g. the pulp and paper industry in South Africa
- efforts to stimulate domestic processing through penalising the export of raw or partially processed products (such as logs or woodchips) seldom succeed: the consequent distortion of factor costs (principally roundwood prices) protects the inefficient, often at significant cost to the wider economy
- such distorting of raw material costs discriminates against downstream processors, while the price incentive to engage in improved resource management and product development is similarly reduced.

Strategic actions

Goal

14.20 To create conditions that favour investment in forest industries so as to achieve the maximum net economic gain for South Africa, especially through the development of downstream processing of forest products in South Africa.

Indicators of achievement

14.21 Achievement of the following would indicate progress towards the goal:

- the establishment of a mix of forest industries which achieves the maximum net economic gain
- an increase in the net economic gain achieved by the forest sector
- an increase, where economically viable, in the proportion of wood which is locally processed and then exported
- successful competition of pulp, paper and wood products with imported products of the same kind
- increased investment in downstream processing of wood products.

Strategy

14.22 Monitor the use of wood from South Africa's industrial forests and influence trade and industry policies to favour appropriate investment in value-adding capacity within South Africa.

Table 14.1: Strategy for promoting value addition in the industrial forest sector

GOAL	Create conditions that favour investment in forest industries so as to achieve the maximum net economic gain for South Africa, especially through the development of downstream processing of forest products.		
INDICATORS OF ACHIEVEMENT	<ul style="list-style-type: none"> • a mix of forest industries which achieves the maximum net economic gain • an increase in the net economic gain achieved by the forest sector • an increase, where economically viable, in the proportion of wood which is locally processed and then exported • successful competition of pulp, paper and wood products with imported products • increased investment in downstream processing of wood products. 		
STRATEGY	Monitor the use of wood from South Africa's industrial forests and influence trade and industry policies to favour appropriate investment in value-adding capacity within South Africa.		
TASK	RESPONSIBILITY	TIMING	RISKS
1. Establish an improved system of monitoring roundwood prices, the level of value addition and the composition of international trade.	DWAF (with industry)	Start: Jan 1998 End: Dec 1998	No risk.
2. Establish and implement a system to monitor the establishment and durability of value-adding forest enterprises.	DWAF (with DTI, IDC, industry)	Start: Jan 1998 End: Dec 1998	No risk.
3. Commission research on the factors determining the viability of value-adding forest products.	DWAF (with DTI, IDC, industry)	Start: Jan 1998 End: Dec 1998	No risk.
4. Establish a basis for ongoing consultation on the application of trade and industry policy.	DWAF (with DTI, IDC, industry)	Start: Jan 1998 End: Dec 1998	No risk.
5. Communicate widely on progress achieved and the conditions for success.	DWAF (with DTI, IDC, industry)	Start: Jan 1998 End: Dec 1998	No risk.
6. Review the use and effect of instruments such as export taxes and the need and desirability of their application in South Africa.	DWAF (with DTI, IDC, industry)	Start: Jan 1998 End: Dec 1998	No risk.

15

South Africa's present and potential position in world trade in forest products

What is the issue and why is it important?

15.1 Over the last 20 years, South Africa has emerged as a significant player in the global forest sector. The forest sector currently contributes around 4.7% of South Africa's total export earnings, while export markets account for around 40% of the value of the industry's output and consume around 35% of annual roundwood harvested.

15.2 The increasing international focus of South Africa's forest industry means that the sector's future direction cannot be seen in isolation from international trends.

15.3 Global patterns of supply and demand for forest products are changing rapidly. These changes carry important implications for South Africa. Forest policy should reflect these changes if it is to serve the country's best interests.

PROBLEM STATEMENT:

The changing pattern of world trade in forest products presents valuable opportunities for the South African forest industry. If these are to be fully realised, concerted and harmonious policies and strategies must be put in place to exploit those opportunities.

Policy context

15.4 The **RDP** recognises that South Africa's industries are increasingly exposed to global market pressures. Trade policy aims to increase the level of manufactured exports and commits South Africa to continued participation in multilateral bodies which regulate trade, and to the steady liberalisation of trade in all sectors of the economy, as spelled out in the WTO agreement.

15.5 Within the **Macro-economic Strategy**, the government commits itself to pursuing employment through creating internationally competitive industries. This should be achieved by shifting from demand-side interventions, such as tariffs and subsidies, to supply-side measures designed to lower unit cost and expedite progress up the value chain.

15.6 The **White Paper on Sustainable Forest Development in South Africa** recognises the significant contribution made by forests and forest products to export earnings and it undertakes to foster competitiveness of the forest sector, both locally and internationally, within the bounds of acceptable environmental and social costs.

Current setting

15.7 South Africa accounts for less than 0.1% of the world's total forest resources and for around 0.7% of the world's roundwood

production. However, South Africa's pulp and paper industry is relatively more significant than these initial figures would suggest. Pulp production of 2.2 million tonnes in 1995 represented around 1.2% of world production and places South Africa as the world's twelfth largest producer. South Africa is the world's largest producer of dissolving pulp. Paper production of 2 million tonnes in 1995 represented around 0.7% of world output.

15.8 In terms of other forest products, principally sawn timber and wood-based panels, South African production remains relatively small.

15.9 As a result of rapid development of the pulp and paper sector in the 1980s, South Africa's long-term trade deficit in forest products has been reversed. The country now enjoys a positive balance of trade in forest products, and this stood at around R2 billion in 1995. Imports of forest products amounted to around R2.8 billion in 1995 and comprised mainly paper products (R1.9 billion) and sawn hardwood (R0.5 billion). Exports of R4.8 billion in 1995 were largely made up of pulp and paper (46% and 33% of total exports respectively). Woodchip exports (at around R0.5 billion), wattle extract and wooden furniture were the only other significant exported forest products. Sawlogs are now also being exported, but the volume and value of the trade remain relatively small.

15.10 In terms of international competitiveness, South Africa enjoys a number of cost advantages:

- the low cost of wood fibre, which provides the fundamental basis of South Africa's competitive position
- low local energy costs
- relatively low human resources costs, although some of this advantage has been eroded due to recent wage increases and slow productivity improvement.

15.11 The industry, however, faces a number of cost disadvantages:

- the high cost of capital equipment due to the imposition of tariffs on capital goods and the recent depreciation of the rand

- high finance ("borrowing") costs. These are at least 6% higher in real terms than those of competitor countries and have a significant impact on the continued viability of capital-intensive industries such as pulp and paper production
- relatively high transport costs arising from tariff protection on motor vehicles and which increase the cost of access to overseas markets.

5.12 New supply-side incentives have, however, helped to mitigate these factors and lower the cost of investment.

15.13 In comparison with other sectors in South Africa, the forest industries have enjoyed relatively low levels of tariff protection (around 7% overall). The Uruguay Round of negotiations within the WTO has resulted in South Africa's agreeing to further reduce tariffs on pulp and paper products and to bind tariffs on other products to agreed levels. This latter factor is, however, unlikely to have any real significance as the agreed binding levels are often above tariff rates currently in force.

15.14 The anticipated impact of the Uruguay Round on world trade is expected to be small. Projections suggest that it will result in an increase of around only 0.4% of the value of the total 1991 forest product imports. A major factor limiting the gains from the Uruguay Round is that most tariff levels were already very low. The impact for South Africa is believed to be negligible.

15.15 The global demand for forest products is expected to grow at up to 3% per year over the next 20 years. This reflects continued population growth and significant increases in wealth in large populous countries, particularly China. Estimates of future roundwood consumption to the year 2020 vary from 0 to 25% above existing levels.

15.16 Estimates of future supply also vary. This reflects uncertainties regarding the likely impact of environmental exclusion from forest areas, the impact of political instability on forest resources of the former Eastern Bloc, the uncertainty of future supplies from traditional South-East Asian sources and the uncertain extent of plantation development worldwide.

15.17 While projections of supply and demand may vary, all estimates point to increasing tightness in supply, with the possibility of acute shortages in particular regions, notably North America, China and possibly South-East Asia. Consequently, the present direction of world trade in forest products is likely to change to reflect regional supply and demand imbalances. Real prices for forest products can also be expected to rise.

15.18 While much clearly depends on domestic developments in the sector and the extent to which they affect South Africa's competitive position, the consequences of these developments for South Africa as an inherently competitive and efficient producer of wood fibre are essentially positive.

15.19 New and expanded export opportunities are likely to emerge within the Pacific Rim, which South Africa is geographically well placed to serve. However, if present worldwide trends continue, it is unlikely that this global demand will be for finished products. Demand will rather be for semi-finished products, such as pulps, to supply value-adding industries in the main consuming countries.

SADC

15.20 South Africa's trade with SADC countries is small at present, but it has the potential to increase significantly. Growth in this market could be rapid but it is largely dependent on economic developments in these countries.

15.21 Other SADC countries (particularly Angola and Mozambique) have the potential to supply wood fibre and to support processing capacity to meet the needs of South Africa's forest products industries, and South African companies are already investing in plantation establishment in surrounding countries. The full extent of this potential will, however, depend on cost factors, especially transport.

15.22 A long-term vision of SADC regional development would, however, suggest that

South Africa could increasingly be importing processed and semi-processed forest-based products from neighbouring countries to meet future demand. The pattern of development in processing capacity in the SADC region will depend on access to raw materials and the investment climate within each country. South African forestry companies could play a major role in this regard. In addition, SADC countries may, in future, work more closely to develop a common marketing strategy for exporting products from the region.

Strategic actions

Goal

15.23 To put in place the conditions that would assist the sector to realise its full potential in the global market, within the constraints of acceptable social, economic and environmental bounds.

Indicators of achievement

15.24 Achievement of the following would indicate progress towards the goal:

- increased private fixed investment in export-oriented forest-products enterprises
- coherent views among stakeholders (i.e. national government, parastatals such as NPI and IDC, the private sector and others) for the necessary conditions to assist the sector
- the development of value-adding enterprises to participate and compete in world markets
- continued deregulation of the economy
- emergence of a regional (SADC) market for forest products.

Strategy

15.25 To facilitate the alignment of South Africa's forest industries to the regional (SADC) and global forest products markets through improved intelligence and active engagement in trade negotiations and marketing agreements.

Table 15.1: Strategy for assisting South Africa's industrial forest sector to realise its full potential in global markets

GOAL	To put in place the conditions that would assist the sector to realise its full potential in the global market, within the constraints of acceptable social, economic and environmental bounds.		
INDICATORS OF ACHIEVEMENT	<ul style="list-style-type: none"> • increased private fixed investment in export-oriented forest-products enterprises • coherent views among stakeholders for the necessary conditions to assist the sector • the development of value-adding enterprises to participate and compete in world markets • continued deregulation of the economy • emergence of a regional (SADC) market for forest products. 		
STRATEGY	To facilitate the alignment of South Africa's forest industries to the regional (SADC) and global forest products markets through improved intelligence and active engagement in trade negotiations and marketing agreements.		
TASK	RESPONSIBILITY	TIMING	RISKS
1. Gather and disseminate information concerning the global forest-products market.	DTI (with industry and DWAF)	Ongoing	No risk.
2. Inform and actively promote the South African forest-products industry in overseas markets.	DTI and industry	Start: Jan 1998 Ongoing	South African producers do not meet demands of overseas markets.
3. Inform policy debate and negotiations concerning trade treaties and agreements.	DWAF (with DTI and industry)	Start: Jan 1998 Ongoing	The interests of the forest sector differ from, and are accorded less importance than, those of other sectors in negotiations.
4. Identify specific product opportunities for South African producers.	DTI and industry	Start: Jan 1998 Ongoing	South African producers unable/unwilling to respond to new market opportunities.
5. Promote rapid development of skills in industries, or clusters of industries, with good export potential.	DWAF, DTI, industry	Start: Jan 1998 Ongoing	No risk.
6. Harmonise supply-side measures focussed on forest-based enterprises.	DWAF (with DTI and industry)	Start: Jan 1998 Ongoing	Industry fails to take advantage of new supply-side incentives.
7. Establish SADC inter-governmental forum for the promotion of regional forest-sector coordination.	DWAF (with DTI, DFA, industry)	Start: Jan 1998 End: Dec 1999	Other governments do not cooperate.

16

The contribution of industrial forestry to rural development

What is the issue and why is it important?

16.1 The majority of the poor in South Africa live in rural areas under conditions of extreme hardship and livelihood insecurity, often with a lack of access to basic social services, housing and the means to support themselves and their families.

16.2 The forest sector provides employment for over 110 000 people, mostly in rural areas. While the development of the sector has generated significant benefits for local people, it has also entailed certain social costs. These include loss of access to land and water resources in many places.

16.3 The relationship between industrial forestry enterprises and rural stakeholders has, on occasion, been characterised by mistrust and conflict, resulting in damage to property and reduced productivity. Continued develop-

ment of the sector depends critically on resolving conflict on this land and accommodating the needs and aspirations of all stakeholders.

16.4 Certain members of the working group which addressed this issue objected to its inclusion in the NFAP. They hold the view that it receives sufficient attention in other policy processes such as the Land Reform Programme. This was reiterated during the round of consultative workshops by participants from industry. It has, nevertheless, been included here because:

- there are opportunities for progress in the sector if the issue is addressed effectively
- the White Paper adopts a holistic approach to sector development and includes this issue because many stakeholders have been concerned that it should be addressed.

Policy context

16.5 The **White Paper on Sustainable Forest Development in South Africa** notes the forest industry's significant contribution to rural economic development. While the industry's need to remain competitive is acknowledged, this should be achieved within acceptable social costs.

16.6 The **White Paper on Rural Development** sets out a bold vision for rural South Africa in which the present reality,

PROBLEM STATEMENT:

The sustainable and equitable development of the industrial forestry sector requires that the aspirations and rights of rural stakeholders be recognised. At present, this does not occur in all cases.

characterised by poverty, inequality and poor services, is transformed into a future of growth, dignity and prosperity. Large commercial rural industries (such as forestry) have a role to play in achieving this.

16.7 The **Land Reform Programme** provides an enabling and regulatory framework to empower claimants to, and current owners of land to develop local solutions for conflicts over access to land and other resources. State land is earmarked to be employed in this Programme. The land, currently administered by DWAF and previously in the hands of the administrations of the former homelands, is relevant here.

16.8 The **White Paper on Agriculture** recognises that agriculture's potential for broadening economic and social options for rural people has not been fully realised. This largely reflects the sector's present structure which is characterised by inequality in terms of access to land, ownership and participation. The paper provides a vision of a market-driven, efficient agricultural sector to be achieved through a policy of broadening access to the farming sector through land reform and targeting assistance and financial support at the resource poor.

Current setting

Land claims and disputes

16.9 Lack of access to land and its benefits, and insecurity of tenure, are major causes of rural poverty and instability. Expansion of the forest industry has had negative impacts on rural communities in relation to these land related issues.

16.10 The number of land claims relating to forestry land is unknown. It is, however, in the interests both of current owners of forestry land and claimants to enter into negotiations in order to arrive at mutually acceptable and beneficial solutions. The Land Reform Programme aims to provide legislative, financial and administrative support for the resolution of land claims, but it will still take time to become fully operational.

16.11 Several land claims have been lodged on land within the forest assets of the former homeland administrations. An unknown number relate to State land held by SAFCOL.

