

SUSTAINABLE FOREST DEVELOPMENT IN SOUTH AFRICA

THE POLICY OF THE GOVERNMENT OF NATIONAL UNITY

WHITE PAPER

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MINISTRY OF WATER AFFAIRS AND FORESTRY,
PRETORIA, SOUTH AFRICA

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PREFACE

This White Paper on Forest Policy is the second such document produced by my Department. As with its predecessor, the White Paper on Water Supply & Sanitation Policy, it is intended to provide the Forestry Industry and the general public with a clear view of the policy which the new Administration intends to adopt. In keeping however with our expressed intention to ensure open and transparent debate, comment and criticism on the contents of this document are

welcomed. Policy is not holy writ. It can and will be modified when a clear need to do so is shown to be in the national interest.

The policy directions which you will read clearly break with the narrow and rather parochial concerns of the past. Our new Government is concerned with far wider issues that impact on the lives and wellbeing of all of our people, and new forestry policy must reflect these concerns.

We of course cover the direct and immediate policy requirements of historical and traditional forestry and the industries which it has spawned, as will be apparent from the Table of Contents. We also, however, cover another sector hitherto largely neglected.

Forestry in South Africa, and everywhere else where it is consciously practised, has at least two main streams of endeavour. The older of these is the protection of the natural forest resource, it being clearly recognised as being a part of the natural heritage. Out of this has grown the science of commercial forestry to feed the voracious appetite of the world's growing populations for wood as a raw material. We are surrounded by wood from the cradle to the grave. Timber and paper are irreplaceable in our lives.

There is a third stream in South Africa, at present weak and seeking its optimum flow-path, but of major importance in South Africa's proper and harmonious development. It is the new stream of community forestry and agroforestry, supplementing commercial forestry by endeavours nearer to the people's needs. It aims to improve the living conditions of all our people through projects such as school nurseries, urban and peri-urban tree plantings, individual fruit and shade tree plantings and transporting surplus wood to needy areas.

It is common cause that the most deprived sections of our people are those in rural areas. They have little or no land, little or no fuel, little or no income, and struggle daily with the burden of poverty. Forestry is rurally based and there is a natural link between it and the rural population. It can provide employment, building materials, fuel and craft materials. It can provide opportunity and hope and can add dignity to the environment.

This is the broad aim of the policy outlined in this White Paper to weld together the three strains of conservation forestry, commercial forestry and community forestry.

The overall goal of Government is to promote a thriving forest sector, utilised to the lasting and sustained benefit of the total community, and developed and managed to protect and to improve the environment. There are also important over-riding concerns which are addressed. We believe that, regardless of the ownership of the forest land, be it state or private or communal, we must move towards fostering a spirit of stewardship of this for the nation and for posterity. We are

dealing with an asset that brings with ownership wider responsibilities than the narrow objectives that have been routinely accepted. Inherent in this philosophy of stewardship is the concept of sustainability which is a recurring theme in this paper. Sustainability is of course the essential norm for all of the broad spectrum of endeavours that are part of forestry. There should no longer be exploitation of any of our assets, human or material, for an ephemeral advantage which ignores the future.

My Department has no formal jurisdiction over many of these matters, but it does, by Act of Parliament, have a clear responsibility to ensure the wellbeing of the forest industry. We interpret this to include the wider reaches of that industry which are covered in this document. That is the background against which it is presented.

The policy will be applied and monitored by a newly reconstituted Department of Water Affairs and Forestry. The amalgamation of all water and forestry related activities and personnel of the eleven old "homelands" under the national administration will effectively treble the size of the Department. Because of this and the new and different functions which it will have to undertake to satisfy the new policy directions of water affairs, sanitation and forestry and the necessity that these should be integrated into the Reconstruction and Development Programme, a new institutional framework is being developed. This transformation will take some time but I am confident that the new Department will achieve our policy objectives within a reasonable period.

This White Paper is based to a very considerable degree on the extensive consultation process, beginning with the preparations for the National Forest Conference which I convened over a year ago. Many people from all sectors of the wider forestry industry have contributed to the debate. I must express my deep gratitude to them all, and especially to the small core of dedicated officials and individuals who have produced the documents which have reached the public. They have made my task easier and indeed more comfortable in that I am secure in the knowledge that most major concerns of all who have an interest in our industry have been addressed.

[Prof. Kader Asmal](#), MP,
Minister of Water Affairs and Forestry

1. BACKGROUND TO A NEW FOREST POLICY

1.1 The scope of forest policy in South Africa

Contrary to the traditional view of forestry as the science of managing forested land, forestry today is about the relationships between people and the resources provided by the forest. It includes the use and husbandry of the wood, fruits and other products that come from trees, as well as the wildlife that dwell in the forest. Other factors of importance are the environmental, aesthetic and cultural values of forests and woodlands.

A forest policy must therefore deal with the scope of these relationships between people and forest resources. It cannot be confined narrowly to matters relating to forest industries, or to a restricted concept of a forest. World forest policies, such as those contained in the Forestry Principles of Agenda 21 (a comprehensive global programme for sustainable development arising from the Earth Summit in Rio de Janeiro in June 1992), refer to "forests of all kinds". Government policy in South Africa is formulated to include "forests of all kinds", that is, the indigenous forests, where trees grow with their crowns virtually intertwined, natural woodlands, where tree cover may be as little as 10%, plantation, and community forests. This accords with the Food and Agriculture Organisation's (FAO) definition of forests.

Consequently, the forest policy for this country addresses all components of the forest sector, i.e. indigenous forests and woodlands, industrial forestry and community forestry. The text distinguishes between these where required. This is a change from the past which has significant implications. This is made clear later in Section 3.

This forest policy defines the role of Government in dealing with the forest sector. It is set within a frame of overarching policies, including macroeconomic, trade, industrial development, and human resources development policies. These may have a major effect on the forest sector through their influence on wood prices, for example. The forest policy directs, facilitates, and regulates the actions of players in the forest sector, but it must do so taking into account the influence of the other policies mentioned above. It addresses the need to adapt and strengthen the central government institution in forestry, in order to ensure effective implementation of policy.

1.2 The role of forestry in the RDP

The RDP is a political framework for integrated and coherent socioeconomic progress. It seeks to mobilise all South Africans and the country's resources toward creating sustainable growth and opportunities for all.

The Department of Water Affairs and Forestry has already redirected its programmes toward RDP goals. This includes the new community forestry programme, for example.

Rural development is one of the main objectives of the RDP. Successful rural development will be achieved through cooperation between rural people, their local government, and many provincial and national agencies. The RDP strategy is based on a multisectoral approach to rural development, aimed at local economic development, in which rural people set the agenda.

The role of Government is twofold. It must:

- invest in infrastructure and provide basic services
- create a facilitative environment for local economic development, that will encourage rural people to develop entrepreneurial skills and promote appropriate markets that will implement local economic development.

The RDP strategy identifies the forest sector as an important element of local natural resources development that can contribute to creating better living environments and economic opportunity. Plantation forestry and local valueadding industries would have a place in local development programmes in many rural districts in the Western Cape, Eastern Cape, KwaZuluNatal, Mpumalanga, and Northern Provinces. Throughout South Africa, better management practices for the sustainable development of indigenous forests and woodlands could create income earning opportunities. Sustainable wood supplies need to be part of integrated energy programmes to address the historic shortfall in energy supplies to rural households. This can be done through community forestry programmes, the redistribution of surplus wood from industrial forests, the management of harvesting from natural woodlands, and improved efficiency in wood use.

1.3 The process of developing policy for the forest sector in South Africa

The Department initiated a process to develop appropriate policy for forestry soon after the establishment of the Government of National Unity. This resulted in the National Forest Policy Conference at the World Trade Centre, Kempton Park, on 2 and 3 March 1995. Before this, a representative organising committee developed a discussion paper and conference process designed to elicit broad participation, identify areas of common ground, and highlight policy issues. The conference involved 330 people, from all interest groups, and included a contingent of about 60 people from rural communities across the country. These representatives were supported through preparatory meetings to enable them to participate effectively in the main conference. A representative editorial group used the information from the debates at this conference, the conference report, and further material to compile a discussion document, *Towards a policy for sustainable forest management in South Africa a discussion paper* issued by the Department in July 1995. The Department received comments on the paper from 68 parties. Then followed the conference on the Greening of South Africa held on 19 and 20 October 1995, organised by women for women and involving 365 delegates. All of

these processes have provided opinions, ideas, and information as a basis for the White Paper.

1.4 The issues facing the forest sector in South Africa

1.4.1 The state of natural forest and woodland resources in South Africa today

Natural forests South Africa has never been rich in natural forests. Climate and the ageold effect of fires have confined natural forests to about 327 600 ha, 0.2% of South Africa's land area. Natural forests have been depleted over the past three centuries. Nevertheless, much of the natural forest has survived, though currently there are reports of renewed forest destruction in some parts of the country.

Most natural forest occurs in the Eastern Cape (about 140 000 ha) and in KwaZuluNatal (about 91 200 ha). This is followed by the Western Cape (about 60 000 ha) and the Northern Province and Mpumalanga (about 35 000 ha each). These forests are mostly small and scattered. In the former Transkei, no forests are larger than 1 800 ha; the forests in the mountains are all smaller than 700 ha. Large forests occur only in the Knysna region, in the Amatolas and at Woodbush.

Most of these forest areas are owned by the State (although the status of the forests formerly administered in the homeland "governments" needs to be clarified). Only in KwaZuluNatal is a substantial portion of natural forest in private ownership. Here, the removal of indigenous trees along streams on commercial farms has had widespread negative effects for arable agriculture.