Security of tenure

16.12 Many forest estates had labour tenant communities in residence when the land was bought. In some instances, forest owners attempted to evict labour tenants, thereby creating a climate of mutual distrust which persists to this day. Labour tenants are now protected by the Labour Tenants Act.

16.13 In addition, many families who are not labour tenants currently reside on industrial forestry land and may be vulnerable to eviction.

16.14 There are, however, two notable documented cases where forestry companies reached negotiated settlements with labour tenants. These provide examples of how conflicts can be resolved through agreeing upon terms for access to the benefits of resources available on forest land, without necessarily having to transfer ownership of the land itself.

16.15 There is currently limited legislation protecting occupants other than employees and labour tenants. The Extension of Security of Tenure Bill (published January 1997) seeks to provide security to people, other than employees or labour tenants, who occupy land. The forest industry has joined organised agriculture in opposition to the Bill.

Access to land

16.16 Considerable scope exists for forestry companies (including the State in the case of the former homelands) and rural communities to reach agreements allowing controlled access to arable land, grazing and other natural resources, which benefit both parties and reduce conflict. These include access to arable land for, for instance, groundnut cultivation in newly established compartments, livestock grazing on forestry land, and access to firewood and other forest products.

The role of women

16.17 In rural areas women outnumber men and collectively constitute the principal force

for development. They are already thoroughly engaged in the forest sector, e.g. as outgrowers and employees. However, their situation is often insecure and their influence marginalised. This needs to be changed.

Impact on water resources

16.18 Plantation establishment can result in reduced streamflow, affecting communities downstream. The revised afforestation permit system and the new national water policy will have implications for disputes between the forest industry and communities over water usage. In some cases, forest owners have invested in rural water supplies in mitigation of reduced streamflow, but these cases are rare.

Enterprise development

16.19 The forest sector already provides significant direct employment. In addition to this, the industry can play a proactive role in support of improved rural livelihoods through providing access to new business opportunities and through sharing equity.

16.20 The forest industry provides rich opportunities for the emergence of a wide range of small, medium and micro-enterprises (SMMEs). There are several recent and ongoing initiatives by forestry companies to do this. Promotion of forest-based SMMEs by the forest industry should be linked up with national SMME support programmes of the DTI.

Outgrowers and contractors

16.21 Large processing companies are increasingly sourcing timber from independent small-scale growers, in addition to their own resources. The large companies have all stepped up their support for small-scale individual growers and communal property associations which have potential to make a significant contribution to rural development (see Chapter 17).

16.22 The forest services contracting sector has grown rapidly, but few of these firms are black-owned. Some large timber companies do have affirmative contracting policies.

16.23 There is some concern among stakeholders that employment conditions and

labour relations are worse for individuals within contracting companies than when working directly for large companies. It is the policy intention, therefore, that new small, medium and micro-enterprises created in the forest sector be viable businesses which meet adequate employment standards, as would be applied elsewhere in the industry.

Equity sharing and joint ventures

16.24 Equity sharing and joint ventures are mechanisms for enabling partnerships to adjust the unequal distribution of wealth, land and capital between the large business and farming sectors and economically marginalised communities and individuals. Several examples of such ventures already exist.

16.25 Many of the assets of the former homeland administrations could qualify for such local business arrangements.

Wider social impacts

16.26 By virtue of their location in rural areas and the presence of rural communities, both on their land and in adjacent areas, forestry operations make a positive contribution to social conditions, but can also have negative impacts.

16.27 All the major forestry companies have social responsibility programmes targeting families of employees and communities living in and around plantations. These include literacy programmes, support to schools and clinics, and sponsoring paper for printing of textbooks. Many farmers contribute to social upliftment in similar ways.

Increasing social and ethical responsibility

16.28 Mechanisms exist to promote greater social and ethical responsibility on the part of forest owners. These include certification and social auditing. Initiatives are under way by the Institute for Social and Ethical Auditing (ISEASA) to develop social auditing in South Africa. The social criteria and indicators which could be applied to systems for sustainable forest management are being addressed within the certification debate.

16.29 Grants, services and legislation provided by DLA and the Department of Housing can be used to promote, enable and, if necessary, enforce improved ethical behaviour and social responsibility in land-holding rural enterprises.

Strategic actions

Goal

16.30 To maximise the contribution of the forest sector to increased stability and prosperity in rural areas, through local economic development, favourable resolution of land claims and other land-reform issues, and improving access of rural dwellers to development opportunities based on the forest sector.

Indicators of achievement

16.31 Achievement of the following would indicate progress towards the goal:

- agreement between stakeholders on the need for a shared-responsibility approach to conflict resolution
- agreed identification of the impediments to

achieving an improved contribution of the forest sector to rural economic development

- an agreed understanding among stakeholders of the costs of conflicts and the benefits of negotiated settlements
- increased security of tenure for legal occupants of forestry land
- claims to forestry land are speedily resolved, based on out-of-court settlements between the parties where possible
- agreed voluntary guidelines for the provision of services by forest companies
- best development of the forest resources of the former homeland administrations
- increased numbers of SMMEs associated with the forest industry and small-scale growers (including contractors)
- multiple resource-use opportunities on forestry land identified and implemented.

Strategy

16.32 To disseminate and promote successful ways of resolving conflict; to direct restructuring of State forest assets so that maximum benefit is gained, and to facilitate conflict resolution on request.

Table 16.1: Strategy for facilitating progress in maximising the socio-economic contribution of the forest sector to rural development

GOAL	To maximise the contribution of the forest sector to increased stability and prosperity in rural areas, through local economic development, favourable resolution of land claims and other land-reform issues, and improving access of rural dwellers to forest sector-based development opportunities.		
INDICATORS OF ACHIEVEMENT	<ul style="list-style-type: none"> • agreement between stakeholders on the need for a shared-responsibility approach to conflict resolution • agreed identification of the impediments to achieving an improved contribution of the forest sector to rural economic development • an agreed understanding among stakeholders of the costs of conflicts and the benefits of negotiated settlements • increased security of tenure for legal occupants of forestry land • claims to forestry land are speedily resolved, based on out-of-court settlements between the parties where possible • agreed voluntary guidelines for the provision of services by forest companies • best development of the forest resources of the former homeland administrations • increased numbers of SMMEs associated with the forest industry • multiple resource-use opportunities on forestry land identified and implemented. 		
STRATEGY	Disseminate and promote successful ways of resolving conflict, direct restructuring of State forest assets so that maximum benefit is gained, and facilitate conflict resolution on request.		
TASK	RESPONSIBILITY	TIMING	RISKS
1. Establish a database of forest sector related land claims, in collaboration with the Department of Land Affairs, and monitor progress.	DWAF, DLA	Start: Jan 1998 End: Mar 1999	No risk.
2. Complete the options study for the forest resources of the former homeland administrations, and complete restructuring.	DWAF, Department of Public Enterprise	Start: June 1997 End: Mar 1999	No risk.
3. Document and communicate success models for the resolution of land issues.	DWAF	Start: Jan 1998 End: Dec 1998	Lessons learnt may not be applicable to other situations.
4. Document and communicate optional enterprise-development models relevant to the forest sector, e.g. various forms of joint business ventures.	DWAF, DBSA, DTI and others	Start: Jan 1998 Ongoing	(i) Parties are not interested in adopting such models. (ii) Lessons learnt may not be applicable to other situations.
5. Establish agreed voluntary guidelines defining the services provided by companies to communities.	DWAF (with NGOs, CBOs, industry)	Start: Jan 1998 End: Dec 1998	Some companies do not participate, or fail to apply guidelines.

17

Timber farming: increasing the contribution by small-scale growers to timber production

What is the issue and why is it important?

17.1 The term “small-scale grower” is used to describe the non-corporate private growers of forests who grow trees commercially, both on privately owned and on communal land. At present, this sector consists predominantly of well-established white small-scale growers. However, emergent growers from previously disadvantaged communities are entering the sector increasingly, and support to these emerging growers is the focus of this chapter.

17.2 The small-scale grower sector is dominated by private landholders who are successful, well-organised and influential players in the forest industry. They provide a significant proportion (around 20%) of the national supply of timber and bark products, while contributing to job creation and livelihoods.

17.3 In addition, over the last ten years, there has been a rapid increase in the plantation area in communal areas, mainly as a result of support offered by the private sector.

17.4 The Land Reform Programme will open up new opportunities for black land ownership, and small-scale grower forestry is an important land-use option in many districts.

17.5 Throughout the consultations in the development of forest policy, representatives of

previously disadvantaged rural communities expressed the need for commercial opportunities in the forest sector.

PROBLEM STATEMENT:

Opportunities exist for small-scale growers to increasingly participate in the production of wood. In order to realise these opportunities, there is a necessity for greater understanding of the factors which inhibit or promote small-scale grower involvement.

Policy context

17.6 The **White Paper on Sustainable Forest Development in South Africa** suggests that the ownership base of the forest industry should be broadened through the introduction of incentives and through minimising barriers to entry. The potential role of the forest sector in providing economic opportunities in impoverished rural areas is clearly recognised.

17.7 The **White Paper on Agriculture** emphasises the need to broaden economic and social options to the rural poor by providing targeted assistance for rural activities such as forestry.

17.8 The **Land Reform Programme** provides a basis for land acquisition by blacks and for upgrading of security of tenure. These are clear prerequisites for the expansion of black small-scale growers.

17.9 The **White Paper on the Development and Promotion of Small Businesses** seeks to create an enabling environment for small business enterprises.

17.10 The **White Paper on a National Water Policy for South Africa** provides that allocation of water uses must be according to the policy of optimum water use, i.e. allocation that achieves equitable and sustainable economic and social development. This White Paper identifies afforestation as requiring licensing and being subject to charges, the "interception levy", which should cover water resource management costs, and a resource conservation charge for each relevant catchment. The White Paper also provides for the integration of the afforestation permit system into the new water resource allocation system. This new policy direction applies to small-scale and large-scale growers.

Current setting

Organisations supporting small-scale growers

17.11 A number of successful organisations represent the interests of the independent timber growers and provide comprehensive support services:

- The **South African Timber Growers Association (SATGA)** which, in March 1996, had 1 310 members owning a total of 248 307 hectares of plantations. SATGA's main function is to play a policy-level advocacy role on behalf of its members. The Forestry Training Service (FTS), based in Baynesfield, was established to provide training for small-scale timber growers under SATGA's auspices. Although still largely representative of independent established farmers, SATGA's services are available to the new emergent tree-growing sector.
- The **South African Wattle Growers Union (SAWGU)** which, in March 1997, had 2 800

members who owned a total of 130 000 hectares. SAWGU supports the growing of wattle plantations and manages the marketing and processing of wattle bark country-wide. SAWGU has a high proportion of black members who are represented throughout the management and decision making structures.

- The **NCT Forestry Cooperative** is the largest timber-marketing cooperative in the country with nearly 1 400 members. Its main role is to provide marketing services to its members, as well as technical and financial assistance.
- The **Central Timber Cooperative (CTC)** was established to secure export markets for small-scale growers as an alternative to the market provided by the corporate processors. CTC has a wood-chipping plant at Richards Bay supplying woodchips to Japan, Taiwan and Finland.
- The **Forest Owners Association (FOA)**, which, although it represents corporate growers, provides funding for essential industrial activities such as research, education and training, which are of benefit to all elements of the industry.
- The **Transvaal Wattle Growers Cooperative (TWK)** is active in Mpumalanga and northern KwaZulu-Natal, providing similar services to those of NCT.
- **Corporate support.** Sappi directly supports small-scale growers through its *Project Grow* outgrower scheme and indirectly through its support to the Lima Foundation in KwaZulu-Natal, as well as other outgrower schemes outside the homelands. Mondi also operates outgrower schemes such as *Khulanathi* in KwaZulu-Natal. Both Sappi and Mondi are considering entering into joint-venture or equity-share schemes to support small-scale growers in the former Transkei.
- **DWAF.** While support to industrial (white) forestry extension formally ceased in 1992, DWAF's community forestry services provide active support to emergent black small-scale growers.

Trends in small-scale grower production

17.12 Estimates of changes in the relative contributions of large and small-scale

producers in recent years vary between those provided by SATGA and official DWAF statistics. In broad terms, however, around 20 to 25% of the forest resource is owned by small-scale growers, mostly private land holders.

Participation of black growers

17.13 Within the areas of the former homeland administrations, there has been a rapid increase in the numbers of individual growers over the last ten years as a result of market opportunities, the support offered by organisations such as SATGA and SAWGU, timber company outgrower schemes and the initiative of forestry extension staff. Most of this recent development has occurred in eucalypt growing.

Timber outgrower schemes

17.14 Sappi and Mondi support contract tree farming by providing planting material, extension advice and advance payments at favourable interest rates to cover labour costs during the growing period of the trees. By agreement, the grower must sell the first crop to the company, and the costs of inputs, with interest in most cases, are deducted from the price paid for the timber. Thereafter, the grower has no further obligations unless a new contract is agreed on involving similar support from the company. Of particular importance is the supply of credit and marketing services to growers.

17.15 A number of concerns regarding this development require attention, however:

- that afforestation may expand in areas where other forms of land use may be more beneficial if comparable levels of support were available
- that tree planting may interfere with existing access rights by other stakeholders to land
- that small-scale growers are in a weak position to negotiate timber prices and other conditions of contract
- that the terms of the agreements may result in growers becoming dependent on the larger companies
- that the cumulative effect of large numbers of small plantations on water supplies may be significant

- that corporate support of outgrowers may be a means for the larger companies to circumvent restrictions on new afforestation.

Economic viability of small-scale grower forestry

17.16 Financial viability and profitability of small-scale grower forestry is critically dependent on prices, wood yields and the time within which returns are realised. These factors tend to make small-scale grower production more attractive in high-potential forestry areas.

17.17 The reduction of price support and tariff protection to certain commodities (most notably sugar) is likely to increase the attractiveness of small-scale grower forestry in a number of areas.

Influence of the changing policy environment

17.18 The recent political changes in South Africa have ushered in a host of opportunities for independent individual growers and communities to become involved in commercial forestry.

17.19 The Land Reform Programme will enable families and communities to gain access to land suitable for forestry through restitution, redistribution, tenure reform and joint ventures such as equity-sharing schemes.

17.20 The restructuring of State forest assets (both of SAFCOL and the former homeland administrations) also provides important opportunities for the expansion of the small-scale grower sector.

17.21 There is significant potential for expansion of small-scale growers, particularly in the former Transkei. Sappi and Mondi are currently negotiating with communities to establish new ventures, and support may have to be provided for intermediation in negotiations.

17.22 Before these projects can go ahead, it is necessary to clarify land ownership, resolve all conflicting claims to land, and upgrade tenure security. Policies and procedures for these are still being developed under the umbrella of the tenure reform programme of the Department of Land Affairs.

Strategic actions

Goal

17.23 To promote maximum participation by emerging independent, small-scale growers in the production of wood and other forest products, within acceptable social and environmental constraints.

Indicators of achievement

17.24 Achievement of the following would indicate progress towards the goal:

- greater understanding within the sector of the opportunities for, and constraints on, wider participation by small-scale growers
- increased numbers of independent small-scale growers involved in the production of wood and other forest products
- greater bargaining power and improved marketing arrangements for small-scale

growers (e.g. through the formation of cooperatives or similar associations)

- a wider range of financing options for small-scale growers
- tailored support services being accessed by small-scale growers
- complementarity between government and the private sector in providing support services to small-scale growers
- government and private-sector resources aligned with the provision of support services to small-scale growers.

Strategy

17.25 To supplement the implementation of existing national policy relating to the promotion of emergent farmers and of SMMEs with measures which provide a stronger enabling environment for small-scale growers in the forest sector.

Table 17.1: Strategy to promote the participation of small-scale growers in the forest sector

GOAL	To promote maximum participation by emerging independent, small-scale growers in the production of wood and other forest products, within acceptable social and environmental constraints.		
INDICATORS OF ACHIEVEMENT	<ul style="list-style-type: none"> • greater understanding within the sector of the opportunities for, and constraints on, wider participation by small-scale growers • increased numbers of independent small-scale growers involved in the sector • greater bargaining power and improved marketing arrangements for small-scale growers • a wider range of financing options for small-scale growers • tailored support services being accessed by small-scale growers • complementarity between government and the private sector in providing support services to small-scale growers • government and private-sector resources aligned with the provision of support services. 		
STRATEGY	To supplement the implementation of existing national policy relating to the promotion of emergent farmers and of SMMEs with measures which provide a stronger enabling environment for small-scale growers in the forest sector.		
TASK	RESPONSIBILITY	TIMING	RISKS
1. Identify all service providers in relevant provinces, which have the potential to support small-scale growers (including private sector, cooperatives, government, NGOs, CBOs).	DWAF (with NGOs, CBOs, industry)	Start: Jan 1998 End: Dec 1998	No risk.
2. Identify roles and responsibilities of service providers based on comparative advantage and complementarity.	DWAF (with NGOs, CBOs, industry)	Start: Jan 1998 End: Dec 1998	No risk.
3. Participatory planning with small-scale growers to identify: <ul style="list-style-type: none"> • constraints and opportunities • requirements in terms of support services. 	DWAF (with small-scale growers, NGOs, CBOs and industry)	Start: Jan 1998 End: Dec 1998	Constraints cannot be removed or significantly alleviated.
4. Equip the national forest authority with the necessary resources in terms of budget, skills and staff numbers to support emergent growers.	DWAF	Start: Jan 1998 End: Dec 1998	Central government finances are not available.
5. Review Chief Directorate: forestry structure to ensure its capacity to fulfil its mandate.	DWAF	Start: Jan 1998 End: Dec 1998	No risk.
6. Pilot the integrated delivery of support services tailored to meet small-scale grower needs.	DWAF (with small-scale growers, NGOs, CBOs and industry)	Start: Aug 1998 Ongoing	Lessons learnt cannot be applied elsewhere.
7. Identify candidate districts for promotion of small-scale growers through forest-sector strategic environmental assessments.	DWAF (with provincial government and industry)	Start: Jan 1998 End: Dec 1998	No risk.
8. Identify unnecessary constraints to small-scale grower development, as well as unnecessarily high transaction costs, and implement solutions.	DWAF (with small-scale growers, provincial government and industry)	Start: Jan 1998 End: Dec 1998	Unnecessary constraints do exist.
9. Establish a forum to support the small-scale grower sector through, for example, commissioning research into smoothing income flows during plantation establishment.	DWAF (with small-scale growers, cooperatives and industry)	Start: Jan 1999 Ongoing	Important stakeholders may not be willing to participate.

18

Timber standards: their use and purpose

What is the issue and why is it important?

18.1 Product standards are quality performance criteria enforced to protect consumers from sub-standard products. The existing Forest Act enforces the use of product standards relating to structural lumber grades (the strength of timber) and the preservative treatment of timber.

18.2 Considerable public debate has been conducted, questioning the relevance of these standards in relation to the needs of the majority of South Africans. It is felt by some that they may play a part in unnecessarily restricting entry into the market, particularly for small businesses. Others, however, maintain that their retention is essential for the protection of consumers' interests.

PROBLEM STATEMENT:

Existing timber standards and the method of their enforcement are being questioned. They may be increasingly irrelevant to the needs of a large proportion of consumers and producers and may inhibit the development of the forest products sector, specifically with a view to new entrants.

Current setting

18.3 The introduction of formal grading standards for structural lumber and wood preservation evolved in the 1940s and 1950s as a consequence of the poor quality of South African sawn timber at that time. These legally enforced measures were largely successful in improving both the quality and reputation of South African products. Standards are determined by the South African Bureau of Standards (SABS) and enforced by the Department of Water Affairs and Forestry (DWAF) through the Forest Act.

18.4 A number of issues have subsequently emerged which challenge both the value of having standards and the merit of their legal enforcement. These include:

- the relevance of a single set of relatively sophisticated standards for a diverse range of end-users who may not all demand, or require, the same standard level
- the rationale of demanding high quality standards for wood products when substitute non-wood products are exempt from similar standards
- the possibility that self-regulation may be a more efficient and appropriate means of maintaining standards and protecting customers
- the potential unconstitutionality of the Forest Act, which, as it stands, prevents anyone

from legally buying or selling “treated timber” without an SABS mark

- the potential barrier to entering the market, due to the cost and difficulty of achieving compulsory standards. This factor possibly conflicts with objectives of extending participation in the sector
- the high cost, inconvenience and relevance of the current restrictions on treated timber to all timber sold, irrespective of the importance of treatment for its use
- the appropriateness of having forest product standards within forest legislation.

18.5 In moving towards an appropriate standards policy, the following key questions need to be addressed:

- how can standards be made to meet different levels of need in a society as diverse as South Africa’s?
- should standards be compulsory?
- how should standards be enforced?
- who should enforce standards?

- is the Forest Act the best vehicle through which to enforce standards?

Strategic actions

Goal

18.6 The development of a set of product standards that meets the needs and aspirations of all facets of South African society with minimum State intervention.

Indicator of achievement

18.7 Agreement between stakeholders on acceptable standards and the means of their enforcement would indicate progress toward meeting the policy goal.

Strategy

18.8 Establish a means to reach agreement between all stakeholders on an appropriate system and a means of enforcing product standards.

Table 18.1: Strategy for the development of appropriate timber-products standards for South Africa

GOAL	The development of a set of product standards that meets the needs and aspirations of all facets of South African society with minimum State intervention.		
INDICATOR OF ACHIEVEMENT	Agreement between stakeholders on acceptable standards and the means of their enforcement.		
STRATEGY	Establish a means to reach agreement between all stakeholders on an appropriate system and a means of enforcing product standards.		
TASK	RESPONSIBILITY	TIMING	RISKS
1. Establish a timber products standards working group, drawing in all relevant parties.	DWAF (with SABS, trade representatives)	Start: Jan 1998 End: Dec 1998	No stakeholders willing to participate.
2. Undertake research to determine consumers' preferences and requirements for product standards.	DWAF (with SABS, trade representatives, consumer groups)	Start: Jan 1998 End: Dec 1998	No risk.
3. Undertake research to determine the impact of compulsory standards on the access of SMMEs to the market.	DWAF (with SABS)	Start: Jan 1998 End: Dec 1998	No risk.
4. Identify and review (drawing upon relevant local and international experience) the alternatives to compulsory standards.	DWAF (with SABS)	Start: Jan 1998 End: Dec 1998	Alternatives which are suitable and applicable to South Africa may not exist.
5. Retain the provisions for standards within the Forest Act initially and determine best statutory arrangements after steps 1-4.	DWAF (with SABS)	Start: Jan 1999 End: Dec 2000	No risk.

19

Strategy for human resources and employment in the forest sector

What is the issue and why is it important?

19.1 People manage and deliver the goods and services yielded by the forest sector. To be competitive, any economic sector needs to attend to the development of its employees. The latest information commissioned for the purposes of the NFAP indicates that the industrial forest sector in South Africa employs the equivalent of about 61 500 full-time staff in the primary sector (growing and harvesting trees), of which approximately 25 250 are contract employees. An additional 50 000 are employed in the processing industries (sawmilling, pulp and paper, mining timber and poles, and board products). This information is summarised in Table 19.1.

19.2 This survey did not include employment in services such as timber transportation from forest to processing plant. Consequently, employment directly dependent on the sector has been underestimated, possibly by around 10 to 15%.

19.3 South Africa's policies for employment, labour relations and human resources development all place an onus on each sector to establish its own arrangements, standards and procedures to meet the objectives of these laws and policies. These policies, in turn, are cast within the framework of the RDP and the

Table 19.1 Employment in the forest sector

Forest-products segment	Total equivalent full-time employment
Primary forestry	61 550 ¹
Sawmilling	23 000
Pulp and paper	13 000
Mining timber and poles	7 000
Board products	7 000
Total	111 550

Source: LHA (1997)

¹ The actual number of people involved in primary forestry exceeds 61 550. Many are involved only part-time. Employment figures are therefore reflected as equivalent to full-time employment.

Growth, Employment and Redistribution Strategy for the country, and are thus designed to support overall national goals.

19.4 The much lower level of employment now reported, relative to previous estimates, reflects either inaccuracy in previous estimates or a trend towards capital and technology-intensive operations in the sector.

19.5 The outlook for growth in the forest sector in South Africa will depend on the comparative advantages it will offer, relative to other sectors. The relative rate at which the

sector can create rewarding new jobs and contribute to a skilled, flexible workforce, will weigh strongly in the balance.

19.6 The state of employment and skills varies enormously across the sector. Employees within the larger companies are relatively well served in these respects; those on farms and in forestry contracting firms less so.

19.7 Consistently, throughout the process of developing forest policy and the NFAP, representatives of local communities interested in deploying forestry for local development called for support and opportunity to develop the skills and competence that would enable them to establish their own forest-based enterprises. These people are severely hampered, both by lack of finance and the nature of current institutional arrangements, from accessing necessary training and qualifications.

19.8 Several aspects regarding human resources and employment in the forest sector would benefit from improvement. This section outlines strategies to achieve the desired improvements.

19.9 The forest sector has many segments. This chapter and the next three focus on industrial primary forestry in terms of policies for human resource development (HRD) and labour, although many of the principles also apply to skills needs in community and conservation forestry. Other industrial segments, such as pulp and paper, manufacturing and sawmilling, will readily be accommodated in sectors such as manufacturing. However, a flexible approach is appropriate both for an HRD strategy and labour relations.

19.10 The Forest Industries Association has rejected the approach adopted in the White Paper of including the questions of HRD and labour in the forest policy. This position was reiterated during the consultative workshops and by industry representatives on the National Forestry Advisory Council. However, this inclusive approach has been retained in the NFAP for the reasons given in paragraph 20.4.

PROBLEM STATEMENT:

Many rural households benefit from employment in the forest sector in South Africa. Income, education, skills and quality of life in these households are closely linked with the ways in which human resources development and labour relations policies are implemented in forestry. Growing a competitive forest sector depends on close linkages with human resources development. South Africa's new human resource development and labour relations policies have developed rapidly, but much negotiation lies ahead to implement these in the forest sector. Implementation in forestry should be coordinated from the outset to achieve a sound foundation for progress.

Policy context

19.11 Several new policies and laws determine the approach to sectoral issues of human resources development and employment. These are detailed in the following three chapters.

19.12 Important features of this body of policy are:

- it coherently addresses the human dimensions of South Africa's reconstruction and development goals
- it arises from thorough negotiation between government, business and organised labour
- mostly, it is enabling policy and legislation, placing the onus upon sectors to take the provisions forward into action
- education, skills development, sound and robust labour relations, a flexible workforce and competitive industries are all assumed to go hand in hand.

Current setting

19.13 People find employment and income opportunities across a broad range of enterprises and operations in the forest sector, ranging from services (e.g. financial, information, tourism), through manufacturing, transport and field labour, to management. However, without intending to influence the scope of the HRD debate, this chapter deals only with the industrial primary growing sector (growing and harvesting wood). It will be necessary, in time, to incorporate other parts of the forest sector in an HRD strategy.

19.14 It is important to recognise demands for improved opportunities and skills, including:

- rural women's groups interested in improving their environment and economic opportunities
- emergent black farmers
- emergent entrepreneurs of many kinds, other than farmers.

19.15 These needs imply that strategy for the sector must integrate well with overarching policies and strategies, while offering modular opportunities for those who may not be in the mainstream of forestry, but who do participate.

19.16 The approximately 61 500 people formally employed in the primary forest sector occupy a limited range of jobs (Table 19.2). (This table does not include estimates of informal employment, such as in NGOs. However, few people are employed in this way.)

19.17 Table 19.2 provides an outlook for employment, skills and technology for the primary forest sector. This is drawn from interviews with managers in companies. It is a first attempt to understand possible future trends. The outlook is probably conservative, underestimating likely future change. It does, however, indicate the following:

- concentration of employment in categories of unskilled jobs, mostly in silviculture, with little technological change anticipated and a focus on existing skills
- smaller numbers of jobs in categories impacted by technological change (harvesting and transport), where jobs may

reduce in numbers in future, and increasing demands for higher-level and new skills are expected.

19.18 The primary forest sector is the most labour intensive in the forestry pipeline. It is marked by the following:

- greater labour intensity in silviculture than further down the pipeline
- a higher proportion of unskilled workers in silviculture than elsewhere, and less expectation of technological change and human resources development in this part of the chain
- a higher demand for skills in the chain dealing with harvesting and transport, along with a rapid pace of change in technology and skills and an accompanying loss of jobs in the future.

19.19 Other important features are the following:

- a distinction in employment patterns between companies and timber-growing farmers, where the latter tend to provide jobs involving work on all aspects of farm production, not just forestry, and the former tend to offer specialised jobs
- a tendency among companies to focus on the core of their business and operations, and hence to contract for the other work while ensuring some minimum proportion of permanent employees - it seems that in companies, about 50 to 60% of jobs will be done by own employees and the balance by contractors
- variable conditions of employment and job satisfaction, apparently most favourable in jobs which are offered in companies, and less so in jobs in contracting firms and on farms.

19.20 The situation is dominated by recent changes in policy and law affecting this field. The issue, therefore, is for the sector to respond to these changes.

19.21 Implementation of these policies will depend on the measure of agreement that can be achieved, over time and through negotiation, between employers, organised labour, and others.

Table 19.2: Summary of the outlook for employment, technological change and human resource development within each of the major forest operations

Process	Current technology	Future technology	Current human resources	Future human resources
SILVICULTURE				
Nurseries	50% seedling nurseries 50% clonal nurseries	50% seedling nurseries 50% clonal nurseries, reduced reliance on imported seed	Manual labourers Leading hands Nursery foremen	No change No change No change
Establishment	Entirely labour intensive except for limited use of tractors and graders for land preparation	Mechanisation unlikely. Increasing contracting, probably leading to increased productivity	Manual labourers Machinery operators Drivers/Supervisors	Reduce No change No change
Tending	Weed control: Labour intensive (hoe- ing, back pumps and wind boxes); mecha- nised (tractors and spray); advanced mech- anisation (airborne application)	Weed control: Tendency towards advanced mechanisa- tion; depends on chemi- cal developments; (resisted due to environ- mental impact) Pruning: Labour inten- sive Cleaning and thinning: Semi-mechanised/ labour intensive (chain saws)	Manual labourers Chainsaw operators Drivers Pilots Pruning: No change Cleaning and thinning: No change	Slight reduction No change Slight reduction Negligible increase
HARVESTING				
Clearfelling, etc.	70% semi - mecha- nised/labour intensive (chainsaws); 30% advanced mechanisation (harvesters, feller- bunches)	Definite movement towards advanced mechanisation due to improved productivity; maximum potential 70%	Chainsaw operators Machinery operators	Substantial reduction Slight increase
Shorthaul transport	70% mechanised (loader, tractor-trailer) 30% advanced mechani- sation (forwarders, log- ger loaders, skidders, cabling systems)	Definite movement towards advanced mechanisation due to improved productivity	Machinery operators	Slight reduction
SUPPORTING ACTIVITIES				
Research and development	Research laboratories and seed orchards	No change; amalgama- tion unlikely	Manual labourers Technicians Scientists	No change No change No change
Roads and fire prevention	Mechanised road main- tenance and construc- tion (bulldozers, graders); manual and aerial fire fighting	Contracting high-tech fire-fighting capability; no major changes expected	Manual labourers Specialist fire-fighters Pilots	Negligible increase
Long-haul transport	100% mechanised (road and rail transport)	No change	Drivers	No change

Strategic actions

Goal

19.22 To promote adequate sectoral arrangements that will facilitate rapid development of human resources and the sound labour relations needed to set the conditions for concerted improvement in the performance of the sector, especially in relation to its international competitors.