Woodlands Vast areas of woodlands occur in the semiarid to subhumid parts of the country. The mapped area of these woodlands amounts to about 28 000 000 ha, but they have been depleted and the current actual area would be significantly less than this. The National Land Cover project which the CSIR and the Agricultural Research Council are conducting will provide an estimate of their current extent within the next year.

There has been a reduction in tree cover in much of this woodland over the past several centuries. In some parts, this reduction has been beneficial, such as where sustainable agricultural systems have been established. Generally, this is acceptable where woodland utilisation and conversion have contributed to improved welfare in the long term.

Elsewhere, woodlands have been replaced by unsustainable forms of land use, or destroyed in the overall degradation of the environment. In some former homelands districts, over half the woodland environment has been degraded or destroyed through the pressures of the apartheid resettlement programmes, and unsustainable agricultural development. In some commercial areas degradation has

also followed tree removal for arable farming. Deforestation has also occurred through local overharvesting of fuelwood. In this case, use of the woodland resources has not led to improved welfare.

The state of woodland resources, and the factors influencing it, is complex and unclear. It requires urgent investigation in the interests of the country, with a view to establishing the basis for sensitive, sustainable management.

The role of natural forests and woodlands in rural areas Rural people use natural forests and especially woodlands for many purposes. These include:

- timber for housing, kraals and fencing;
- fruit as an important dietary supplement, and sap for brewing of beer and wine;
- bark for making ropes and weaving;
- medicinal products from bark, bulbs, leaves and roots;
- honey production;
- harvesting of insects, mushrooms and other edible plants;
- grass for thatching and weaving, and for grazing cattle;
- local craft industries.

The economic value of forests, and especially of woodlands, to communities often equates to a significant proportion of the income of rural households. This value has seldom been recognised in South Africa. Aside from direct economic benefits, sound woodland ecosystems provide many environmental benefits, such as the protection of soils and of water catchments. However, given the uneven distribution of our population, these benefits are often underutilised.

Management of woodland and forest resources on communal land Most woodlands in the rural areas of the former homelands are communal resources. Under the old Bantu Laws and Administration Act, the use and management of natural woodland resources were assigned to Tribal Authorities, although some national regulations took precedence over the Tribal Authority.

Despite the traditional control of harvesting of natural products, woodlands have been over utilised in many areas. In much of KwaZuluNatal the controls on cutting live trees have lapsed and some large forests have disappeared as a result.

However, some communities have demarcated and proclaimed resource management areas for sustainable resource management to the benefit of the community as a whole. Pilot projects are in progress in the former Bophuthatswana, KaNgwane and KwaZulu.

Conservation of natural forests and woodlands Much of the information on the conservation status of forests and woodlands is outdated. There is concern about

loss of protected forests, and about the lack of adequate management systems to support the interests of local communities, as well as to protect our national assets. A factual basis for evaluating the situation is urgently needed. This should clarify the state of forest and woodlands on State Forests (i.e. protected areas proclaimed in terms of the Forest Act), other protected areas, and areas outside of these. It should provide information on current management of the resources, the stakeholding which neighbouring communities have implemented, the extent of legal and illegal use of woodlands and forests, and the level of degradation of the resource. This factual basis must be used to design a strategy to rectify the situation wherever necessary.

1.4.2 The forestry sector and rural communities

All South Africans have a stake in forestry, but the people most involved are rural people and the workers in the forest industry.

Rural profile About 40% of South Africans live in the countryside and in rural towns and villages. They include most of the poor and very poor, most being women and children. Women between the age of 16 and 65 outnumber men by 30% to 40%, many men being absent, for example, to work in urban areas. Women are especially important among the rural people, since they are often the effective heads of households in the countryside, and bear the major burden for maintaining the wellbeing of the family. They live in households of which the majority do not have access to basic services. Most rural households have no tap water in or near their homes, nor electricity.

Rural unemployment is high, exceeding 50% in the Northern Province and the Eastern Cape. There are disproportionately high levels of unemployment for women especially.

Rural issues to be addressed Rural areas have a history of restricted resources, forced settlement, lack of democratic control of development, poor education and inadequate protection of labour rights. These are the issues to be addressed through rural development in the RDP. Forestry has an important contribution to make to integrated rural development. Furthermore, the Government recognises that traditional leaders have played a role in tenurial arrangements for, and other relevant aspects of, resource use. It will be sensitive to this role and consider these arrangements when developing programmes for community forestry and forest and woodland management.

1.4.3 Rural energy requirements

Onethird of households in South Africa is estimated to rely on wood for fuel. Many other households use a range of fuels, of which wood is one. In some regions, up to

80% of rural households use wood for energy in the home, with or without other fuels. Women in these households often walk long distances to fetch firewood. The average time spent this way is estimated conservatively at five hours per household per week. Between 9 and 11 million tons of wood are used for fuel per year, of which about 6.6 million tons are estimated to be harvested from natural woodlands. The amount of wood consumed for household needs nearly equals that used in the formal forest industry, which provides sales of about R1 billion per year.

Despite the current, massive household electrification programme, estimates indicate that 1,5 million households will still be without electricity 20 years from now. Even households with electricity use wood for heating. In the mean time, sources of wood will continue to be depleted.

The situation regarding fuelwood for rural energy has recently been investigated through the Biomass Initiative, involving Government, NGOs and other institutions. This has provided a first approximation of the use of wood in the rural energy mix, the fuel needs

of rural households, markets for woodfuel, and the state of woodlands in the relevant districts.

It has produced the outline of a strategy for meeting woodfuel needs which has now been passed on to the Department of Water Affairs and Forestry.

1.4.4 The forestry workforce

The forest and forest products industry is a major employer and of great importance to the South African labour market. It is estimated that about 200 000 to 260 000 people are employed in the forest and wood processing industries; more accurate statistics are needed. About 80 000 to 100 000 are forestry workers, of whom nearly 80% are in the Mpumalanga and KwaZuluNatal Provinces. An estimated 120 000 people are employed in those industries which use wood as a primary input. About 40% of these are employed in sawmilling, 30% in pulp and paper manufacturing, and the balance in secondary processing. In addition, there are those employed by the smaller primary converters such as in making poles, matches and charcoal.

Labour distribution Labour intensity varies greatly in the processing sectors. Sawmilling employs about one worker for every 80 m³ processed; in pulp and paper, the ratio is one worker for every 250 m³. Pulpwood and mining timber plantations employ fewer people per hectare than sawlog plantations.

Labour intensity in the forestry and forest products sector will change significantly over time. For example, if proportionately more land is used for pulpwood

production, overall labour intensity will decline, both in the forests and in the processing plants. On the other hand, a move to higher value addition within South Africa, for example through high value sawlog production, and processing and marketing of quality solidwood products from this resource, could contribute to higher and more rewarding employment. The choice of appropriate policy would strongly influence this picture.

Employment conditions Employment conditions in the sector vary considerably. Workers generally enjoy better conditions than their counterparts in agriculture, but they are not as good as in manufacturing. Employees in large companies enjoy better benefits than those in small companies. The average wage rates in 1994 for forest workers in the large companies ranged from R570 to R2 400 per month. Unskilled workers in these firms earned R570 to R600 per month and semiskilled earned R880 to R920. Skilled workers earned R2 200 to R2 400, but only 5% fell into this category.

In addition to the cash wage, most of the large companies also provide a range of benefits including pensions, housing, subsidised meals, medical facilities and schooling. The Forest Owners' Association estimates the costs to the employers of providing these benefits at about R250 per worker per month. Few small employers, including subcontractors, provide these benefits.

No accurate statistics are available for employees of small growers and forestry contractors. Trade union members report that in some areas wages are as low as R200 per month. On average, the small employers probably pay 50% to 70% of the wages paid by the large companies. The South African Agriculture, Plantation and Allied Workers' Union (SAAPAWU) maintains that no employee in the sector should earn less than R750 per month before benefits, to ensure a reasonable minimum standard of living.

Other employment conditions such as training also vary from one employer to the next.

Occupational health and safety Forestry is often a dangerous occupation. Since many tasks are performed outdoors, workers frequently experience difficult working conditions. Working in forestry also involves exposure to the hazards of mechanical equipment and pesticides and chemicals. Working in the processing plants involves exposure to cutting equipment, heavy machinery, dust and often hazardous chemicals. Management of safety in working environments is therefore a special need in this sector.

All forestry companies are legally required to comply with the Occupational Safety and Health Act, and all major companies participate in the NOSA programme. Safety standards have steadily improved in many companies. However, NOSA

standards are not fully acceptable to the trade unions. There is a long way to go to ensure uniform minimum health and safety standards in the forests and the wood processing industries.

Trade union rights There is also an uneven application of trade union rights. Some employers have recognised trade unions for many years, and others since legislation has included forest workers. Among some, however, there is still a reluctance to accept trade union and other workers' rights.

Forestry contractors There has been a strong trend in recent years towards using contractors in forestry operations. This includes transport, planting and harvesting, although each company differs in the work that it subcontracts. More than 15 000 people are estimated to be employed by forestry contractors, according to the SA Forestry Contractors' Association.

The quality of services provided by contractors varies. Problems have been experienced by both forestry companies and workers, including:

- poor quality of work provided by contractors due to lack of equipment or experience, or due to their employing workers without the necessary skills;
- failure to adhere to accepted operating standards and occupational health and safety standards;
- payment of unacceptably low wages;
- lack of job security among workers employed by contractors;
- social problems in some of the forest villages;
- lack of worker benefits such as: pension provisions, maternity leave and health care.