Indicators of achievement

19.23 Achievement of the following would indicate progress towards the goal:

- identification of enterprises that fall within the sector, i.e. demarcation of the sector
- establishment of representative structures, within the scope of relevant law and policy, to address the interests of participants with regard to labour relations and HRD
- self-sustaining processes by which participants in the sector make their contributions to policies, standards and decisions
- early signs of impact on the competitiveness of firms within the sector, and on other

performance criteria, through increased innovation, a flexible workforce and increased levels of job satisfaction.

Strategy

19.24 The recommended strategy is outlined in Table 19.3. Characteristics are:

- government develops competence to monitor and evaluate progress in the sector
- government makes itself available to facilitate the development of sectoral structures where requested, and promotes their activities
- parties use the structures actively to establish and maintain standards and procedures for the sector
- parties organise themselves to finance and direct jointly whatever is needed to work toward a dynamic, skilled and flexible workforce
- government examines ways and means of improving access to skills and qualifications desired by people who are not employed in established companies or on farms; financing included.

Table 19.3: Strategy for human resources and employment in the forest sector

GOAL	To promote adequate sectoral arrangements that will facilitate rapid development of human resources and the sound labour relations needed to set the conditions for concerted improvement in the performance of the sector, especially in relation to its international competitors.		
INDICATORS OF ACHIEVEMENT	<ul style="list-style-type: none"> • identification of enterprises that fall within the sector, i.e. demarcation of the sector • establishment of representative structures, within the scope of relevant law and policy, to address the interests of participants with regard to labour relations and human resources development • self-sustaining processes by which participants in the sector make their contributions to policies, standards and decisions • early signs of impact on the competitiveness of firms within the sector, and on other performance criteria, through increased innovation, a flexible workforce and increased levels of job satisfaction. 		
STRATEGY	Strong reliance on the initiative of stakeholders engaged in developing sectoral arrangements, with government monitoring, evaluating and reporting progress, supporting through facilitation where needed, and developing ways and means of addressing the needs of people not involved in the formal sector.		
TASK	RESPONSIBILITY	TIMING	RISKS
1. Establish a capacity to oversee the progress in the sector regarding human resources and labour and its impact on sector performance.	DWAF (with DOL and industry)	Start: Mar 1998 End: Sep 1998	No risk.
2. Establish and implement an approach to assessing progress in the sector and maintaining information on progress.	DWAF (with DOL and industry)	Start: Oct 1998 End: Mar 1999	No risk.
3. Compile and disseminate first report on progress in human resources development and labour in the forest sector.	DWAF (with DOL and stakeholders, including industry)	Start: Oct 1998 End: Apr 1999	No risk.

20

Employment and employment conditions

What is the issue and why is it important?

20.1 South Africa has made enormous progress in improving the basis for sound labour relations in industry. Policies have been designed to address issues covered in the RDP and GEAR, but their mode of application is being heavily debated. The necessity also exists to implement strategies that will lead to sustainable economic growth and rapidly provide more employment opportunities.

20.2 The forest sector injects skills and technology into rural areas, and creates jobs. Yet forest enterprises must remain competitive and must add greater value to the resources they use, while maintaining rewarding work opportunities. Further growth of the sector will depend, in part, on the rate at which it can create and maintain rewarding jobs and new skills.

20.3 The **White Paper on Sustainable Forest Development in South Africa** addresses the question of labour on the basis that: "sustainable development of the forest sector and a competitive forest economy depend on a dynamic, skilled and competent workforce, whose members are satisfied with their employment conditions, able to grow in their jobs, and motivated to improve the competitiveness of the sector." It places a duty on government to work towards a "progressive labour agreement" that would support the policy goal of a thriving sector.

20.4 This approach has the following benefits:

- labour and human resources issues cannot be separated from other development aspects of the sector
- generally, successful forest policies worldwide have been those which address inter-sectoral linkages effectively
- labour policies and laws in South Africa provide an enabling framework for dealing with labour issues, but place the responsibility of agreeing on the human resources details within the hands of each sector.

20.5 The White Paper does not determine which government department should take the lead in this matter, nor does it intend new and additional labour policy and legislation. Neither does it imply that government would become a party to negotiations and agreement, but only that government, in whatever form, would work with the parties to assist in reaching agreement.

20.6. Many issues relating to the application of new labour policy in the forest sector are not clear yet. These include:

- how the sector should be defined or demarcated in terms of the Labour Relations Act, i.e. which enterprises should be included in the forest sector
- the number of people employed in the sector, what type of enterprises they are employed in, and where

- the priorities that need to be addressed to satisfy workers' aspirations, while supporting industry competitiveness and growth.

PROBLEM STATEMENT:

Most of the issues here will have to be settled through long and detailed negotiations between employer and employee organisations. From the point of view of forest-sector policy, a strategy is needed that will promote and facilitate the development of sound industrial relations at all levels. This strategy must be equitable and robust, and it must support investment, growth and competitiveness in the sector.

Policy context

20.7 The **White Paper on Sustainable Forest Development in South Africa** recognises labour issues as a critical part of forest policy, and that government should address labour relations in the industry. The White Paper promotes a "progressive labour agreement" for the sector, i.e. that government, industry and organised labour should join forces to establish agreed measures for employment conditions, skills recognition, job grading, training and improvement in operating practices. They should also promote contracting policies with sound employment conditions (including occupational health and safety), quality practices (including environmental management) and skills recognition.

20.8 The new **Labour Relations Act** promotes collective bargaining at national level, but does not make it compulsory, i.e. the regulation of wages and conditions is done by voluntary agreement between the parties. However, where parties are unwilling to negotiate, government intervention can apply instead. The Act promotes a two-tiered structure of bargaining with basic floor-level agreements reached at the national level and

improvements (e.g. based on productivity) introduced at the workplace level.

20.9 Two structures facilitate national-level bargaining.

- **Bargaining Councils** are set up between parties which are "sufficiently representative" of workers and employers in the industry. They can set wages, resolve disputes, establish pension and provident funds and establish education and training schemes. Once agreement is reached, the councils may apply to the Minister to extend their agreements to everyone in the industry
- **Statutory Councils** have fewer powers than bargaining councils, but also require a lower proportion of representation (at least 30%). A statutory council can resolve disputes, establish pension, provident and medical aid and unemployment schemes, and establish education and training agreements. A statutory council may also negotiate wages and working conditions by mutual consent of the parties, but these may not be extended to other parties.

20.10 The **Labour Relations Act** provides for flexibility. Agreement reached at the national level can incorporate a variety of local-level agreements which take local conditions into account.

20.11 The **Basic Conditions of Employment Bill** proposes to establish mechanisms to regulate the conditions of workers and to protect their basic rights. Important aspects relevant to the forest sector include setting wages and standards, for example, for contract workers.

20.12 The **Employment Standards Commission** would replace the Wage Board and would be empowered to investigate employment standards in any sector where no bargaining council exists. The Commission would make recommendations on wages and working conditions to the Minister of Labour. Once agreed to by the Minister, the minimum conditions would apply to every employee in the sector, including part-time and contract workers.

20.13 The Commission would also make proposals on maternity and parental rights, child labour, maximum working hours, leave

and overtime, dismissals and discrimination. Although these would affect forestry workers, they are still subject to negotiation and are not reviewed here. (Refer to Government Gazette No. 17002 of 1996 for details).

20.14 The **Presidential Commission on Labour Market Policy** submitted recommendations to government on labour market policy in which it supports the notion of "voice regulation". This concept rejects "command-and-control" regulation by government, but promotes standards and negotiation. It argues that, rather than government imposing regulation, business and labour should reach agreements at the sectoral level which express the interests of both. Nevertheless, where parties are unable or unwilling to negotiate, certain minimum conditions should be set by government. The Commission report also comments extensively on sectoral minimum wages where no collective bargaining exists and on the policies needed to balance regulation with job creation. It is likely that the thrust of the Commission's report will be incorporated into government policy.

Current setting

20.15 Employment in the primary forest sector is presented in Table 20.1, according to ownership type.

Table 20.1: Employment in the primary forest sector

Forest segment by ownership	Equivalent number of full-time direct employees	Number of contractor employees
Corporate	17 930	15 620
Private	4 200 ¹	5 480
State	9 860	1 000
Local authorities	450	1 980
Small-scale growers	3 860 ²	1 170
Total	36 300	25 250

Source: LHA (1997)

^{1,2} Figures shown represent the number employed equivalent to full-time employment. The actual number of people involved is significantly higher, but many are employed part-time. The figures have been adjusted to take account thereof.

20.16 Interviews with representatives of organised labour, and anecdotal reports, suggest that the following issues need attention from the point of view of the employees:

- it is difficult to negotiate an issue when employees are distributed across a large number of plantations, i.e. most bargaining tends to occur through forest management units, hence the difficulty of reaching equitable agreements without some form of sector-wide mechanism
- a lack of satisfactory linkage between training and certification of skills, job-sizing, performance, wage levels and career paths
- a lack of general compliance with minimum standards in working conditions
- variable progress in achieving employment equity.

20.17 Most farmers, through SATGA, strongly reject any sector-wide approach to labour relations. Employment on these farms might best be classified as part of the agriculture sector in any case, at least in the case of mixed farming.

20.18 Working conditions are best in the larger companies, as are prospects for progress through negotiation to implement the new labour legislation.

20.19 Most contracting firms were established as the larger companies reduced in-house employment to their "core business". The ratio between permanent employees and contract workers varies from one company to the next. Company managers believe that the trend towards meeting their requirements through contract services will continue, and will only partially be influenced by collective bargaining arrangements.

20.20 Clearly, contractors have become major employers in this sector. Good industrial relations within contracting firms are as important as they are within large companies if the forest sector as a whole is to thrive.

20.21 Forest contracting offers opportunities for the development of new small businesses, but black-owned firms are currently under-represented. About 5% of the companies of the contracting association Forest Services and

Facilitators are black-owned, and some of the other firms have black shareholders. Forest Services and Facilitators estimates that a new contractor needs about two years of support and training before he or she can launch a business on his or her own. SAFCOL has a special programme to support black contractors, who now hold about half the contracts with that firm. A strategy for labour relations in the forest sector should take account of the special needs of small and medium businesses.

20.22 Employment conditions among contracting firms appear to be variable. The firms themselves vary in size, with one employing about 1 200 people, and others only five.

20.23 Forest Services and Facilitators estimates that manual labourer employees in contractor firms earn between R400 and R600 per month. About 25% of the members of Forest Services and Facilitators negotiate with trade unions.

20.24 Trade union members have negative perceptions of the quality of labour practices among contractors. They also argue that contractors' employees are almost completely unprotected because such protection is difficult to organise in the contractor segment, which involves some 300 firms distributed widely in the country. There are widespread concerns among union officials as to the position of contractors' employees, some of whom remain employed as casual labourers despite having worked for many years. There are also complaints about unsatisfactory training and poor health and safety practices.

20.25 The larger companies have instituted formal company policies concerning contracting. Contractors are required to abide by health and safety legislation and minimum work standards and they are promoting professionalism in the labour relations performance of their contractors.

20.26 The labour study for the NFAP indicated that, in terms of employment conditions:

- employees in major companies enjoy substantially better remuneration than those on farms or in contracting firms, while enjoying pension and housing benefits throughout and medical benefits in 85% of cases (companies also normally provide health, crèche and other social services)
- employees on farms are remunerated at substantially lower levels than in companies, but normally enjoy housing and other benefits such as health and schooling services
- employees in contracting firms tend to receive housing, but do not receive pension and medical benefits
- employees of DWAF and local authorities enjoy substantially better remuneration than elsewhere, with the minimum wage having recently risen to R1 600 per month; employees also enjoy medical, housing and other non-wage benefits, although in some cases work and housing conditions are poor.

20.27 A comparison of wage rates for manual workers, according to employers, is shown in Table 20.2.

Table 20.2: Manual labourer wage by different employer

Job category	% of total receiving wage			
	R/month 400-600	R/month 600-800	R/month 800-1 200	R/month 1 200-1 800
Contractors	100	—	—	—
Corporate	2	60	19	19
Private	52	37	11	—
State	—	—	—	100
Local authorities	—	—	100	—

Source: LHA 1997

Options available in the new labour policy for South Africa

20.28 There are essentially four possible options for collective bargaining in terms of the Labour Relations Act. The options that are available depend largely on the relationship between large employers and contractors. At the heart of the matter lies the question of whether contractors can afford to pay the same wage rates and provide similar conditions as the large companies. An understanding of this problem would affect the interpretation of the options for collective bargaining.

- **Option 1: Setting up a bargaining council for all forestry employees**

Bargaining councils are set up by agreement, but usually only if the parties represent a majority of workers and enterprises. However, the parties may set up a bargaining council by agreement without measuring union density. A bargaining council would have the prerogative of setting differential wages and conditions for different types of employers or different regions.

- **Option 2: Setting up a statutory council for the industry as a whole**

If the parties are not sufficiently representative and/or are unwilling to set up a bargaining council, then trade unions may compel employers to set up a statutory council if they collectively represent at least 30% of employees in the industry. The statutory council would not be empowered to discuss wages, but could cover a variety of other issues including working conditions and benefits.

- **Option 3: Wage determination for all forestry employees**

This option would involve applying for a wage and employment standards determination for all forestry employees by the Employment Standards Commission. This would depend on the Employment Standard Bill becoming law; failing which, the Wage Board could play a similar role. Such a determination would set a minimum level for wages and conditions for the various job categories in forestry. The Wage Board or Employment Standards

Commission would have to judge as to whether the minimum rate would be set at a level approximating to the current wages offered by contractors or the current rate offered by larger employers. This would, in turn, rest on the rates paid to contractors by large employers.

- **Option 4: Separation of company and contract labour through demarcation**

The trade unions indicated that it is difficult to organise the contract sector because they have to deal with so many different employers spread over great distances. In addition, there is a better sense of employment numbers (and therefore trade union density) in the large companies than among contractors. To capitalise on these advantages, the parties could agree to demarcate the forest sector by company type in order to set up a bargaining or statutory council for the large employers only.

20.29 The **Labour Relations Act** allows parties to set demarcation limits and submit these to the National Economic Development and Labour Council (NEDLAC). In this case, the parties could agree to demarcate large forestry companies (defined by their number of employees) as a sector for bargaining purposes. This would mean that a bargaining council or statutory council would need to be set up to cover the large companies only. A particular cut-off point would be set (at say 50 employees) and any employer with a number smaller than that would be excluded from the negotiations. Obviously, in this case, agreements would apply only to those party to the agreements.

20.30 Employees of smaller companies (including contractors and small-scale growers) would then not be covered by collective bargaining. These employees could possibly be covered by a wage determination.

20.31 There is concern within the industry that pressure for increased employment standards could reduce the flexibility of the workforce and encourage increased mechanisation and greater contracting rather than direct employment. These impacts will have to be monitored and evaluated.

Strategic actions

Goal

20.32 To promote sufficient agreement between parties in the forest sector regarding structures and mechanisms for managing labour relations, as a basis for continued improvement in employment conditions and competitiveness in the sector.

Indicators of achievement

20.33 Achievement of the following would indicate progress towards the goal:

- clear identities and roles for the parties in the process of implementing the country's labour relations policies
- demarcation of the forest sector

- adequate shared information on the workforce and on employment conditions in the sector
- establishment of agreed bargaining arrangements
- a flexible approach to negotiated labour agreements, so that the varying needs and conditions in different regions and enterprises are taken into account.

Strategy

20.34 DWAF, the Department of Labour, industry and the unions coordinate efforts to promote progress towards effective arrangements in the sector regarding labour relations by disseminating adequate information about the sector, being available to facilitate progress where called upon to do so, and by advising on labour policy development.

Table 20.3 Recommended strategy for employment and employment conditions in the forest sector

GOAL	To promote sufficient agreement between parties in the forest sector regarding structures and mechanisms for managing labour relations, as a basis for continued improvement in employment conditions and competitiveness in the sector.		
INDICATORS OF ACHIEVEMENT	<ul style="list-style-type: none"> ▪ clear identities and roles for the parties in the process of implementing the country's labour relations policies ▪ demarcation of the forest sector ▪ adequate shared information on the workforce and on employment conditions in the sector ▪ establishment of agreed bargaining arrangements ▪ a flexible approach to negotiated labour agreements, so that the varying needs and conditions in different regions and enterprises are taken into account. 		
STRATEGY	DWAF, the Department of Labour, industry and the unions coordinate efforts to promote progress towards effective arrangements in the sector regarding labour relations by disseminating adequate information about the sector, being available to facilitate progress where called upon to do so, and by advising on labour policy development.		
TASK	RESPONSIBILITY	TIMING	RISKS
1. Achieve agreement between DWAF and the Department of Labour on relative roles and responsibilities.	DWAF (with DOL, industry, unions)	Start: Jan 1998 End: Mar 1998	No risk.
2. Establish and implement an appropriate programme of research on labour employment and labour relations in consultation with affected parties.	DWAF (with DOL, industry, unions)	Start: Mar 1998 End: Apr 1999	No risk.
3. Establish a system for monitoring and evaluating changing employment patterns and conditions in the sector, as well as the impacts of legislation.	DWAF (with DOL, industry, unions)	Start: Sep 1998 End: Apr 1999	No risk.
4. Convene a workshop to evaluate the relationship between employment trends, employment conditions and competitiveness in the forest sector.	DWAF (with DOL, industry, unions)	Start: Jan 1999 End: Mar 1999	Some stakeholders unwilling to participate.

21

Tertiary education

What is the issue and why is it important?

21.1 Within an effective tertiary education system, the facility for forestry education needs to be maintained for South Africa to build capacity in the forest sector, especially in areas where current capacity is poor, such as in community forestry.

PROBLEM STATEMENT:

The tertiary education system must supply the forest sector with an adequate number of appropriately trained people to fill specialised positions in the sector.

Current setting

21.2 South Africa has well-established institutions for tertiary education in forestry.

21.3 Training in forestry (including wood science) takes place at six tertiary educational institutions in South Africa:

- University of Stellenbosch (Faculty of Forestry)
- University of Natal (Faculty of Agricultural Sciences)
- University of the Orange Free State (Tree Pathology Cooperative Programme)

- Port Elizabeth Technikon (Faculty of Forestry)
- Natal Technikon (Department of Pulp and Paper Technology)
- Fort Cox College of Agriculture and Forestry.

21.4 People trained in other disciplines, such as the biological and social sciences and engineering, also feed into the forestry employment pool.

21.5 An average of 30 first and 13 postgraduate degrees in forestry and wood science are conferred annually by the Faculty of Forestry at the University of Stellenbosch.

21.6 Forestry courses were introduced this year at the Faculty of Agriculture at the University of Natal, Pietermaritzburg. Five forestry students have registered at the Faculty.

21.7 Port Elizabeth Technikon has produced between 80 and 100 graduates and diplomates per year over the past five years.

21.8 Consistent figures for the number of scientists being recruited by the various subsectors relating to forestry are not available and further investigation is necessary to establish this, particularly relating to community forestry and conservation forestry. In the industrial forest subsector, the general feeling is that the current supply and demand of graduates and diplomates are approximately in balance.

21.9 Forestry education in South Africa tends to be narrow and technical and employers often find that graduates do not satisfy their

requirements. If sustainability is to become the main aim for forestry in South Africa, tertiary education for the forest sector will have to broaden its scope and strengthen the education provided.

21.10 Gender imbalances are very obvious in tertiary forestry education. Only 15.8% of all forestry students in South Africa are women. Women will have to play a larger role in the forest sector if equitable development is to be achieved.

21.11 Forestry graduates employed in the forest sector are still mostly white. This racial imbalance is slowly improving but there is a long way to go to correct the situation. Currently, 34% of students studying forestry are black.

21.12 Of the six institutions listed in paragraph 21.3, four are located in the Eastern and Western Cape Provinces. Many students from other provinces who might choose this field are either ignorant thereof or cannot afford to study that far from home. It has been suggested that local institutions should be brought into the education system for the forest sector. This could be achieved through distance learning or by using course modules from the current forestry education institutions.

21.13 Some commentators are concerned that the institutions do not confer qualifications of an adequate standard. Furthermore, there is concern that employers prefer graduates of certain institutions over those from others.

21.14 The present capacity of the tertiary forestry education system to produce social or community foresters is weak. The number of competent graduates produced in this specialist field is, so far, inadequate.

21.15 In addition to tertiary education facilities in South Africa, there are opportunities within the SADC region for cooperation and specialisation in subject areas according to institutional comparative advantage.

21.16 Innovative ways have to be developed to widen access to tertiary education

nationally and regionally and to overcome the existing cost constraints for students studying far from their homes.

Strategic actions

Goal

21.17 A tertiary forestry education system that produces quality graduates and diplomates with specialised and multi-disciplinary skills that support the specific requirements of the forest sector and who are drawn from the best talent available in South African society.

Indicators of achievement

21.18 Achievement of the following would indicate progress towards the goal:

- a substantial shift towards gender balance and representation of previously disadvantaged groups among graduates
- significant progress in clarifying the overall requirements for forestry education in South Africa and adaptation of the curricula accordingly
- establishment and achievement of common norms and standards
- modularity in curricula so that students are able to move from one institution to another, according to need and opportunity
- significant improvement in the satisfaction expressed by employers as to the quality of graduates provided by the institutions
- innovation in service delivery which provides for improved access to tertiary forestry education, particularly for students from previously disadvantaged groups
- greater regional (SADC) cooperation and complementarity in curriculum development and course specialisation.

Strategy

21.19 To achieve a streamlined, efficient and accessible tertiary forestry education system through reviewing the sector's needs and the institutions (national and regional) involved in delivery.

Table 21.1: Strategy for tertiary forestry education

GOAL	A tertiary forestry education system that produces quality graduates and diplomates with specialised and multi-disciplinary skills that support the specific requirements of the forest sector.		
INDICATORS OF ACHIEVEMENT	<ul style="list-style-type: none"> • a substantial shift towards gender balance and representation of previously disadvantaged groups among graduates • significant progress in clarifying the overall requirements for forestry education in South Africa and adaptation of the curricula accordingly • establishment and achievement of common norms and standards • modularity in curricula so that students are able to move from one institution to another, according to need and opportunity • significant improvement in the satisfaction expressed by employers as to the quality of graduates provided by the institutions • improved access to tertiary forestry education • improved regional (SADC) cooperation in tertiary forestry education. 		
STRATEGY	To achieve a streamlined, efficient and accessible tertiary forestry education system through reviewing the sector's needs and the institutions (national and regional) involved in delivery.		
TASK	RESPONSIBILITY	TIMING	RISKS
1. Establish an agreed basis for developing a strategy for forest-sector tertiary education through participation with relevant stakeholders.	DWAF (with relevant stakeholders)	Start: Jan 1998 End: Dec 1998	Lack of consensus among stakeholders.
2. Commission a study of: <ul style="list-style-type: none"> • current curricula of existing and potential service providers • the needs of employees and students In order to: <ul style="list-style-type: none"> • develop measures to streamline and coordinate the existing forestry education system • improve understanding of the likely annual demand for forestry graduates and diplomates. 	DWAF (with tertiary institutions and employers)	Start: Jan 1999 End: July 1999	No risk.
3. Investigate and implement ways of broadening access to tertiary forestry education.	DWAF (with tertiary institutions and students)	Start: July 1999 End: Dec 1999	Limited demand for tertiary forestry education.
4. Monitor and evaluate progress and report on the needs for further adaptation to the tertiary forestry education system.	DWAF (with relevant stakeholders)	Start: July 1998 End: Dec 1999	No risk.
5. Provide support to relevant tertiary institutions by improving linkages with other SADC institutions to improve complementarity and accessibility.	DWAF (with tertiary institutions)	Ongoing	No risk.

22

Meeting skills needs of the forest sector

What is the issue and why is it important?

22.1 Meeting forest-sector goals depends crucially on the knowledge, skills and competence of people involved in the sector.

22.2 New human resource development policies for South Africa place an onus on the sector to implement a strategy for the development of people in the entire forest sector, including industrial, community and conservation forestry.

22.3 Good facilities for the training of people employed in the forest sector exist and provide a sound base for further progress. However, those not employed in the sector, and wanting knowledge and skills, seldom have access to the opportunities they seek.

22.4 A strategy for human resources development in the forest sector needs to be established and the roles and responsibilities required to implement this strategy must be clarified.

22.5 The strategy should address ways in which to:

- universalise training standards and learning outcomes to enable trainees to gain portable skills and knowledge
- clarify career paths in forestry and related industries

- enhance the overall productive capacity and competitive capability of the forest sector.

PROBLEM STATEMENT:

The necessity exists for coordination within the forest sector regarding the various components of human resources development. Initiatives within the sector are fragmented.

Policy context

22.6 The **White Paper on Sustainable Forest Development in South Africa** incorporates several elements of policy that are relevant here:

- the forest sector should comprise a skilled and competent workforce, acceptable employment conditions and appropriate training and development in order to motivate employees to improve the competitiveness of the sector
- sustainable development of the sector requires well-educated, skilled and competent workers and managers
- industrial forestry development should include the provision of training and advice to small-scale farmers and contractors in the skills needed to negotiate and manage contracts.

22.7 The White Paper identifies the following policy objectives for government:

- to support the educational components of the RDP's rural development strategy
- to promote curricula related to forestry at tertiary education institutions
- to ensure the recognition of workers' skills in the forest sector
- to encourage forestry firms to participate in training schemes
- to investigate ways of promoting basic literacy and numeracy among forest workers.

22.8 These objectives were formulated before the national policy for human resources was developed and they need to be moderated accordingly.

22.9 The RDP promotes the expansion and improvement of the current education and training system in the country. The new system must be available to all and its aim must be to raise the knowledge and skills of people in such a way as to lead to higher productivity and better-quality goods and services.

22.10 **Growth, Employment and Redistribution (GEAR):** the Department of Finance's macro-economic growth strategy identifies a number of key goals that the government wishes to attain. These include developing a competitive fast-growing economy, creating income opportunities for the poor, and ensuring sound health, education and an environment of secure homes and productive workplaces. This vision is part of an integrated strategy in keeping with the goals of the RDP.

22.11 Productivity enhancement forms the core of this vision. In order to give substance to this vision, GEAR recommends the formation of a tripartite national coordinating council to give strategic direction to human resources development in the country. It is within the new integrated human resource strategy that forestry should define its own human resources policies.

22.12 **The Labour Relations Act (LRA)**

- **bargaining councils** lay the basis for an institutional framework, at a sectoral level,

that promotes the principle of union management dialogue

- **workplace fora** encourage dialogue between management and unions. However, in order for the workplace fora to function effectively, managers as well as workers will require skills in consensus building as well as knowledge of various aspects of the enterprise.

22.13 The **Green Paper on a Skills Development Strategy for Economic and Employment Growth in South Africa**

focuses on the centrality of human resource development to competitiveness of enterprises. It emphasises the importance of making the training industry relevant, while at the same time enhancing the individual's life skills and potential contribution to the community.

22.14 The authorities listed below have the following responsibilities within the system:

- **Standards Generating Bodies (SGBs)** make proposals concerning course content and learning prerequisites for certification within specific learning fields
- **National Standard Setting Bodies (NSBs)** take recommendations from SGBs and set standards which are submitted to SAQA
- **Sectoral Education and Training Organisations (SETOs)** maintain training plans, accredit education providers, register assessors and disburse national training funds
- **Education and Training Qualification Authorities (ETQAs)** verify that learners are assessed in terms of the standards drawn up by the NSBs
- The **South African Qualification Authority (SAQA)**, the highest body governing education and training in the country, makes recommendations on the structure, rules and administrative systems for awarding education and training qualifications through the new National Qualifications Framework (NQF); it also registers NSBs, SETOs and ETQAs, approves standards and ensures that these entities are competent to perform their tasks.

22.15 An additional key element of the Skills Development Green Paper is the recommended

formation of a Research and Strategic Planning Unit to enhance productivity and meet the requirements of a best practice approach to competitiveness.

22.16 The **Workplace Challenge Project (NEDLAC: Trade and Industry Chamber Initiative)** includes the participation of labour, business and the Departments of Trade and Industry and Labour. The purpose of the project is to enable role players to engage in a constructive dialogue to determine ways to improve the competitiveness and productivity of industries along an entire value chain.

22.17 The forest industry should become involved in this initiative in order to integrate the strategies of the primary forestry and forest-products manufacturing sectors, both with respect to human resource development and the enhancement of the industry's competitiveness and productivity.

22.18 The **Labour Market Commission's** central concern is to identify national policy initiatives that will encourage the adoption of "productivity-enhancing HRD strategies." Moreover, the Commission identified voice regulation as a constructive means of bargaining between workers and employers to redesign productivity in the work process.

22.19 Finally, the Commission recommended the formation of a policy coordination body along the lines of the Japanese Productivity Liaison Council. This would also help to avoid the formulation of policies that are antagonistic to the pursuit of productivity improvement based on human resource development and shop-floor cooperation.

22.20 The **White Paper on Science and Technology** identifies three goals central to the management of innovation:

- stakeholders must forge partnerships to benefit themselves and the nation
- resources from various sciences must be used for problem-solving in a multi-disciplinary manner
- stakeholders must be part of a more inclusive and consultative approach to policy decision-making.

Current setting

22.21 Some, but not all, forest industry associations are involved in human resources policy.

22.22 Various portions of the sector, such as sawmilling, furniture making, lumber and printing, have training boards and negotiations are already under way to structure the institutions and standards needed to respond to the new skills development strategy for South Africa.