Initiatives to address these problems include:

- establishment of the South African Forestry Contractors Association (SAFCA), whose 194 members include most main contractors. SAFCA operates a grading system, reflecting the quality of work of each of its members; it negotiates group rates on insurance; and it facilitates access to training services;
- some companies are working at improving the standard of contractor work by selecting contractors according to quality of work, requiring compliance with company occupational health and safety standards, and pressing for improved skills and equipment.

The major companies have developed comprehensive policies for managing their relationships with contractors.

Contractors tend to employ labourintensive methods. The trend for contracting has probably helped to maintain employment levels in the industry.

Contractors also offer an important avenue for creation of new black enterprises in rural areas, of which some have become established. The promotion of small business is an important part of South Africa's national economic strategy. On the other hand, however, satisfactory working conditions and human resource management must be achieved if these businesses are to be sustainable. Fostering new enterprises is a Government priority, but there is a concern that this may affect the position of trade unions in collective bargaining. Government will need to investigate the issue to establish the necessary requirements.

1.4.5 Land claims in forestry areas

Many forestry operations are on land where people were displaced in the past. Claims for restitution of land rights are to be dealt with through the mechanisms of the Restitution of Land Rights Act of 1993. The Act stipulates that people who lost their land rights because of a racially discriminatory law shall be entitled to restitution of the land they lost, or receive appropriate compensation. Certain areas of State Forest land, State land in SAFCOL's hands, as well as privately owned

land, are likely to become subject to restitution claims.

Other claims, such as of ownership or security of tenure by labour tenants where their prior rights have been jeopardised by sale of the land to a forestry company (for example, in Mpumalanga), or claims of need arising from land shortages and lack of alternatives (e.g. land invasion and high population density of newcomers or squatters on forestry land), are not addressed through the restitution process. Prompted by pressure from labour tenants,

various forestry companies have negotiated with these claimants and the negotiations have led to innovative solutions, accommodating the interests of both sides.

The Department recognises the urgency of the land reform programme and will therefore facilitate restitution of land rights wherever possible. Where land claims are lodged against State land the Department will cooperate with the Minister of Land Affairs to examine whether restoration is feasible, and will assist to achieve speedy resolution of claims.

1.4.6 Community forestry

Community forestry is forestry designed and applied to meet local social, household, and environmental needs and to favour local economic development. It is implemented by communities or with the participation of communities. It includes farm forestry, agroforestry, community or village planting, woodlots and

woodland management by rural people, as well as treeplanting in urban and peri-urban areas.

The state of community forestry in South Africa Community forestry has been neglected in South Africa in the past. Government focused on woodlots for fuel and construction. Commercial farm forestry, in the form of farm windrows, shelter belts, and woodlots, has proved quite successful, and no longer need much support. Community forestry among African people has had little success, perhaps only in some parts of the Eastern Cape, where woodlot establishment around indigenous forests has helped to conserve the natural resource, and in scattered cases where woodlots have been incorporated into the local resource use system. Generally, the lack of adequate community forestry programmes is reflected in, amongst other things, the pervasive shortfalls between fuelwood demand and fuelwood production, the severe degradation of woodlands in many districts, as well as local destruction of natural forests, and the fact that few communities have been able to build treegrowing into their local development initiatives. This overall failure reflects the past lack of recognition of the value of natural and plantation forest resources to rural households, in economic, environmental, and social terms. There has been an absence of sound policy that recognised local needs, as well as a suitable supporting institutional framework.

Lately, community forestry has gained impetus through changes in the programmes of the Department of Water Affairs and Forestry, the Biomass Initiative and others. In implementing these programmes, it has been realised that many initiatives are difficult to sustain, in common with experience elsewhere in the world. It therefore requires ongoing governmental support.

Greening Conference The recent Conference on the Greening of South Africa affirmed the need for effective community forestry programmes, and that women can play a central role in such programmes. Delegates emphasised the fact that programmes must be locally based, and that local communities should be supported to develop the capacity to influence and control projects and programmes. They emphasised that women needed the institutional framework that would allow them to assert their influence, and that direct access to appropriate information in useful forms was a central part of the support needed. Recognising the need for decentralised influence on policies and plans, the conference recommended the formation of women's representative structures at Provincial level, as well as various individuals to bring influence to bear on policy and its implementation at national and Provincial levels.

1.4.7 Industrial forestry and its contribution to the country's economy

Industrial forestry in South Africa encompasses the large planted forests (established to supply raw materials to satisfy mining, construction, and industrial

markets) which supply the pulpmills, sawmills and factories which process the raw materials.

Wood is a key raw material to which value is added in many industries in our economy, for example in mining; construction of houses and commercial buildings; poles for electricity distribution and telecommunications; furniture manufacture; pulp and paper manufacture; and energy production.

South Africa's demand for wood is met predominantly from industrial forest plantations, and not from natural sources or through imports for the following reasons:

- natural forests provide little wood suitable as a raw material for industry
- after the First World War, the Government focused on implementing policies of selfsufficiency
- the influence of the commercial opportunities offered through a domestic source of lowcost wood.

The growth of industrial forest plantations Although industrial forestry began in the last quarter of the nineteenth century with government projects, the main investment has been by the private sector. The largest part of this industry has proved to be highly profitable in the use of natural resources, although it comes at an environmental and social cost, especially if, as with other forms of development, land conversion is involved.

By 1994, industrial forests had grown to about 1,45 million hectares. Of the planted areas, 56% was pines, 32% was eucalyptus and 11% was wattle. About 2 800 ha of small plantations of poplar, mostly owned by commercial farmers, supplied wood for matches. Most plantations are located where climatic conditions are suitable for afforestation in the Northern, Mpumalanga, KwaZuluNatal, Eastern Cape, and Western Cape Provinces, with the largest plantation areas in Mpumalanga (624 000 ha) and KwaZuluNatal (532 000 ha). Assessments by the Department of Water Affairs and Forestry indicate that most land suitable for further afforestation is located in KwaZuluNatal, Mpumalanga, and the Eastern Cape. The area currently afforested amounts to a significant fraction of the total area that could be biologically suitable for forestry.

New afforestation has increased the total area of plantation by about 17 000 ha per year recently. This has been supported by past Government policy to expand the plantations, and by the need for wood for the pulp and paper sector. New afforestation has slowed down, however, with very few permits having been issued in the last year.

Potential productivity of these forests is relatively high by world standards, averaging about 20 m³ per ha per annum. They currently yield about 18,5 to 19

million m³ of wood per year, which satisfies over 90% of domestic demand and provides for a surplus for export, largely as pulp, paper, wood chips and other products. The average realised yield of about 13 m³ per ha per annum is lower than average potential productivity, because many plantations are still young, and about 7 to 8% of plantation land is temporarily unplanted. Neglect of some industrial forests, such as in the former homelands, also contributes to poor realised yields.

Estimates by the Forest Owners' Association for 1994 indicated that the value of annual sales of roundwood from the plantations exceeds R1 billion. The land and the timber was valued at more than R8 billion.

The relative roles of large companies and farmers in industrial forestry Currently, 77% of plantations are owned by large companies and SAFCOL, the recently established State company (see Table 1). The plantations in the former homelands, owned by the State, amount to about 12% of the total.

Table 1. Estimated extent of industrial forests in South Africa, as in 1993/94.

ownership	Total (ha)
Government (former homelands)	172 000
SAFCOL	263 000
Large companies in the private sector	703 000
Commercial farmers and other private individuals	308 000
Total	1 446 000

Although ownership is dominated by SAFCOL and the large companies, there are many farmers who participate in forestry. Of these farmers, 1 050 are growers registered with the South African Timber Growers' Association (SATGA), who now own about 200 000 ha. Their numbers and their share of the planted area have declined recently because of land purchases by larger companies. Many black farmers (about 4 000 in KwaZuluNatal alone) have entered forestry, largely under contract to the big companies. Most of these farmers are dependent on these companies and are not able to operate freely in a competitive market.

Roundwood prices Prices of roundwood in South Africa have increased sharply recently, but are still much lower than world prices (up to about 40% less). This reflects the past influence of low prices set in longterm sawlog contracts, and the dominance of the market by a few large buyers who are vertically integrated. Currently, market protection does not play a role. Factors governing prices need to be investigated to enable the development of appropriate policies.

The rural development and agricultural policies of the country are intended to broaden access to farming opportunities and diversify farm sizes in South Africa. Attractive prices for roundwood will tend to draw more farmers into forestry. These trends could favour a diversification in ownership of the industrial forest holdings, and greater participation by small farmers, a trend which the Government would welcome.

Opportunities offered by multipleuse forestry Multipleuse forestry is practised on many plantation forests, where forestland is used for purposes other than wood supply. These include, for example,

- nonwood or minor forest products, such as ferns and forest mushrooms, which earn certain companies several million rands a year through licence fees and royalties paid by collectors;
- recreation and tourism, which is growing rapidly.

Multipleuse forestry offers significant opportunity to realise greater value from the land, and increase local economic development.

Neighbouring communities do not often have access to these opportunities. On the other hand, progressive companies have shown how multiple use involving neighbouring communities can benefit both parties. There is potential for much wider sharing of opportunities in this way.

Finally, industrial forestry is based on exotic trees, which confines it to limited climatic zones. Indigenous trees offer an alternative for many purposes, in a wider range of localities. The Department will promote the investigation of the better use of indigenous trees.

1.4.8 Industries based on wood

Contribution of forest products to the economy The forest products industries, i.e. all those industries using wood and wood products as raw material, constitute a significant part of the South African economy, contributing about 7,4% to the output of the country's manufacturing sector in 1993/94.

They earned about R1,28 billion in net foreign exchange from total export earnings

of about R3,6 billion in 1994/95. Their relative contribution to the economy has grown steadily in the past 20 years. The many jobs involved in these industries mean that over one million mainly rural people depend on this industry directly.