22.23 However, the process of negotiating, developing and implementing these arrangements for the whole sector will take time, particularly for community and conservation forestry where skills needs are, as yet, not clearly defined. Policy and strategy details are still being established through negotiations between parties at the national level.

22.24 A fragmented approach within the forest sector is not advocated. This is because, ultimately, the strength of human resources should be consistent through all the segments in the forest sector to ensure progression in individual competence and overall competitiveness in the sector.

22.25 Roles and responsibilities of government departments and other public bodies

- The **Department of Labour** has a Human Resources Development and Career Services Directorate to help ensure, among other things, the development of a flexible and skilled workforce and promotion of vocational education and training
- The **Department of Education** has initiated a number of reforms to standardise the quality and content of the Adult Basic Education (ABE) programmes which are offered at present
- The **National Training Board** will be transformed and given greater powers under the proposed new legislation
- The **South African Qualifications Authority (SAQA)** will play a significant role in influencing the design and development of

education and training programmes within each industry, including the forest industry, through the new National Qualifications Framework (NQF)

- The **Commission for Conciliation, Mediation and Arbitration (CCMA)** acts as an independent jurisdictional body to resolve disputes between industrial parties.

22.26 Training and education systems:

- **Certification:** some form of certification policy should be established for the sector, underpinned by some form of literacy and numeracy programme
- **Setting standards:** most role players favour the development of national competency standards through a sectoral Standards Generating Body (SGB); this would serve to ensure that the learning outcomes and assessment criteria of training course programmes are consistent with these standards
- **Accreditation:** the forest sector must establish its own accreditation body against which a multiplicity of different providers can seek accreditation of their courses; the national accreditation system proposed by SAQA and the Skills Development Green Paper will seek to locate this function in a new ETQA that will apply more rigorous accreditation criteria than those currently applied by the Department of Labour (DOL)
- **Assessment:** lack of consistency in assessment methodology complicates comparison of the skills of employees trained by different learning providers; in practice, assessment should be done by the training provider or in-house by the company and, to ensure fairness and transparency, a proper assessment procedure should be established and the assessment should be undertaken by competent assessors
- **Grading:** the implementation of the national HRD objectives provides an opportunity for industry to review its existing grading systems so as to reflect the new national skills objectives; COSATU unions in particular have articulated the need for skills-based grading systems which provide financial incentives for skills development

and opportunities for career path advancement.

The role and impact of training institutions:

The role of the private sector

22.27 Labour in the primary forest sector is mostly manual, requiring little or no formal training. In most cases, training for nursery, planting, weeding, pruning and weed control activities is carried out on the job and requires no formal skills training or certification.

22.28 **Private training centres and the companies:** Training at the Forest Training Centre at Baynesfield and the SALMA Sawmilling Training Centre at Sabie is open to the public, although certain basic skills and knowledge are required to enter the courses. Sappi and Mondi have scaled down their in-house training facilities and now contract them out to a private training organisation, Skills for Africa. During 1996, 10 000 people, most of whom are employees of Mondi and Sappi, participated in its training programmes.

22.29 To satisfy the need for standards, certification, accreditation and assessment, employers have to participate in SGBs (established under SAQA) and the DOL's Industry Training Boards.

22.30 Trade union policy favours the new legislation concerning labour relations and human resource development, though with some reservations concerning wage restraint. Unions also need to become directly involved in SGBs and in the activities and meetings of new Industry Training Boards.

Strategic actions

22.31 Forestry companies and the Unions in the forest sector should work out a strategy to set up the appropriate structures to fit in with the new HRD policy as outlined in the Skills Development Green Paper. In order to achieve this, the strategy will have to address ways of universalising training standards and learning outcomes. The sector would also be expected to support programmes which aim to provide their adult workers with education and training

on a par with the exit level in the formal school system, with an emphasis on literacy and numeracy skills.

Goal

22.32 To establish an appropriate and effective system for the development of the skills and worker competencies that would support a thriving forest sector, as well as means for people not employed in the sector to access these opportunities.

Indicators of achievement

22.33 Achievement of the following would indicate progress towards the goal:

- progress in the overall level of forest workers' skills, together with improving productivity and competitiveness in the industry
- progress in the establishment of appropriate training and development programmes
- progress in establishing career paths for all forest workers and in providing incentives for learning
- integration of forestry human resources planning into the national training framework through the establishment of representative bodies within sector learning organisations and other appropriate human resources development bodies
- formation of an SGB which will draft certification and assessment criteria for the training and development programmes
- registration of the forest sector as a member of the NSB within primary agriculture
- formulation of a proposal for submission to SAQA, on behalf of forestry, to develop standards for forestry employees



An appropriate and effective system for the development of skills and worker competencies is required to support a thriving forest sector. Photo: Environmentek

- development of an appropriate method for assessment of trainees, so as to maintain those training standards identified and implemented
- establishment of an accrediting body for the forest sector against which a multiplicity of training providers can seek accreditation of their training-course programmes
- development of learning programmes which can be registered with the NQF, consistent with SAQA guidelines
- development and implementation of a training fund scheme for the forest sector, in line with national policy
- development of a sector database system for tracking employee skills, job skill requirements and training programmes
- identification of opportunities for community development in forestry through access to better and more relevant training programmes
- contribution to the overall growth and competitiveness of the nation through the forest industry's HRD strategy.

Strategy

22.34 Establish a system for comprehensive reporting on progress every one or two years through collaboration with the Department of Labour and other stakeholders, evaluate progress against indicators, promote possible improvements and investigate and promote ways of broadening access to training.

Table 22.1: Strategy for meeting the skills needs of the forest sector

GOAL	Establish an appropriate and effective system for the development of skills and worker competencies that would support a thriving forest sector, as well as means for people not employed in the sector to access the opportunities provided.		
INDICATORS OF ACHIEVEMENT	<ul style="list-style-type: none"> • improved worker skills and improved industry productivity and competitiveness • progress in establishment of appropriate training and development programmes • progress in establishing career paths and in providing incentives for learning • integration of forestry human resources planning into the national training framework • formation of an SGB which will draft certification and assessment criteria for the training and development programmes • registration of the forest sector as a member of the NSB within primary agriculture • formulation of a proposal for submission to SAQA, on behalf of forestry, to develop standards for forestry employees • development of an appropriate method for assessment of trainees • establishment of an accrediting body for the forest sector • development of learning programmes which can be registered with the NQF, consistent with SAQA guidelines • development and implementation of a training fund scheme • development of a sector database system for tracking employee skills, job skill requirements and training programmes • identification of opportunities for community development in forestry through access to better and more relevant training programmes • contribution to the overall growth and competitiveness of the nation through the forest industry's HRD strategy. 		
STRATEGY	Establish a system for comprehensive reporting on progress every one or two years through collaboration with the Department of Labour and other stakeholders, evaluate progress against indicators, promote possible improvements and investigate and promote ways of broadening access to training.		
TASK	RESPONSIBILITY	TIMING	RISKS
1. Develop the structure and procedure for regular reporting on the state of a human resources development system for the forest sector.	DWAF (with DOL and stakeholders)	Start: Oct 1998 End: Dec 1998	No risk.
2. Compile and disseminate the first report.	DWAF (with DOL and stakeholders)	Start: Jan 1999 End: Apr 1999	No risk.
3. Investigate and recommend ways of supporting skills development among people not directly employed in the forest industry, including the skills development needed to support community and conservation forestry (see tasks 3 and 4 in Table 4.1).	DWAF (with DOL and stakeholders)	Start: Jul 1998 End: Dec 1998	No risk.
4. Evaluate and propose ways of monitoring progress and skills levels and productivity, and their effects on sector competitiveness.	DWAF (with DOL and stakeholders)	Start: Apr 1999 End: Sep 1999	No risk.

23

Research, technology
and innovation***What is the issue and why is it important?***

23.1 In order to ensure a thriving forest sector, information is required on, for example, the size, nature, value, ownership and location of a resource; whether it is increasing or decreasing and why; ways of increasing its productivity; the conflicts of interest between stakeholders involved in its management and the impact of forestry on other resources.

23.2 The objective of a forest research, technology and innovation system is to deliver this information cost-effectively, on time and according to end-user needs.

23.3 Forest research, properly directed at real needs, should deliver knowledge and techniques that can be usefully applied and put into practice as a variety of innovations. It should lead to:

- better policies
- improved practices and systems
- new and useful technologies of many kinds
- better awareness and understanding of forestry issues among the broad public.

23.4 In South Africa there is a special need to unlock knowledge and information from past and future research and make it accessible to everyone, especially those in rural areas.

23.5 There is general consensus that research and development in the forest sector

in South Africa is currently not capable of delivering the necessary services needed to support all the aspects of a thriving forest sector, which include community forestry, industrial forestry and the management of natural forests and woodlands.

PROBLEM STATEMENT:

The existing research, technology and innovation system lacks coordination, clearly-defined roles and responsibilities, and is too narrow in its scope to address the needs of all stakeholders within the sector.

Policy context

23.6 The **White Paper on Sustainable Forest Development in South Africa** recognises the contribution made by research and technology development to the industrial forest sector and to the improved management of natural forests and woodlands. However, it identifies a lack of focus on community forestry and the interface between people and resources, as well as a failure to develop synergies between research and existing indigenous technical knowledge.

23.7 The **White Paper on Science and Technology** calls for demand-led research, effective transfer and implementation of technology by the users, the formation of alliances to achieve focus and critical mass, the broadening of the research system to include formerly disadvantaged people, and the consolidation of research and technology development into sectoral systems of innovation.

Current setting

23.8 Prior to 1994, forestry research in South Africa dealt primarily with the needs of the industrial forest sector. Although the State provided the lead role in establishing forest research capacity, private-sector involvement has grown to approximately equal status. This trend in the relative growth in private-sector funding has been mirrored by a withdrawal of funds by government and the overall effect has been a drop in the total real value of research funding.

23.9 Currently, industrial forestry research in South Africa is undertaken mainly by company in-house research divisions, the CSIR (Environmentek), the Institute for Commercial Forestry Research (ICFR), the University of the Orange Free State and the University of Stellenbosch. A number of other institutions and consultants make smaller contributions.

23.10 There has been extensive research on natural forests, through the Department of Water Affairs and Forestry and its predecessors, and through universities and others. For example, research in the forests of the George-Knysna region began at the turn of the century and has continued to this day, focussing on forest biology, ecology, and silviculture. Research on the natural woodlands has tended to focus on its agricultural and wildlife values, but the Savanna Biome Programme, funded by government and managed through the Foundation for Research Development (FRD), assembled a multi-disciplinary team from diverse organisations in a concerted programme of ecological research which contributed significantly to our understanding of this resource. In its latter

stages, the Savanna Biome Programme examined the socio-economic dimensions of woodland management. Prior to this scattered work on ethnobotany and traditional use of forest resources enjoyed a small fraction of research resources. On the whole, research on natural forests and woodlands has tended to focus on natural history, ecology, and management for agricultural and wildlife objectives, and has only lately begun to take a comprehensive view of the role of these resources in our society as a whole, e.g. through work on the use and conservation of medicinal plants.

23.11 Prior to 1994, community forestry research was largely confined to the establishment of woodlots in former homeland areas and, to a limited extent, agroforestry. Since 1994, there has been an increase in community forestry research, partly due to international funding. However, community forestry research still lacks a coherent strategy (see Chapter 5 paragraph 5.12).

23.12 In general, research relating to all fields of forestry has tended to be technical in nature, and social and economic research skills are lacking, although the IDC is currently examining the state of the industrial forest sector in a cluster study.

23.13 Generally, where the forest sector in other countries succeeds in remaining competitive, effective research, technology and innovation systems are mobilised and integrated with human resources development, management practice, product improvement, and investment as part of overall forest-sector development strategies.

Towards a new research, technology and innovation system

23.14 There is consensus that research to support forest-sector development in South Africa could be better coordinated among the parties involved, although coordination on research relating to industrial forestry is seen by some participants to be good.

23.15 A national workshop on forest research, held in April 1996, confirmed that the country's forest research capacity had become

weakened relative to benchmark countries overseas. Participants affirmed the need for an improved and effective system and the importance of continued and strengthened investment in this field and agreed that the current network of research and development institutions should not be modified in any major way. Rather, improving the overall effectiveness of the network should begin with stronger coordination of the institutions as a whole, together with a strengthening of the critical mass in centres of excellence, so as to exploit the comparative advantage of each institution.

23.16 During the development of the NFAP, the working group took these thoughts further and

- recognised the trend in South Africa towards various collaborative research models, including cooperatives, consortiums and partnerships
- supported the network model outlined above
- emphasised the relevance of the new science and technology policy in this respect, which includes strong support for research partnerships and change in the role of government departments as users of research towards longer-term project funding rather than short-term consultancy-style projects, and several other relevant policy directions
- proposed the establishment of an office for strategic forestry research, to be funded by contributions from government and other participating research users, to support strategic appraisals of forest research in South Africa and elsewhere, maintain information on past and current research in South Africa, facilitate coordination, and fulfil several other functions that would provide strategic support to forest research in South Africa. Such an office would be autonomous, but governed by a board to be appointed by the Minister on the basis of recommendations made by stakeholders from across the sector.

23.17 These recommendations have been discussed in various fora and have found some support. However, the organised forest industry did not support the proposals and expressed the following views:

- that as far as research for the industrial forest sector was concerned, many members were happy, at the least, with the current state of affairs
- greater financial support was needed from government, to be directed at generic problems such as the effects of forests on water resources, and
- any new arrangement would need to offer tangible benefit to commercial forest operations to be acceptable and should not become an unnecessary additional layer of government bureaucracy.

23.18 Although there is an evident need for an effective structure and mechanism to provide strategic guidance and coordination, its form and function would have to be based on agreement between all the parties involved. An appropriate model needs to be established through further discussion and negotiation.

Strategic actions

Goal

23.19 To develop a research, technology and innovation system which supplies, and effectively transfers, the information needed for an environmentally and socially sustainable and economically competitive forest sector. Members of formerly disadvantaged groups will be well represented within the research system and as end-users.

Indicators of achievement

23.20 Achievement of the following would indicate progress towards the goal:

- increased and maintained research funding in the forest sector related to the market and non-market values of the resource
- meeting the needs of users in all sectors of the forest industry in terms of appropriate research of a high technical standard and quality of delivery
- efficient allocation of funding to improve knowledge and generate innovations of direct benefit to end-users
- members of previously disadvantaged groups are represented, both as researchers and end-users

- measurable impact on the achievement of the overall policy goal for the forest sector
- the making available of core research skills in the country, both in the private and public sectors
- an agreed structure and process for providing strategic direction and coordination
- effective international and regional (SADC) networking and coordination in forest research
- consolidation of forest research into a sectoral system for innovation, in line with the White Paper on Science and Technology.

Strategy

23.21 To establish a funded, well-managed, accountable and credible structure which can take responsibility for efficient coordination and networking between funders, researchers and end-users, in both the private and public sectors.

Table 23.1: Strategy for national forest research technology and innovation

GOAL	To develop a research, technology and innovation system which supplies, and effectively transfers, the information needed for an environmentally and socially sustainable and economically competitive forest sector. Members of formerly disadvantaged groups will be well represented within the research system and as end-users.		
INDICATORS OF ACHIEVEMENT	<ul style="list-style-type: none"> • increased and maintained research funding • meeting the needs of users in all sectors • efficient allocation of funding • representation by members of previously disadvantaged groups • measurable impact on the achievement of the overall policy goal for the forest sector • the making available of core research skills in the country, in both the private and public sectors • an agreed structure and process for providing strategic direction and coordination. 		
STRATEGY	To establish a funded, well-managed, accountable and credible structure which can take responsibility for efficient coordination and networking between funders, researchers and end-users, in both the private and public sectors.		
TASK	RESPONSIBILITY	TIMING	RISKS
1. Convene a consultation among stakeholders to reach agreement on the proposed office for strategic research, or its alternatives.	DWAF (with all stakeholders)	Start: Jan 1998 End: June 1998	Stakeholders do not reach consensus.
2. Equip new coordinating structure with skills and capacity to fulfil its mandate.	DWAF (with new structure)	Start: Jan 1998 End: June 1998	Task 1 may not be achieved.
3. Develop capacity within DWAF to fulfil its mandate in terms of identifying research needs, commissioning research, dissemination and innovation.	DWAF	Start: July 1998 End: Dec 1998	No risk.
4. Compile and disseminate a report on progress in forest research in South Africa, benchmarked against other countries.	Forest research coordinating structure.	Start: Jan 1999 End: Dec 1999	Task 1 may not be achieved.
5. Establish and maintain an information system on forest research in South Africa.	Forest research coordinating structure.	Start: July 1988 Ongoing	Task 1 may not be achieved.
6. Establish and maintain a system for international and regional (SADC) networking and coordination.	Forest research coordinating structure.	Start: July 1988 Ongoing	Task 1 may not be achieved.
7. Establish an agreed structure or system for innovation for the sector, according to the requirements of the White Paper on Science and Technology.	DWAF (with DACST, DTI and industry)	Start: Sep 1997 End: June 1998	Stakeholders do not reach consensus.

24

Providing law for the sustainable development of the forest sector

What is the issue and why is it important?

24.1 The **White Paper on Sustainable Forest Development in South Africa** identifies the necessity to replace the present Forest Act, No. 122 of 1984.

24.2 The purpose of the new Act would be to promote the sustainable development of all forest resources in South Africa. It should reflect an integrated approach to the protection, management and utilisation of forest and woodland resources. This would accord with international principles and reflect the principle of stewardship under which every forest owner must ensure that the entire forest resource is sustainably managed.

24.3 **The White Paper stipulates the following guidelines for the new Act:**

It must:

- be cast in the mould of the new Constitution
- recognise international norms and standards
- provide for a dynamic approach to forestry and natural resource management
- provide for local interests
- provide for a people-driven approach to development
- embody other necessary aspects of new national policy.

24.4 The new Act must also be coordinated with other legislation and policy documents such as those on land, agriculture and the environment, including the Conservation of Agricultural Resources Act, the Environment Conservation Act and the Water Act.

Policy context

24.5 **The present Act provides mainly for:**

- the management of State forests
- the protection of land, vegetation and forest produce
- the protection against, and combating of, fires
- the control and use of land for afforestation
- the regulation of forest produce
- the protection of natural water resources where afforestation is involved
- the control and management of a National Hiking Way System and the National Botanical Institute.

Formulation of a new law

24.6 The new Forest Act is to be developed through several phases on the basis of the guidelines in the White Paper and of consultation to date. These phases will involve the development of a rough draft by a team of policy and legal experts, consultative work-

shops, and the drafting of the Bill, described in greater detail in paragraph 24.27.

Suggestions for the new Forest Act

24.7 Various suggestions for the provision of the new Forest Act are outlined below and are open for discussion and comment. No suggested provision is intended to duplicate the provisions of other statutes.

24.8 The **purpose** of the Forest Act is to provide for the effective protection, management and utilisation of all types of forest resources in South Africa, in order to promote the sustainable development of the forest sector, including the ecosystems and the biological resources they contain, for the benefit of the present and future generations.

24.9 The **preamble** should:

- recognise the political, social and economic changes that have taken place in South Africa
- recognise the new Constitution
- recognise the broader policies in the country
- take into account the principles according to which the Act should be drafted.

24.10 Definitions

A section will be included to clarify, in simple language, the words used in the Act.

24.11 Application

The Act should apply to all forest resources in South Africa.

24.12 Administration

- the Act must stipulate the identity, functions and other aspects relevant to a national forest authority
- the Act should stipulate what the Minister can delegate, and should provide for delegation of national competencies to the provinces and to local government
- the Act should provide measures for coordination between departments and different tiers of government

- the Act should make provision for cases where provinces/local authorities are unable to carry out their mandate
- the Act should make provision for the appointment and empowerment of forest officers to administer and enforce the Act, relating to:
 - inspections
 - monitoring and evaluation
 - enforcement of regulations.

24.13 Sustainable forest management systems

The Act should make provision for:

- the use of criteria and indicators of sustainability at different levels (national, provincial, landscape, and the forest management unit)
- regulations to promote sustainable forest management
- minimum standards
- forest management plans
- rehabilitation of degraded forests
- provisions for agreements between various parties on management systems.

24.14 Protecting and maintaining the resource

The Act should make provision for:

- maintenance of water resources
- fire management, in terms of protection and control measures, and areas of application
- forest hygiene, in terms of:
 - pest and disease control
 - control of invasive plants
 - litter and waste control
 - soil conservation
 - regulation of nurseries.

24.15 Certification of sustainable forest management

The Act should make provision for:

- evaluation and recognition of certification schemes in South Africa
- options include:
 - no provision
 - provision to require certification
 - provision to support credible voluntary certification schemes chosen by enterprises.

24.16 Provisions relating to community forestry

The Act should make provision for:

- enabling provisions for cases where people wish to proclaim and manage community forests
- institutions and governance
- demarcation, planning and managing forest resources
- forest resource rights in terms of tenure, access to benefits and other usage rights
- mediation systems and other conflict-resolution mechanisms
- participatory processes for developing forest management plans
- by-laws
- financing and other support services
- urban forestry support.

24.17 Provisions relating to the sustainable management of natural forests and woodlands

The Act should make provision for:

- proclamation of protected areas such as: State forests, protected forests, protected trees and a permanent forest estate
- responsibility of authorities for the various categories of protection
- forest management plans, criteria and indicators
- monitoring the condition of the resource
- rehabilitation of degraded forests.

24.18 Reporting on the state of the sector

The Act should make provision for:

- including the obligations and powers of various parties. These would include the various tiers of government, private forest owners, communities and NGOs
- obligation to maintain an information system or central database
- dissemination of information
- a biannual national report on the state of the forest sector
- information, to be made available to all interested parties
- responsibilities for marketing and promotion of products.

24.19 National Forestry Advisory Council

The Act should make provision for:

- representation
- the proposal that membership initially include at least 30% women, with a target of 50% within five years
- terms of reference: the purpose of the Council would be to advise the Minister on policy
- funding.

24.20 Public rights relating to private and public land (subject to constitutional rights)

The Act should make provision for:

- rights of way
- usage rights (for example the collection of firewood, medicinal plants and mushrooms)
- recreational rights
- conflict resolution
- provincial and local government responsibilities and obligations.

24.21 International obligations

The Act should make provision for:

- regulations to enforce obligations where necessary
- reference to international conventions on a variety of aspects that affect forest legislation
- links to trade conventions and treaties such as CITES, the WTO Agreement and the SADC where necessary
- regional cooperation, where necessary.

24.22 Research and development

The Act should make provision for:

- funding
- institutions.

24.23 Offences

The Act should make provision for:

- sanctions
- fines.

24.24 National Hiking Way Board

This should be retained, but in a new form with a new mandate to deal with access of this kind, and addressing the needs of the majority.

24.25 Forest product standards

See Table 18.1. Provisions are to be retained in the Forest Act until tasks 1 to 4 have been completed.

24.26 National Botanical Institute

This could be dealt with in the legislation administrated by DEAT.

The way ahead

24.27 The following steps have been, or will be, taken in the process of preparing the new Forest Bill:

- a legal drafting team has been appointed to prepare the legal documentation. A steering committee, made up of individuals who have been closely involved in the development of the NFAP, has been appointed to supervise the technical contents of the Bill
- a working paper containing suggested provisions for the new Bill will be produced for consultation by the end of September 1997
- consultation on the proposed contents of the Bill will follow during October 1997. Consultation will include provincial and local government and other stakeholders from the private sector, NGOs, unions, women's groups and civic society
- the working paper will be revised following consultation and a second draft will be discussed at a national workshop in March 1998
- following debate and discussion during the workshop, the Forest Bill will be prepared from the working paper, and will be presented to the Minister in time for tabling in parliament in the 1998 session.

25

Defining the role of government in the forest sector

What is the issue and why is it important?

25.1 Political and economic transformation in South Africa has created new demands on public sector institutions and the roles which they are expected to perform. A central element of national policy is the transformation of public service institutions to ensure greater representation, efficiency and relevance to the majority of South Africans.

25.2 In the past, government tended to focus on industrial forest resources and the protection of State forests. The new forest policy involves not only the industrial forest sector, but also requires the development of community forestry and the sustainable management of natural forests and woodlands.

25.3 This comprehensive vision of the forest sector also reflects the constitutional changes in forest-sector competencies and the recognition of the importance of incorporating all relevant stakeholders in ensuring a sustainable growing sector. All this requires a review of forestry functions and the roles of respective parties.

25.4 Increased efficiency and performance of those institutions involved in the forest sector must be measured against agreed key result areas.

PROBLEM STATEMENT:

The functions of the national government entity, i.e. the Chief Directorate: Forestry, have not yet been aligned with new forest policy. Provincial government institutions are in various stages of evolution with regard to the needs of the forest sector. Local government in rural districts, which has an especially important role to play in the forest sector, is hardly established. A carefully focussed strategy is necessary to transform government institutions in the forest sector. Similarly, their relationships with outside institutions need to be changed for the effective implementation of policy.

Policy context

25.5 The **Constitution** provides the basic values and principles which should govern public administration. These include the necessity for an efficient and transparent public service which responds to peoples' needs and

encourages participation in decision making. The Constitution also provides the functional areas of concurrent national and provincial legislative competence.

25.6 The **RDP** recognises the necessity to reform the public service to ensure efficient and coordinated structures. These structures must be capable of contributing to national goals and working with representative civil society, including NGOs and CBOs.

25.7 The **White Paper on the Transformation of the Public Service** highlights the major role that a reformed public service must play in the process of reconciliation, reconstruction and development. The government commits itself to the creation of a transformed public service which is "representative, coherent, transparent, efficient, effective and responsive to the needs of all". It must be characterised by "equity, equality, timeousness and a strong code of ethics". A number of transformation priorities are identified, including:

- transformation of service delivery to meet the needs of the majority of the population, specifically the previously disadvantaged
- rationalisation and restructuring to achieve integrated and coordinated service delivery
- institution building to achieve increased efficiency and cost-effectiveness
- increased representivity of the public service.

25.8 The **White Paper on Sustainable Forest Development in South Africa** recognises the key role of government at all levels (national, provincial, local and parastatal) in achieving the vision of a sustainable and efficient forest sector. There is a need for coordination between the different levels of government and between government, the private sector and civil society. Furthermore, these actions must take place within the framework of national policy and law.

25.9 Ensuing from the White Paper, the national government forestry function is committed to:

- developing the resources and competencies of the existing forest service, to implement policy and to ensuring that its core functions are carried out

- reviewing the status of the existing forest service to ensure maximum administrative efficiency
- reviewing the future of the forest resources of the former homeland administrations with the ultimate objective of disposing of these assets, after full and proper consultation, in the most beneficial way.

Current setting

25.10 The national forestry function in government has undergone many institutional changes since the late 18th century. These include provincial administration, independent departmental status, being a subsidiary division within the Department of Agriculture, being a Branch within the then Department of Environment Affairs and, more recently, holding the status of a Chief Directorate within DWAF.

25.11 Over the years, however, there has been little change in the main functions of government in forestry. These functions focussed on the protection of State forest land and the establishment and management of industrial plantation forest resources to meet national policy objectives.

25.12 Significant changes to government's forestry functions have, however, occurred more recently through:

- initial transfer of timber research to the CSIR in 1983 and subsequent transfer of the South African Forestry Research Institute (SAFRI) in 1990 to the CSIR
- the devolution of extensive areas of State forest to provincial nature conservation bodies in 1986
- the restructuring of the industrial forestry function leading to the establishment of SAFCOL in 1993
- the development of community forestry extension services from the early 1990s.

25.13 Reincorporation of the former homeland administrations into South Africa in 1994 resulted in the transfer of responsibility for the management of their extensive forest resources back to central government. Government is committed to a process of

restructuring these assets through fully consultative consideration of the available options. Assumption of this role has placed an additional burden upon DWAF – one which it is not best suited to perform.

25.14 The new forest policy redirects government to deliver a wide range of support and services to ensure sustainable development of the forest sector in its widest and most inclusive sense. These “core functions” include the need to:

- develop and implement forest-sector policy, including international policy
- monitor and evaluate progress on achieving sector objectives
- ensure development and delivery of relevant and comprehensive community forestry support services, complementary to and integrated with other development services
- ensure the sustainable management of South Africa’s natural forests and woodlands
- promote the development and continued competitiveness of the industrial forest sector and its growing contribution to national goals, including sustainable resource use
- facilitate coordination inter-departmentally and between different tiers of government, when necessary, for sector development.

25.15 The Constitution and the new forest policy carry important implications for the role of government in the forest sector and the allocation of responsibilities between different levels of government (national, provincial and local) and between government, the private sector and civil society. These require changes in roles and functions and are of particular relevance to the central government and the provinces.

25.16 National government may need to maintain the following functions until capacity at provincial and local levels is developed. However, provincial and local government will, in time, take responsibility for:

- the delivery of direct services in support of community forestry
- the delegated management of State forests
- the management of forests and woodlands in protected areas.

25.17 The forest sector will develop successfully only if national and provincial government assume the relevant roles and responsibilities in respect of these functions and provide a framework for successful individual and community initiative. The process of transferring responsibility in accordance with the new constitutionally defined competencies must be gradual but progressive. It must reflect the views and abilities of provincial-level institutions to perform the roles expected of them. It must also accommodate a variable pace of transfer of roles between provinces and the central forestry function, executed with sensitivity to local circumstances and aspirations. A cooperative governance approach is needed.

25.18 Effective delivery of core functions requires review of the institutional status of the central government’s forestry function. A wide range of alternative structures exists and is considered below. Such consideration must take account of:

- the necessity (or otherwise) to retain a critical mass of expertise within one national-level institution to deliver specialised services to a range of institutions in the government and private sectors
- the necessity (or otherwise) to achieve an institutional status which is sufficiently flexible in structure to respond swiftly to varying demands made on it by a range of institutions and clients at diverse levels in the government, private, civil society and NGO sectors
- the necessity to ensure a sufficiently high level of authority and responsibility in addressing the needs of a complex and diverse forest sector.

Institutional options – national government

25.19 Four feasible alternative options for the national government forestry functions have been identified:

- i. **Dispersal:** this would involve dismantling the single centralised forestry function and allocating the delivery of government responsibilities within the forest sector to a mix of appropriate institutions at national, provincial and local levels

- ii. **A national forestry function as part of a larger department:** this would involve the maintenance of a single, centralised forestry function in government, but as a subordinate part of a parent ministry
- iii. **An autonomous forestry function within the public service:** this would involve the creation of an autonomous forestry function within the formal public service, i.e. achievement of departmental status
- iv. **An autonomous forest authority outside the formal public service:** this would involve the creation of an autonomous forestry function outside the formal public service, i.e. the creation of an Authority or Commission.