This sector currently consumes about 19 million m³ of wood a year (in 1993/1994), about 43% of which is hardwood and the rest, softwood. Sixty percent of this is consumed in pulp manufacture, 23% in sawn timber, and about 12% in mining timber. Pulp consumption is growing at about 3% per year, and saw timber at 2%, but mining timber consumption is declining. Investments in the forest products industry are valued at about R12,0 billion, of which 90% is in pulp and paper mills.

Exports Most pulpwood (more than 60%) is destined for export, as chips and dissolving pulp, paper pulp, and newsprint. Of the total roundwood consumed, about 35% was destined for export in 1992. In 1994, pulp, paper and board contributed R1,5 billion in net foreign exchange earnings, and timber and wood chips amount to R707 million. By volume of roundwood equivalent, chips, pulp and paper represented 600 000 m³ and sawn timber, 400 000 m³.

Success of the pulp and paper sector The pulp and paper sector has proved especially successful since it is internationally competitive. This is because the companies employed modern technology and improved continually, both in the plantations and in the manufacturing process, and moved quickly to an export-led strategy when production exceeded domestic demand. Because of the export orientation of the pulp and paper sector, it is especially sensitive to macroeconomic and trade policies.

Forest products industries and the environment The forest products industries have environmental impacts which must be recognised and managed. In sawmills and mining timber mills, wood waste is often problematic and needs to be minimised, largely through improved processing and utilisation. Atmospheric emissions can be problematic, though only locally, and much reduced in recent years. Wood preservative chemicals need careful control and management. The organised preservative industry is now implementing a new SABS code of practice to this end. However, since most wood is processed in pulp and paper manufacture, and because this involves large volumes of water, significant amounts of various chemicals, and large volumes of lignin-based emissions, it is this part of the industry where the meeting of environmental standards is most important.

Pulp and paper mills generate waste and water- and airborne emissions which are environmentally harmful and often offensive to neighbouring people. South African mills have progressively improved their environmental management and introduced innovative processes to reduce waste and emissions. Continued improvement of environmental management will be needed to meet statutory

standards, and similar demands from buyers on the international market. They are regulated through the Water Act and the Air Pollution Act, and in some measure through the Environmental Conservation Act. The stringency with which these Acts is applied will need to increase to protect the environment, meet the expectations of the South African public, and to assist firms trading internationally.

Decline of the sawmilling sector By contrast to the pulp and paper industry, the sawmilling sector has declined. It has followed a protectionist strategy until recently, has exported little, innovation has been weak, and the industry has shrunk.

Beneficiation and value addition in South Africa More foreign exchange can be earned through greater value addition within South Africa, and new employment created as a result. Wood chips, especially, could be diverted to new processing capacity within the country. Sawing the logs presently exported, together with better grading and marketing of sawn boards for high value markets overseas, could make an important contribution in a short space of time. Ultimately, domestic processing of pulp for paper or for textile fibres in the case of dissolving pulp offer even greater prospects for new economic growth through export of high value products.

The structure of the forest products industry Currently, the structure of the industry is a matter of concern. Most of the industrial forests are held by a handful of companies, and most of these own both the forests and the processing capacity. In parts of the sawtimber business, the same holding company sometimes owns the forests, the sawmills, the distribution system, and the retailing outlets. Generally, such a pattern of ownership in an industrial sector is not healthy, without enough of the competition among firms that is needed to satisfy the interests of the consumer.

This sector is currently the subject of an economic study by the Department of Trade and Industry, and the Industrial Development Corporation. This should lead to appropriate policy to guide and facilitate the future development of the industry.

1.4.9 Meeting the country's need for industrial wood

The growth of the forest industry In the past two decades, the industry has grown largely through expanded exports of wood chips, pulp, and paper. Domestic consumption has grown little. In the next two decades, domestic consumption is likely to increase considerably. Exports will be maintained, and certainly increase in some cases (such as in dissolving pulp and in other value added products). This trend is desirable, since it will address domestic needs as well as the opportunities available in global trade.

The demand for roundwood has increased considerably. To date, the main response

to increased demand has been to plant more land, rather than to increase yield efficiency.

Predicted shortfall Domestic demand for wood in South Africa will increase in the foreseeable future owing to economic growth, and growth in per capita consumption of woodbased products such as paper (from the current low base). Current analyses indicate that domestic supply of wood will apparently fall short of demand during the next two decades. Shortages are already experienced periodically. Supply will also fluctuate, because the distribution of the age classes of the forests is uneven.

This rising demand will tend to encourage further expansion of plantations. However, expansion will be constrained by the competition for land and water resources, and by environmental and social concerns. Policies concerning expansion of the forest resource can crucially affect the direction of development. Therefore, the projected shortfall in wood supply needs careful investigation before an appropriate policy response can be chosen.

Increasing yields and efficiency At least half of what will be needed in 20 years' time can be provided by increasing the productivity of current resources. Yields from existing afforested land can be increased through genetically improved trees, improved silviculture and forest operations, and better utilisation of current waste. A 30-40% improvement, and perhaps more, from the current base is possible over the next 20 years.

Yields in the sawmills and other processing plants can be increased through:

- improvements in feedstock from genetics;
- better forest management;
- new processing technologies;
- waste minimisation;
- adaptations in current lumber standards;
- better general management; and
- human resources development.

Improvements in yield of possibly up to 10% may be achieved in this way. As much as 40% of waste paper can be recycled (recycling accounts for 35% now), which at current levels would equal 1,5 million tons of wood per year. Changing technologies in mining supports could ultimately release another 2 million tons per annum. Prolonging the life of wood used for construction by general application of preservatives could equate to some hundreds of thousands of cubic metres per annum. The remaining half of the roundwood required 20 years from now must come from other sources.

Trade with SADC countries SADC countries are important in planning a strategy

to meet South Africa's needs. Roundwood can be imported at acceptable prices probably only from Zimbabwe and southern Mozambique, because of the high transport costs from elsewhere in the region. However, other countries could supply processed products, such as sawn boards and paper pulp, for further processing in South Africa. Inevitably, regional trade will play a growing role in the industrial forest sector.

Further afforestation Further afforestation in South Africa will be necessary to balance the supply with anticipated demand. Rising demand will draw new land into industrial forests, perhaps facilitated by changes in the structure of the agricultural sector. Any industrial forest operation here, large or small, will need to be competitive with counterparts in SADC or elsewhere. However, incentives for afforestation here should not be to the detriment of forest projects in SADC countries, except in the case of small grower schemes relevant to the rural development strategy. Great care must be taken to ensure that new afforestation in the country occurs in the right places, in the most beneficial manner, and in a socially and environmentally acceptable manner. These issues are treated in the statements of policy that follow below.

1.4.10 Sustainability of industrial forests

Afforestation constitutes a major change in the environment, with impacts on landscape and ecological processes of the same order as in crop and orchard agriculture.

However, industrial forestry provides a renewable resource for many uses if it is practised in a sustainable way. Many concerns have been raised as to whether or not plantation forestry as it is now practised is sustainable in the long term. These concerns are broad ranging, from possible depletion of soil resources, to the concerns of society about changes to the aesthetic character of the landscapes.

Acidification Most industrial forests in South Africa were established in grassland ecosystems on naturally acid soils which are prone to loss of mineral nutrients. Where mineral nutrients in the wood are exported by harvesting, or if the forest litter is not effectively recycled, the already acid soils lose fertility.

The combination of acidification and forestry effects have been found to be comparable to areas affected by 'acid rain' to the worst degree in the industrialised countries of the northern hemisphere. The loss of nutrients is worsened by the increasing acidity of rainfall over much of the region, caused principally by industrial

pollution. About one sixth of the plantations in South Africa are on soils with a high risk of acidification due to their shallowness, low buffer capacity, or low base

status. In order for plantation forestry to be sustainable in the long term on these sites, fertilisation or other mitigating measures would be required.

Wider impacts of forestry Forestry has widescale impacts. An example is the impact on water in rivers which flow through protected areas, such as the Kruger National Park. This, together with other factors such as irrigation abstraction and the prolonged drought, have jeopardised aquatic ecosystems.

Alteration of the landscape affects perceived scenic value. Afforested landscapes are perceived differently by different observers. It seems that many visitors to such areas as Mpumalanga perceive the afforested landscape as attractive, but many people who appreciate the South African landscape, do not. Injudicious layout of plantations frequently offends the eye; however, the forestry industry has implemented guidelines to prevent this. For example, forestry companies have cleared and maintained at least 2800 km of riparian zones on their estates, which would effect a significant aesthetic improvement.

Managing sustainability The principle of sustainability explicitly requires a responsibility on the part of present custodians and users of resources to ensure sufficient opportunities for future generations to derive adequate benefits from these resources, or from the human, intellectual and physical capital that arises from their current use. However, this concept is difficult to apply in practice, the more so since principles of sustainability and sustainable development must be fit for the particular needs of any given country.

Practical ways to manage toward sustainability are being pursued internationally by developing criteria according to which forestry may be judged sustainable or not, and indicators for assessing forestry against each criterion. Such criteria and indicators need to be applied at the national level, to allow the country to assess its performance as a whole. They are applied also at the level of the firm, or operating unit within the firm, such as a plantation estate. These assessments may be limited to certification of operations, or forest products, so that firms and operations may be accredited, and products may be certified as coming from sustainable forestry the so-called green labelling of forest products.

Involvement of local forestry companies Forestry companies in South Africa have responded by subscribing voluntarily to bestpractice guidelines for environmental management, the "Guidelines for environmental conservation management in commercial forests in South Africa". These are widely implemented in the companies. These companies have developed selfassessment procedures to ensure application of the guidelines, incorporating them into their internal procedure manuals and instituting monitoring and evaluation procedures (environmental audits). The S A Timber Growers' Association actively encourages smaller private growers to use the guidelines.

However, the fact that the system is not legally binding is a significant weakness. Accreditation through statute and an independent authority with the resources to provide clear evaluation and certification of environmental management in forestry could protect the interests of the sector, as well as protecting the environment.

1.4.11 Forestry and water supplies

Controversy about the effects of afforestation on water supplies began in the 1920s, and continues today. This led to the implementation of controls on afforestation that have been applied since 1972 through the afforestation permit system.

In 1986 the industrial forests in South Africa were estimated to consume about 1.2 billion cubic metres of water that would otherwise have entered rivers and streams, and been available for other uses. This volume equated to about 30% of the amount used for urban and industrial purposes, or about onetenth the volume used in irrigated agriculture. The value of wood produced per cubic metre of water consumed is higher than that yielded by many forms of agriculture, and less than others. The water consumed is a cost required to support the forestry sector as a contributor to our economy.

Regulation through the permit system The administration of permits is discussed in the Green Paper. The principal effect of the permit system was to disperse afforestation among catchments, rather than to limit afforestation generally. By 1994, nearly one million hectares had been permitted for afforestation, but only 40% of that extent had been planted. Because of financial and logistical constraints and drought, some applicants seek simply to increase the value of their land.

Afforestation is currently the only form of land use which is regulated to limit upstream water consumption (though irrigation use and other abstractions from streams are regulated in controlled catchments). This, together with the need to regulate the apportionment of the entire water resource at different scales within the quaternary catchment, is one of the major limitations of the permit system, and a principal reason why progress toward integrated catchment management is needed.

Prior to 1972, afforestation proceeded more or less unchecked. In some cases, injudicious afforestation of riparian zones occurred. As a result, there are cases where plantation forests

should arguably be removed. Many companies have already begun to do so, for example in riparian zones. This clearing has recently been given great impetus by the RDP water conservation programme, which involves clearing of alien invasive

trees from riparian zones and sensitive catchments. The forestry companies make a significant contribution to this programme.

Changes to the afforestation permit system Afforestation permits are no longer issued for many of the catchments in the country, and indeed were not from the inception of the system in 1972. Areas suitable for afforestation and which may be released for this purpose are diminishing.

Afforestation permits were previously administered by the Chief Directorate of Forestry in Government. This responsibility has now been transferred to the Chief Directorate:Water of the Department. This arrangement is intended to ensure better balance in the process of deciding on permits.

Permits are now administered at the level of quaternary catchments. Decisions are no longer based on whether or not the cumulative effects of afforestation would exceed a certain percentage reduction in flow. The intention is that the increased water use anticipated from a proposed forestry development should be assessed in relation to all demands for water downstream of the development. The decision must be based on the option that provides the most favourable use of the water in economic terms (after provision for community needs, the needs of downstream countries on international rivers, and the requirement to maintain aquatic ecosystems).

Applications are now screened by a multiparty Afforestation Review Panel in each province. The Panel carefully considers representations from all interested and affected parties. It may call for an appropriate environmental impact assessment should it regard this to be necessary, on the strength of representations received.

Policy for the permit system is being developed by the Afforestation Permit Policy Committee, comprising representatives from relevant central Government departments, forest industry associations, trade unions, and technical experts. This committee will complete its task soon, after which a committee to advise on permit decisions at national level will probably be required.

There are certain problems because of shortterm bottlenecks in the administration of the permits, the need to find and apply rapid procedures for economic, environmental and social assessment of competing water demands, and the burden which the system places on the prospective small farmer or community. These problems need to be resolved quickly. The need to place the permits in the larger context of integrated catchment management is even more important to ensure proper balance in the allocation of water resources and sound consultative decisionmaking processes to balance the competing interests involved. Also needed are ways of bringing the true costs of water use to bear on all users, not just the forest sector, to improve the efficiency of water use.

1.4.12 Industrial forestry and the conservation of biodiversity

Afforestation involves the replacement of natural vegetation such as grassland or woodland, ancient communities rich in species. Fundamental habitat change of this kind obviously impacts upon biodiversity.

Grasslands are most affected. About 11% of the grasslands of the mountains and higherlying parts of South Africa are afforested. About 25% of the grassland typical of the escarpment of Mpumalanga is afforested.

Elsewhere, such as in the coastal forest zone of KwaZuluNatal, afforestation has seldom replaced natural habitats, but rather sugar plantations or other agricultural crops. Concern about impacts on biodiversity arises principally in the case of mountainous regions, such as the Wolkberg centre of endemism in the Northern and Mpumalanga Provinces. This is because the grassland habitats in the mountainous regions contain many native species of which a large percentage does not occur elsewhere.

Although forestry displaces many of the original species, it does provide habitats for new species suited to arboreal habitats. Nevertheless, biodiversity in plantations is lower than otherwise, except in comparison with other monocrops such as many agricultural crops, and degraded land.

Reduction in biodiversity due to plantation forestry is offset in certain ways. This is because negative impacts are confined to planted land, and are mitigated by survival of adapted species. Biodiversity is often protected on unafforested land within the estate, which amounts to about 15% of the total area involved. Much unafforested land within forest estates has been demarcated for conservation.

Nevertheless, afforestation just like any other cropping system, reduces biodiversity, a cost which is inevitable if we are to meet our needs for wood. The concerns presently are that:

- affected habitats and species should be adequately conserved in appropriate reserves as well as on forest estates where possible;
- afforestation should continue where justifiable, but should not proceed in areas important for the conservation of biodiversity;
- effective assessment is needed to ensure that proposed afforestation is properly evaluated in terms of biodiversity impacts.

The Department intends that those concerns should be addressed.

Some experts maintain that too much afforestation has occurred in sensitive areas, and that it must be reduced. This is especially true in areas of attractive scenery, or

special conservation value. Afforested land is being cleared in the Eastern Shores of St Lucia for this reason. Pressures are mounting to do so in districts such as those along the Drakensberg.

1.4.13 Forestry and landuse planning in South Africa

Generally, the use of land in South Africa has been poorly planned, with resultant inefficiencies, inequities, and environmental degradation. Although the most glaring consequences arise from the apartheid policies as applied in the former homelands, effects are evident throughout the rest of the country.

In the forest sector, some consequences of inadequate landuse planning are seen in land disputes, the conflicts about water resources, a concern over the loss of land suited to crop agriculture and the loss of habitats for native species. Previous forestry development strategies were formulated in the context of inadequate or inappropriate overarching policies, without sufficient consultation, and did not include the regulations needed to find the optimum development path for the sector.

While policy for the forest sector cannot provide the policy for land use in general, it must nevertheless take into account the need for an overarching policy and strategy, and must be designed so that it can be accommodated within the landuse policy. Examples exist elsewhere of policies and planning processes that require national goals and strategies for land use to be translated to district and local level plans through appropriate consultation to balance national and local interests. The district level plans identify allowable and inadmissible land uses through comparative assessment of environmental, economic and social impacts. The mechanisms for reaching decisions on proposed changes are clear and transparent, and can be designed to be feasible. Such approaches could rapidly facilitate improvement in the way forestry is fitted to overarching landuse planning in South Africa, especially if properly linked with integrated catchment management.

1.4.14 International conventions and concerns

Concern about the state of the global environment and the changing international political agenda has given rise to a variety of international forestry agreements, organisations and initiatives that affect policy for the forest sector in South Africa.

Five documents produced at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in June 1992 are relevant to South African forestry. These are:

- the Forestry Principles, a nonlegally binding authoritative statement of principles for a global consensus on the management, conservation and sustainable development of all types of forests;

- the Convention on Biological Diversity, the objectives of which are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources;
- Agenda 21, a document presenting detailed work plans for sustainable development including goals, responsibilities and estimates for funding;
- the Rio Declaration, a statement of broad principles to guide national conduct on environmental protection and development; and
- the Framework Convention on Climate Change, which does not impact directly on forest policy, but which influences the forest sector insofar as forests are recognised for their role in mitigating industrial carbon emissions and are used for this purpose.

South Africa is signatory to the convention on Biological Diversity and the Framework Convention on Climate Change and now faces the task of turning them into national policy.

In addition, South African is signatory to the Rome Statement on Forestry (March 1995), which reaffirms a determination to attain the objectives from UNCED in the shortest time possible, while pursuing a balanced approach between the environmental and the developmental functions of forests.

Since UNCED, the UN Commission on Sustainable Development has established the Intergovernmental Panel on Forests (IPF), which first met in September 1995. Its purpose is to pursue consensus and coordinated proposals for action to support the management, conservation and sustainable development of all kinds of forests, not just tropical forests, consistent with the UNCED Statement of Forest Principles. The main issues to be addressed are:

- implementation of UNCED decisions related to forests at national and international levels;
- international cooperation regarding financial assistance and technology transfer;
- scientific research, forest assessment and development of criteria and indicators for sustainable forest management;
- trade and environment related to forest products and services, including the development of methodologies to advance the full valuation of forest goods and services;
- a review of international organizations and multilateral institutions and instruments, including appropriate legal mechanisms, to develop a clearer view on the work being carried out under existing instruments and institutional linkages; and
- the identification of any gaps, areas requiring enhancement and areas of duplication.