Results of consultations

25.20 Views of stakeholders were solicited on the various institutional options throughout the consultation process. In general terms there is:

- a body of opinion that favours a splitting of the forest sector; one part dealing with industrial, commercial and/or socially motivated planted resources, and the other with natural forests and woodlands; this point of view is not upheld in the NFAP, for the reasons given in Chapter 2
- broad support for a consolidated national forest authority, rather than a dispersal of functions
- rejection of the concept of an independent forestry department within the public service
- roughly equal support for the creation of a forest authority outside the formal public service (option iv) or the retention of a national forest authority as part of a larger ministry (option ii), but with considerable debate about an appropriate parent ministry.

25.21 The current political imperatives, and the limited administrative options effectively available to government, however, constrain the range of options available. Thus, establishing a function outside the formal public service is not an option at this stage. The available alternatives will now be developed further and their suitability tested in the light of the demands of the new forest policy and the NFAP, and in the light of

constraints and opportunities offered through reform of the civil service in South Africa.

25.22 Irrespective of institutional structure or status, the current body of staff within the national government forest function needs new competencies and new institutional arrangements to perform the new, diverse and demanding tasks required of it.

25.23 Furthermore, there is now a misalignment of budgetary provision in relation to current functions. For example, 86% of the budget is allocated to the management of the forests of the former homeland administrations which operate at a loss.

25.24 Institutions at the provincial and local levels are similarly poorly positioned to assume new responsibilities.

Strategic actions

Goal

25.25 An appropriate, efficient and competent national forestry function which supports and promotes a thriving forest sector and establishes an appropriate relationship with other tiers of government and institutions outside government.

Indicators of achievement

25.26 Achievement of the following would indicate progress towards the goal:

- effective and accountable allocation of roles and responsibilities, both within the national forestry function and in other provincial and local institutions
- a defined and agreed mission for the national forestry function in government
- defined and agreed core functions (performance areas) for the national forestry function which contribute directly to the mission
- institutional arrangements and structure for the national forestry function, appropriate to the delivery of core functions
- staff trained and equipped to deliver core functions efficiently and effectively

- budgetary allocations for the national forestry function which reflect activities relevant to the core functions
- capacity for credible and competent leadership in the sector
- rapid transfer of extraneous functions such as the former homeland administration forests
- national forestry function enjoys the confidence of key stakeholders: forest industry, provincial and local governments, NGOs, CBOs and unions
- appropriate distribution of authority and responsibility among different spheres of government, clear and consistent role definition, and effective working relations between them.

Strategy

25.27 To improve the performance of the national forestry function through the identification of its appropriate mission and strategy; core functions, institutional home and arrangements, staff skills and budgetary provision.

Table 25.1: Strategy for the creation of a competent national forestry function

GOAL	An appropriate, efficient and competent national forestry function which supports and promotes a thriving forest sector and establishes an appropriate relationship with other tiers of government and institutions outside government.		
INDICATORS OF ACHIEVEMENT	<ul style="list-style-type: none"> • effective and accountable allocation of roles and responsibilities • a defined and agreed mission for the national forestry function in government • defined and agreed core functions • institutional arrangements and structure • staff trained and equipped to deliver core functions • budgetary allocations which reflect activities relevant to the core functions • capacity for credible and competent leadership in the sector • rapid transfer of extraneous functions such as the former homeland administration forests • forest authority enjoys the confidence of key stakeholders • appropriate distribution of authority and responsibility, and clear roles and relationships between different tiers of government. 		
STRATEGY	To improve the performance of the national forestry function through the identification of its appropriate mission, strategies, core functions, institutional home and arrangements, staff skills and budgetary provision.		
TASK	RESPONSIBILITY	TIMING	RISKS
1. Develop purposeful strategy for the creation of an effective national forestry function.	DWAF	Start: Sep 1997 End: Dec 1997	No risk.
2. Develop business plan for national forestry function.	DWAF	Start: Sep 1997 End: Mar 1998	No risk.
3. Align budget of the national forestry function to new core functions.	DWAF	Start: Sep 1997 End: Mar 1998	Inadequate central government budgetary provision inhibits assumption of new core functions.
4. Develop national forestry function's competence and capacity to deliver core functions.	DWAF	Start: Sep 1997 End: Dec 1998	Inadequate personnel available to fulfil new roles.
5. Identify best institutional option to deliver core functions.	DWAF	Start: Sep 1997 End: Mar 1998	No risk.
6. Clarify roles and responsibilities of different tiers of government.	DWAF and other provincial and local government authorities	Start: Ongoing End: Mar 1999	No risk.
7. Establish the cooperative governance structures needed to promote forest-sector development at provincial level.	DWAF and other provincial and local government authorities	Start: Apr 1998 End: Mar 1999	No risk.

26

Integrating the forest sector with other natural resources policies

What is the issue and why is it important?

26.1 In most of the key issues identified within the NFAP we have found that development in the forest sector needs to be closely linked with developments in other sectors, most importantly water and the environment, which are considered here. For example:

- at all levels, water resource management requires planning and decisions about land-use, including afforestation, since many aspects of water resource allocation can be managed only in this way
- those seeking local development are demanding integrated development plans and integrated support services
- environmental concerns can be addressed only through weighing up the advantages and disadvantages of realistic development options available in any given case.

26.2 Experience worldwide shows that sustainable development of the forest sector is difficult, or impossible, to achieve unless cross-sectoral integration is first pursued and achieved.

26.3 South Africa lacks resource-use policies that cover all sectors, although there are various policies and laws which together influence the direction of resource development.

26.4 The absence of a policy for integrated resource development inhibits progress in the forest sector in many ways, for example:

- natural forest and woodland habitat is being lost in many places because forest is being converted without sufficient consideration of sustainable forest management as a viable land use
- afforestation is being inhibited in many districts where the net benefits would be great
- industrial afforestation is singled out among all land uses as the only one requiring special planning measures.

26.5 To implement forest policy, therefore, we need to harmonise strategy for the development of the sector with both the existing and the emerging natural resources policies for the country.

Policy context

26.6 The **RDP**, and the rural development strategy which has emerged from it, emphasise the need for an integrated approach to development at all levels.

26.7 The **White Paper on Sustainable Forest Development** identifies the need to integrate the forest sector with resource management strategy, i.e. land-use planning and integrated catchment management,

through the NFAP. Further, it tasks national government, i.e. DWAF, to facilitate, among other things, linkages between the forestry function and other government departments with regard to land-use planning, integrated catchment management, and various relevant aspects of environment policy.

26.8 The **White Paper on a National Water Policy** provides the direction for the development of new water law and water management systems for South Africa. Aspects of special relevance to forest policy and sector strategy are the recognition of only those water uses (other than the water reserve) that are beneficial to, and in, the public interest. Allocation of water uses, over and above the water reserve, must be according to a policy of optimum water use, i.e. it must achieve equitable and sustainable economic and social development.

26.9 User charges for water consumed are to be instituted to promote the efficient use of water. The said White Paper identifies afforestation as requiring licensing and being subject to charges (the "interception levy"), which, with other user charges, should be employed to cover water resource management costs and a resource conservation charge for each relevant catchment. Furthermore, the White Paper identifies the necessity for each major water use sector to develop a water use, conservation and protection policy, which would be supported by regulation to ensure compliance with policy. Finally, the White Paper provides for integrating the afforestation permit system with the new water resource allocation system, and extending similar licensing arrangements to other land uses that impact significantly on other water users.

26.10 The emerging principles for water resource management have resulted in the changes to the afforestation permit system noted earlier and which have shifted afforestation decisions towards a better-integrated approach.

26.11 In the same spirit, the Minister and DWAF have initiated development of province-scale afforestation strategies through the method of strategic environmental assessment,

an extension of the principles of integrated environmental management.

26.12 The **White Paper on the Conservation and Sustainable Use of Biological Diversity** identifies as a national priority the need for the sustainable use of biological resources. This includes the need to restore degraded ecosystems, to control the spread of alien organisms and to integrate biodiversity considerations with land-use planning procedures and environmental assessments.

26.13 Draft regulations in terms of the **Environment Conservation Act** would require an environmental impact assessment for any development that would involve conversion of natural vegetation or change in land use, as well as the written consent of the Minister of Environmental Affairs and Tourism or the relevant authority in the province.

26.14 The **Development Facilitation Act** provides for local land development planning, according to a set of principles which include environmental principles. The Commission established in terms of this Act has the task of extending its scope to deal with land-use planning overall.

Current setting

26.15 In this document we have noted many obstacles to desirable forest development and that stem from the lack of adequate natural resources policy (see, for example, Chapters 11 and 12).

26.16 Developing the required overall policy is expected to take several more years, at least. In the meantime, forest resources are still being lost, rapidly in some places, and afforestation is perhaps being unnecessarily delayed in others.

Strategic actions

Goal

26.17 The strategic goal should be to influence the existing and emerging elements of relevant natural resources policy in South Africa to secure the most beneficial policy for

the sustainable, equitable and efficient development of the forest sector.

Indicators of achievement

26.18 Achievement of the following would indicate progress towards the goal:

- explicit recognition of forest and woodland conservation objectives in the Land Development Objectives drafted in terms of the Development Facilitation Act and Integrated Development Plans drafted in terms of the Local Government Transition Act, or their equivalents in each of the provinces
- completion of the strategic environmental assessments for afforestation in KwaZulu-Natal and the Eastern Cape, and the implementation of these, or equivalent procedures, in Mpumalanga and any other province where forest development planning is urgently needed
- reconciliation of the draft regulations in terms of the Environment Conservation Act with the outcomes of local development plans which support sustainable forest and woodland management plans and mutually

supportive legal and institutional arrangements

- reconciliation of the draft regulations in terms of the Environment Conservation Act and of the afforestation permit system with the outcomes of strategic environmental assessments of afforestation, spatial development initiatives and local development plans, so that rural development can be speeded up in districts where afforestation is beneficial, for example, in certain districts of the Eastern Cape Province
- the principles, criteria and indicators of sustainable forest management that are appropriate to the scale of the province, landscape or catchment (see Chapter 12) are built into planning procedures, such as strategic environmental assessment and integrated catchment management.

Strategy

26.19 To lead in the development of required cross-sectoral policies and policy instruments through participatory engagement with all relevant stakeholders.

Table 26.1: Strategy for achieving development of the forest sector that is integrated with overarching natural resources (water and environmental) policies and strategies in South Africa

GOAL	To influence existing and emerging elements of natural resources policy in South Africa to secure the most beneficial policy for the sustainable, equitable and efficient development of the sector.		
INDICATORS OF ACHIEVEMENT	<ul style="list-style-type: none"> • explicit recognition of forest and woodland conservation objectives in local development plans • completion of the strategic environmental assessments or equivalent procedures • reconciliation of the draft regulations in terms of the Environment Conservation Act with the outcomes of local development plans • reconciliation of the draft regulations in terms of the Environment Conservation Act and of the afforestation permit system with the outcomes of relevant assessments and initiatives • the principles, criteria and indicators of sustainable forest management are built into planning procedures. 		
STRATEGY	To lead in the development of required cross-sectoral policies and policy instruments through participatory engagement with all relevant stakeholders.		
TASK	RESPONSIBILITY	TIMING	RISKS
1. Initiate and complete strategic environmental assessments for industrial forest sector development in KwaZulu-Natal, the Eastern Cape and Mpumalanga.	DWAF	Start: Jan 1997 End: Apr 1998	The projects cannot be adequately resourced and funds are not available.
2. Formulate and implement a consistent procedure for joint development of forest-sector strategies in each province by national and provincial government, together with other stakeholders.	DWAF (with provincial government)	Start: Apr 1998 End: Mar 1999	No risk.
3. Develop and implement a method for supporting local development planning as mandated by the Development Facilitation Act and Local Government Transition Act (or equivalent) by incorporation of appropriate forest-sector goals in Land Development Objectives.	DWAF	Start: Apr 1998 End: Mar 1999	The Act is not implemented timeously.
4. Participatory development of a forest-sector policy for the use, conservation and protection of water resources as required in the White Paper on a National Water Policy for South Africa.	DWAF (with other stakeholders)	Start: Jan 1998 End: Dec 1998	Stakeholders do not collaborate.
5. Participatory development of a forest-sector policy for the conservation of biological diversity.	DWAF (with DEAT and other stakeholders)	Start: Jan 1999 End: Dec 1999	Stakeholders do not collaborate.
6. Insert forest-sector objectives and criteria into regulations in terms of the Environment Conservation Act to ensure that sustainable forest and woodland management plans are supported.	DWAF	Start: Apr 1998 End: Mar 1999	Regulators disagree.
7. Reconcile the regulations in terms of the Environment Conservation Act with the results of strategic environmental assessments for forest-sector development so that unnecessary constraints to afforestation are eliminated.	DWAF	Start: Apr 1998 End: Jun 1998	Regulators disagree.
8. Promote, implement and monitor the adoption of nationally and locally agreed criteria and indicators of sustainability into planning procedures (e.g. strategic environmental assessment) that are applied to the forest sector.	DWAF	Start: July 1999 End: Dec 1999	Stakeholders do not collaborate.
9. Devise and implement a communication plan so that principles, criteria and systems for sustainable forest management are effectively communicated to other sectors.	DWAF	Start: Jan 1998 End: Ongoing	No risk.

27

The way ahead

27.1 Preparation of the NFAP brings to a conclusion the first phase of developing a new forest policy for South Africa, a process which began in March 1995. The vision of the White Paper has now been translated into a series of tangible actions which, when implemented, will help us realise the goal of a thriving, sustainable and equitable forest sector which contributes towards meeting our national goals.

27.2 The policy process has, however, not come to an end. Policy is not static; it must respond to changing circumstances and needs and must be constantly improved as our understanding of the sector itself improves. We still know too little about many important issues relating to people's needs and aspirations, resource use, environmental, economic and social concerns and the full value of the forest sector.

27.3 In terms of the specific goals, strategies and tasks contained within the NFAP, these should now help to direct key stakeholders to plan their work schedules, activities and budgets towards better meeting the overall policy goal. The nature of the NFAP is that it should serve to inform and direct, rather than compel. We should, furthermore, not lose sight of it being a programme of action for all stakeholders, not only government.

27.4 Rapid progress can be expected, and will clearly be required, in terms of drafting a new Forest Act. Similarly, early attention will be given to equipping DWAF to perform the new functions and roles expected of it within this document and to shoulder the heavy burden of responsibility identified for it within the NFAP.

27.5 The time frame for this first NFAP is three years. Throughout these three years, DWAF will monitor our progress in meeting the goals of the Programme and will advise the Minister accordingly. The Programme itself will be revised in the course of the next two years in the light of progress, improvements in understanding and changing needs. At the end of the third year it will be formally evaluated and a consultative and participatory process of preparing South Africa's second NFAP will commence, no doubt benefiting from the experiences and practice of preparing its predecessor.

27.6 The NFAP is a process of continuous improvement. The Programme is an important benchmark and framework for sustainable development of the sector. However, we will quickly learn what improvements and adaptations for policy will be needed and we must be ready to implement these improvements as we progress.

Appendix 1

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