Various efforts to harmonize forest product certification programmes are under way. Broadly, their primary goal is to establish ways to accredit certifiers of forest products and to ensure that certifiers operate with the highest possible standards of integrity and technical competence. Certification is or should be based on forest management standards that are in accordance with internationally accepted principles and criteria, as well as with locally developed forest management standards. The FAO has taken the initiative to support African countries in the development of systems appropriate to Africa. The International Standards Organisation is in the process of enhancing the ISO 14000 standard for environmental management to incorporate provisions for forest management and forest products. Experience has shown that a diversity of national methods and approaches to criteria, as well as indicators, needs to be recognised. Criteria need to be globally appropriate, but indicators should be developed for assessments of sustainability at the national forest management unit levels.

The FAO and UNCED have recognised National Forestry Action Plans (NFAP) as the most appropriate planning processes leading toward forestry development and implementation of Agenda 21 in the forest sector, and this has been endorsed internationally. Experience has shown that early NFAPs were inappropriate in many countries, often reflecting the agendas of the international donors involved in developing countries rather than the real needs of the country concerned. Subsequently, the instrument and the processes involving their development have evolved into a useful tool that can satisfy national and international needs.

These international conventions and norms do not necessarily apply without change to the forest sector in South Africa. For example, many elements in the UNCED agreements relate to the conservation of moist tropical forests, and the forests of South Africa do not figure largely in this context. Consequently, care will be needed in applying these norms to the development of policies in this country, while fully recognising global obligations.

1.4.15 Government involvement in forestry in South Africa

Agencies involved in the management of forests Many agencies are currently involved in the management of forests and woodlands in South Africa. In central Government, these include the Departments of Water Affairs and Forestry, Environmental Affairs and Tourism, and Agriculture. The Department of Land Affairs and the Department of Mineral and Energy Affairs have influencing roles. Development of industrial forestry and the forest products industries involves the Department of Trade and Industry. SAFCOL is a matter for the Department for Public Enterprises. The National Parks Board manages extensive areas of natural forests and woodlands. Provincial government agencies involved include Departments of Agriculture, and various agencies for conservation and environmental management.

Each of these agencies has a different role to play, but these roles need coordination and orchestration. Previously, this was sought through such mechanisms as interDepartmental committees, like that involving Water Affairs and Forestry, and Agriculture, for afforestation permits, and, more recently, the Interdepartmental Committee for the Biomass Initiative. Views on the efficacy of these committees differ; some feel that they were relatively ineffective, others believed that they worked, and could have been more effective if they met more often. Others argue that the problem lies in overlapping and conflicting policies and legislation, and that committees are a symptom of the problem rather than a solution for it.

Statutes influencing the forest sector A number of different statutes other than the Forest Act influence the forest sector, the most important of which are:

- the Conservation of Agricultural Resources Act, which among other things, regulates land use and provides for the control of weeds (administered by the Department of Agriculture);
- the Mountain Catchment Areas Act, for the management of catchments (Department of Environmental Affairs and Tourism); and
- the Environment Conservation Act, not currently explicit about the forest sector (Department of Environmental Affairs and Tourism).

The relationship between all these laws and policies for the forest sector must be considered when developing a new Forest Act, and developing the role of Government.

The Forest Act itself confers comprehensive powers on Government to administer forestry matters; these are outlined in the Green Paper. The Act needs to be reviewed, at least to bring it into line with the Constitution.

Many of the responsibilities and duties of central government in terms of the Forest Act have been delegated to Provincial governments, for example, the administration of extensive protected areas declared as Wilderness Areas in terms of the Forest Act, such as in KwaZuluNatal, the Eastern Cape and the Western Cape.

Present forest law and policy reflects an integrated approach to protection, management, and use of forest resources of any kind. This approach has the advantage that forest resources are clearly identified on the national agenda, with clear responsibilities defined. It also accords with international custom and "soft" law.

Furthermore, it reflects the responsibility of stewardship, recognised in national and international norms and law, in that each farmer, forester, or enterprise has to

ensure that the forest estate is sustainably managed, which is the core of the concept of environmentally sustainable management. This integrated route will continue to be followed in the new policy and legislative processes. The process of revision would need to address several issues, as outlined below.

Emerging policies affecting the forest sector (energy, land, environment, water, forestry, science and technology, trade and industry, rural development) all indicate that the roles of Government departments, though complementary, will still need coordination and integration, and mechanisms will be required to achieve this.

The forest resources of the former homelands and TBVC states With the establishment of the new Constitution and the repeal of TBVC Forest Acts, six forestry services have been added to the Department. Approximately 10 000 employees are involved. Industrial forests amount to about 160 000 ha (with significant unplanted areas, and much of the rest neglected), and many indigenous forests are included. The land area adds to about 320 000 ha. Some of this is proclaimed State Forest, some is tribal land, and some is land held by the previous Bantu Trust. Estimates suggest that these administrations involve a net cost to Government of between R200 million and R300 million per annum.

The plantations on these lands constitute a valuable resource. The yields of timber are committed mostly through longterm contracts to diverse sawmilling firms. In many cases, local communities lay claim to the benefits from, if not ownership of, the land on which the forests are situated. Where former tribal land is involved, Provincial governments lay claim to the land in terms of the constitution. Many important natural forests occur on the land, requiring protection and equitable conservation. The future of these forest lands of the former homelands is a pressing issue.

SAFCOL SAFCOL was established in terms of the Management of State Forests Act of 1992 to place the state industrial forest and timber processing functions on a proper commercial footing. This Act provided for its incorporation in terms of the Companies Act, with Government being the sole shareholder. It provided for agreements between the Minister of Water Affairs and Forestry and SAFCOL, for the "... management, control and operation of any State forest..." for commercial purposes. It provided further for the deproclamation and transfer of State forest land to SAFCOL by deeming it to have been deproclaimed as State forest (in terms of the Forest Act, this would normally require a twothirds majority vote in Parliament).

SAFCOL was registered as a company on 21 September 1991. It reports to the Minister for Public Enterprises through the Board of Directors. The Minister of Water Affairs and Forestry and SAFCOL ratified a temporary agreement on 4 May

1994, with effect from 1 April 1993, which provided for SAFCOL's right of use of the relevant State forests, transferring certain powers in terms of the Forest Act at the same time. State forest land was to be hired, or used gratis. Major indigenous forests were excluded from the land transfer. This agreement effectively deproclaimed State forest land, which reverted to the administration of the Department of Public Works.

SAFCOL and the Department of Works signed an agreement for the sale of the land to SAFCOL, at a price based on market value, on 22 September 1995. Title deeds have not yet been transferred to SAFCOL, but the land is deemed to be in its ownership, and its value has been incorporated into the balance sheet for the company.

Currently, the Department of Water Affairs and Forestry is negotiating toward agreement on several aspects of the use and management of this land, especially regarding the conservation and management of natural forests and other ecosystems. At the same time, SAFCOL has been included in the programme for the reconstruction of State assets. SAFCOL is currently operating profitably.

1.4.16 Advanced education and training for forestry

There is adequate capacity for the training of forestry professionals and technicians for South Africa's needs. Significant progress has been achieved recently by the institutions concerned in adapting the curricula to meet the needs of the country today and in the future. However, more needs to be done, in the light of the policy set out in this White Paper. Curricula need urgent evaluation and development to satisfy this requirement.

Furthermore, countries in the SADC have significant shortfalls in professional capacity for development of the forest sector. South African institutions have a role to play in addressing this shortfall, especially if this can be done in cooperation with counterpart institutions in those countries.

The large companies, the SA Timber Growers' Association, and the SA Lumber Millers' Association maintain a diverse range of training courses for employees in the industry. Employees in the companies and those of responsible farmers and smaller operators benefit from the programmes, but many workers do not. Skills acquired through these programmes are not certificated through a national scheme, which limits their value and the mobility of workers.

1.4.17 Research, technology development, and innovation

Industrial forestry in South Africa has benefited from purposeful research and technology development for many decades. Many technical barriers to the

development of the sector have been overcome through this, and productivity has been enhanced as a result. Technical aspects of the ecology and management of natural forest and woodlands have been well studied and the findings used, but the vital interface between people and resources has been much neglected. Overall, little attention has been paid to community forestry. Indigenous knowledge and technology has hardly been mobilised. Thus, science and technology has played a valuable role, but not equitably.

More than a dozen institutions play significant parts in research and technology development in the forest sector, in universities, the science councils, and the private sectors. Financial support to these institutions has declined rapidly during the last few years. Programmes are fragmented. Through lack of overall vision and purpose, many gaps have been left and opportunities for synergy missed. It seems that this research capacity in South Africa is unsustainable in its current form.

The Department has launched an investigation into forestry research in South Africa, to assess its status and the options for future development.

2. THE NEW FOREST POLICY

The new forest policy of the Department has several elements.

- a set of nine guiding principles which determine the kind of policy chosen, and how it is to be applied
- the goal to be pursued in the next five years
- overall policy to govern the place of forestry in the management of land, water, and other natural resources
- policy for industrial forestry
- policy for community forestry
- policy for the conservation of our natural forests and woodlands
- policy that determines South Africa's response to global concerns about forests
- policy for research, education and training
- policy that governs South Africa's relationships with states in the Southern African Development Community and bilateral relations with countries beyond SADC.

These elements of policy form the framework for new legislation, the intended roles of Government and other institutions in the forest sector, and outlines of strategy to turn policy into action.

2.1 Principles

The policy of the Department, and how this policy will be applied, tested, and developed, is based upon the following principles:

- forests and forest resources to be treated as a national asset
- policy to be formulated and implemented so as to promote democratisation
- gender equity
- peopledriven development
- consultation in formulating and implementing policy
- sustainable forest development
- recognition of the scarcity of water resources
- a competitive and value-adding forest sector
- decent employment conditions.

2.2 Overall goal

The overall goal of Government is to promote a thriving forest sector, to be utilised for the lasting benefit of the nation, and developed and managed to protect the environment.

This goal will be pursued by wide participation in formulating and implementing policy and plans for forestry, which will be developed to facilitate the role of people in communities, the private sector, and Government.

2.3 The forest policy in relation to natural resource management in South Africa

Many sectors compete for land, water and other natural resources in South Africa. This competition intensifies as the economy grows. Access to these resources has not been equitable. Government policy is that the forest sector should develop within the context of overall natural resource use planning and continuous strategic environmental assessment, especially planning for the use of land and of water. This overall planning must be peopledriven, set within a national framework, and built from the local level, in the context of participatory planning for local development and integrated catchment management. Government will ensure the necessary coordination and collaboration between Departments to promote a coordinated natural resources policy. It will focus on empowerment of communities, especially women, through equitable access to information, and appropriate service support to facilitate their participation in the planning process.

Government will regulate where and how afforestation occurs, especially in the headwaters of the rivers. It will also ensure the protection of biodiversity, habitats, sites of historical and cultural value, and scenery.

Government also believes that a responsible attitude in forestry would have plantation forests removed from areas where demonstrable environmental damage

has been done, such as on the Eastern Shores of St. Lucia. These aspects of industrial forestry will be investigated and developed accordingly.

2.4 Working conditions

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.

The Government will use its influence to work with industry and organised labour to move workers and management toward a progressive labour agreement within the provisions of the new Labour Relations Act. This is the necessary first step toward jointly agreed measures for employment conditions, skills recognition, job grading, industrywide strategies for training and innovation, and the progressive improvement in operating practices required in a competitive and environmentally and socially responsible sector. The envisaged progressive labour agreement should allow rapid development of skills and progressive innovation and productivity improvement in forestry and forest products firms. Workers' families need security and a good quality of life for this to happen.

Regarding employment conditions among contractors, Government will work to have this issue included in the new labour agreement. It will also promote the universal acceptance of contracting policies requiring sound employment conditions (including occupational health and safety), quality practices (including environmental management systems), and skills recognition among contractors providing services to companies, other growers (including small farmers), and firms in the sector in general.

2.5 The policy for industrial forestry

The Government recognises the important role of the industrial forest sector in South Africa, including the wood processing industries. It currently has a major stakeholding in industrial forestry, as the owner of SAFCOL and the former homeland forests. Restructuring or privatisation of these holdings will be treated in line with overall Government policy, in consultation with all interested parties.

There is great concern as to the present structure of the forest and forest products industry. Whilst a healthy number of smaller farmers and firms exist, the industry is dominated by four large corporations. Generally, a lack of adequate competition between rival firms puts both consumers and suppliers to firms at a disadvantage, through unfavourable prices for example. Government favours a greater diversity of firms in any sector, and prefers conditions which promote rivalry between firms. However, Government recognises also that there are benefits in economies of scale.

In terms of its forest policy, Government undertakes to:

- foster the continued competitiveness of the forestry sector locally and internationally within bounds of acceptable environmental and social costs
 - promote equitable access to the opportunities and benefits arising from industrial forestry such as through equity sharing arrangements, or facilitating land reform
 - promote the speedy resolution of the claims of communities displaced from their land by afforestation projects or the demarcation of conservation areas
 - counter and limit adverse effects of industrial forestry on water resources and biodiversity
 - ensure that afforestation permit allocations and integrated catchment management will be directed at equitable, efficient and sustainable allocation of resources, linked with local economic development and resource use plans
 - develop and follow policy where industrial and profitable community forestry should bear the environmental and resource costs arising from afforestation, e.g. costs of water use
 - promote an industrial policy that will continually improve value addition to forest products within South Africa
 - assess trends in the structure of the forest and forest products industry, and promote a suitably competitive structure
 - encourage further investment in the forest industry, including overseas interest
 - facilitate the entry of small farmers and entrepreneurs by introducing incentives and by minimising barriers
 - investigate the outlook for supply and demand for wood to establish the need for and desirability of further afforestation in the country
 - establish the districts within which new afforestation would be most beneficial, as well as the land use and farming systems best suited to the needs of the local people, and ways of assuring the supply of wood to capital intensive processing plants
 - involve the private sector in the improvement of a strategy to satisfy the growing demand for wood and wood products
 - address all options to increase timber yields and improve efficiency through research, technological and managerial innovation, recycling and waste minimisation, and development of alternative fibre sources
- continually monitor and assess forest health and factors affecting it (pests, diseases, fire, effects of plantation forestry on soils, impacts of atmospheric pollution, conservation of adequate gene pools) as a basis of strategic responses to any potential threats to sustainability

- facilitate the ongoing process of developing criteria and indicators that can be applied to promote the sustainability of the industrial forest resource and for the certification of forest management units and forest products
- cooperate with the Department of Environmental Affairs and Tourism to ensure that the above criteria and indicators adhere to international standards, yet are suited to local needs
- support research and promote innovation through technology transfer to maintain the competitiveness and sustainability of the industry and to improve productivity
- formulate the new law of the forest sector so as to regulate the sector in the wider interest, and to facilitate the management of conflict regarding the use of land and water, and environmental protection
- publish an annual review of the state of the forestry sector to ensure wide dissemination of information on the economic, social and environmental state of the sector
- provide an orderly way for the forest industry to develop and to conduct its business responsibly and profitably
- consult and negotiate with appropriate institutions such as the Rural Financial Services Commission to broaden access to industrial forestry
- facilitate access by new or smaller forest owners to certain industrial forests where large forest owners are considering divesting
- provide training and advice to small farmers, contractors and entrepreneurs in skills such as those needed to negotiate and manage contracts
- develop district level or catchment level plans for areas where there are many small farmers in forestry developments in order to regulate smallscale afforestation so that social and environmental costs are mitigated and impacts on water resources minimised.

2.6 The policy for community forestry

Government recognises that community forestry can contribute to improving the environment, enriching the resources, and creating income opportunities in previously disadvantaged communities in rural, periurban and urban environments. It can be an important component of the range of activities that is needed in every rural district to create employment.

The first element of community forestry Government recognises that natural forests and woodlands play a vital role in the household economies of many of these communities. The benefits arising from the sustainable management of these resources should accrue to local communities. Community forestry will have as a principal element the communitydriven conservation and management of these resources on land owned by the community. State forests will be managed through partnerships with local communities, recognising the Department's legal responsibility to the nation. Government will support communities and local authorities to develop and implement management of this kind.

The second element of community forestry The second leg of the policy will be to encourage people to plant trees, particularly indigenous trees, in gardens and fields, on streets and in parks, and in managed plantations, to build the local resource base and improve the living environment. This will include support to small forestbased enterprises to ensure their place in local markets as well as in the national economy.

Government's role in community forestry A community forestry strategy will form part of the national forestry strategy, coherent with the rural development, urban development, energy provision, and other relevant policies for South Africa, to provide the necessary leadership in community forestry. It will be integrated into local development plans.

Government will support community forestry with relevant information and technologies. It will stimulate development through pilot programmes and projects. It will identify barriers to progress in community forestry, such as institutional capacity, financial services, or availability of seed and trees for planting, and devise ways of overcoming these. The Department will make budget provision for financial support to community forestry where necessary and within its means. However, Government will follow the principle of people-driven development in its engagement in community forestry.

Government will support effective innovation in community forestry through a carefully designed and implemented research programme and the equitable dissemination of information from this programme. It will develop the skills and competencies of the current force of community foresters so that they can become effective providers of services to Provincial government agencies, local authorities such as District Councils, and service providers such as agricultural extension centres equipped to address local needs. The policy will support the eventual establishment of unified extension services at local level.

Finally, the Department will coordinate the programmes and actions of funders, national, bilateral, and international, in community forestry, within the framework of national and local strategies.

2.7 Conserving natural forests and woodlands

The policy recognises the special value which the people of South Africa place on natural forest and woodlands and associated habitats, and our obligation to the global community to adequately protect the forests and biodiversity of the world. It recognises, further, the role which protecting and rehabilitating the woodlands must play in halting and reversing desertification of our country.

Protection of State forests The policy will be to maintain the protected State forests

proclaimed in terms of the Forest Act, and only to permit declassification with support of a two-thirds majority of the National Assembly. Where the management of State forests has been delegated to Provincial governments, their status will be carefully monitored, and the responsible agencies guided and supported where necessary to ensure that national objectives are met. Where management of State forests has been delegated to other agencies, the Government will ensure adequate monitoring of the state of the natural forests and woodlands on the land affected, and will use its general regulatory powers and special influence to ensure their adequate conservation.

Protection of other forest lands Stewardship of forests and woodlands on land outside State forests lies in the hands of conservation agencies, communities, and the private sector. The Government will promote the sustainable use and management of these forest and woodland resources, rehabilitation of degraded forests, and protection of forests and woodlands under threat. Government will assess the provisions of the Conservation of the Agricultural Resources Act to determine whether they are sufficient to regulate the removal of forests and woodlands and improve them as necessary, and promote the implementation of these provisions. It will meet its responsibility by ensuring proper national level monitoring and assessment of the forests and woodlands resource, through the current and future landcover mapping project, through the use of acceptable criteria and indicators for the evaluation of sustainable management of the resources, and by facilitating the stewardship of the forests and woodlands. It will disseminate information about the state of the resource, report to international authorities, support the free flow of ideas, information, and technology for sustainable management, and use regulations, persuasion and influence to ensure that national objectives are met. Where the Department identifies areas under stress, it will investigate and promote rural development initiatives to provide people with alternative opportunities to satisfy their needs.

Emphasis on communitybased methods in managing resources It will place special emphasis on the development and application of communitybased methods of managing these resources and sharing the benefits obtained, wherever appropriate, i.e. in the forests and woodlands of the former homelands, and wherever else local communities have the right, moral or otherwise, to the benefit of the resource. Protection of forests and woodlands will be reinforced by promoting the sustainable harvesting of indigenous resources, to provide benefits and commercial opportunities to local communities. Government will consider incentives to promote sustainable management of these resources.

2.8 Global concerns for sustainable forest development

South Africa has certain duties towards the international community as a signatory to conventions and agreements arising from Agenda 21, especially the Rome Declaration, to ensure that all its forests are sustainably developed and managed,

insofar as this is applicable to South Africa. Government policy will ensure that national accounts of the state of our forest resources are maintained, and that the Government is properly represented and supported in international forums to report adequately on the state of its forests and to negotiate effectively in the interests of the country.

Industrial forests are included in the scope of concern, especially regarding the need to minimise effects on biodiversity and water resources.

Government recognises the importance of environmental considerations in trade, and the influence of consumers in global markets. The emerging agreements on green labelling and international standards, such as ISO 14000, as applicable to forest products, will be assessed and their appropriate application in South Africa promoted and supported.

2.9 South Africa in the Southern African Development Community

The Southern African Development Community (SADC) identified deforestation as a priority environmental issue, and increased afforestation, fuelwood plantations, and tree planting as priority environmental action areas in its 1993 environmental review. South Africa has much to learn from the knowledge and experience in SADC countries. It is commonly held by Governments of SADC countries that considerable economic opportunity exists in the development and sustainable management of forest resources in the region, and in potential afforestation. SADC countries have the potential to supply the market for forest products in South Africa. Furthermore, Government recognises that the economic development of the southern African region, the improvement of our environment, and our social wellbeing, all depend eventually on the coherent development of the region as a whole.

Consequently, the Government of South Africa will join in initiatives to address these potentials, and secure agreements to ensure sustainable regional forest development. Its policy is to work with our counterparts in neighbouring states to ensure formal agreement on common strategies for the forest resources in the region and natural resources in general. It will work to assist the free flow of ideas, information and technology among the countries of SADC. It will assist in establishing common norms and standards for the region, to ensure sustainable forest development and equitable trade among the countries, addressing such things as criteria and indicators for the certification of forest products in the trade, and uniform product standards.

2.10 Bilateral international relations in forestry

The Government recognises the value of exchange of technology, information, and expertise between countries in the field of forestry, and the need to develop

common norms and standards relevant to the forest sector and trade in forest products. Consequently, we will enter into appropriate bilateral agreements with other countries wherever mutually beneficial.

3. TAKING POLICY INTO PRACTICE

3.1 Formulation of a new law

The present Forest Act needs to be replaced with a new law. This law must

- be cast in the mould of the new constitution;
- recognise international norms and standards;
- provide for a dynamic approach to forestry and natural resources management;
- provide for local interests;
- provide for a people-driven approach to development while protecting the national interest; and
- embody all other necessary aspects of new national policy.

Development of the new law will be coordinated with other Acts, such as the Conservation of Agricultural Resources Act, the Environment Conservation Act, and the Water Act.

The purpose of the new Act will be to promote the sustainable development of all forest resources in South Africa and to regulate and control afforestation and deforestation. It will reflect an integrated approach to the protection, management and utilisation of forest and woodland resources. This would accord with international custom and reflects the principle of stewardship under which every forest owner must ensure that the entire forest resource is sustainably managed.

The new Act will seek to provide for the following, among other things:

- demarcation of State Forests and the control and management of resources on those State Forests, including those delegated to the Provinces and any other future agent;]
- proclamation of special conservation areas (nature reserves, wilderness areas), on State forests;
- promotion of the rehabilitation of natural forests and woodlands;
- community forestry and rural development;
- identification of forest resources on State or private land for the purposes of their protection and sustainable development;
- fire protection in districts where forestry is important, and protection against pests and diseases;

- management and control of invasive alien plants in forestry areas to augment current legislation on the control of weeds;
- monitoring and evaluation of the state of all of the country's forests, forest inventories and statistics;
- regulations relevant to the rights of local communities;
- accreditation of sustainable forest management and certification of products, according to nationally and internationally acceptable criteria and indicators of sustainability;
- establishment of standards for traded forest products and certification of standards;
- delegation of certain responsibilities to Provincial and local government and communities;
- protection of biodiversity, habitats, soil, cultural assets, in industrial forests, concurrent with other Acts;
- incentives to and financing of smallscale afforestation (such as woodlots), conservation, restoration and related matters (including provisions for credits, etc.);
- the National Forestry Advisory Council;
- the National Hiking Way Board;
- relationships with other relevant Acts;
- levies for such purposes as research and training;
- gender equity and the empowerment and representation of women.

3.2 Prerequisites for applying policy

3.2.1 The role of central Government

The Interim Constitution stipulates that forestry is a national competence. This implies that central Government has primary responsibility and accountability for everything that Government must do in forestry. However, it does not imply that central Government must do everything: certain functions and responsibilities can be delegated to Provincial or local government or to other agencies. Even then, all actions would need to be taken within the framework of national policy and law.

Enforcing regulation The first role of Government is to:

- regulate the forest sector fairly
- enforce the regulations
- promote the wellbeing of the forest sector
- protect common rights and interests
- facilitate the management of conflict about equitable use of land, water and other natural resources, through the participation of interested and affected parties

Through regulation, an orderly and predictable environment needs to be created in which individuals, communities, firms, and Government can operate successfully and securely.

Ensuring participation of stakeholders Government's second role is to exercise leadership in the forest sector by developing policy and strategy and overseeing its implementation, ensuring participation by the various parties which have an interest in the sector. Stakeholders would include the following:

- affected communities and their communitybased organisations
- relevant firms from industrial forestry
- organised labour
- employees of the firms and agencies in the forest sector
- industry associations
- relevant Government departments and agencies, including conservation agencies
- relevant parastatals and statutory councils
- agricultural organisations
- the tertiary education sector
- environmental organisations
- research bodies
- NGOs
- where appropriate, representatives of SADC states and the international community.

Influencing developments in the forest sector The Government will play a role to influence developments in the forest sector by disseminating the information gathered from monitoring, evaluation and research, shedding light on the issues of the day, engaging stakeholders in debate about the implications of the findings, and generally facilitating agreement on policy options. It will organise and develop its community forestry capacity to support a unified rural extension service, through the technical extension services of the Provincial governments, local urban and rural governments, Community Development Facilitators, local service centres and other agents or institutions serving the needs of development.

Cooperation with other departments In consultation with interested and affected parties, the Department of Water Affairs and Forestry will also work with the Department of Trade and Industry on industrial policy for the forest sector, so that its comparative advantage is maintained in a competitive environment, and that economically and environmentally optimum ways are found to maximise beneficiation within South Africa. Furthermore, working with the Departments of Agriculture and Trade and Industry, the Department will develop ways of increasing the role of small and medium farmers and of small, medium and micro enterprises in this sector.

Promoting a sustainable forest sector Given the dependence of the sector upon demonstrated environmental sustainability, the Government will work with the industry and other stakeholders to enable the development and implementation of legally recognised criteria and indicators of sustainability and the certification of forest products from sustainably managed forests. This will take place within the national framework of sustainable forest development.

Conducting pilot projects in community forestry Pilot projects will be conducted, especially in community forestry, to prove the feasibility and sustainability of forestry projects and programmes, both those involving woodland and natural forest management, and those involving tree planting. The Government will undertake or support startup projects, where necessary, such as for the supply of seed and plants. It will use appropriate incentives, especially supplyside incentives, to promote community forestry and conservation of forest resources.

Managing indigenous forests Government will continue to manage and control indigenous forests declared under the Forest Act. It will seek to declare new protected areas where necessary. Government will monitor and protect indigenous forests on privately owned land. It will delegate management to appropriate agents where desirable.

Reporting to the nation and the international community

The Government will report regularly to the nation and to the international community through the FAO and the UNCED on the state of the forest resources of the country and on progress in sustainable forest development.

Coordinating donorfunded programmes Working with the Office of the RDP, the Government will provide appropriate programmes and projects to be supported by the international donor community in the forest sector in South Africa.

Facilitating linkage between forestry and other Government departments Finally, the Government will facilitate progress toward coherent policy, through linkage between the forestry function and other government departments, sections, or bodies:

- Land Affairs, Agriculture and the RDP in regard to land-use planning and new legislation as a basis for districtlevel framework plans, as indicated in 1.4.12, above
- Water Affairs, regarding development towards integrated catchment management, supported by landuse planning laws
- Public Enterprises, with respect to SAFCOL
- Environmental Affairs and Tourism, regarding
 - integrated environmental management,
 - the conservation of biodiversity,

- the combating of desertification, and
- establishment of criteria and indicators of sustainability
- Labour, regarding progressive labour agreement and a sectoral Bargaining Chamber for the forest sector
- Trade and Industry, regarding industry and trade policy, competition issues, strategies for competitive advantage and greater value-addition in South Africa, and international environmental standards applicable to the forest sector
- RDP office, on rural development strategy
- Mineral and Energy Affairs, on integrated energy planning
- Science and Technology, on research and development
- other Government landholders on protection of forests and woodlands under their control
- the National Parks Board, regarding forest and woodland conservation
- Provincial planning, environment and agricultural departments, and conservation agencies, regarding land-use planning, rural development, and environmental management.

Strengthening the forestry function in Government Currently, a task team is examining the forestry function within Government and developing a strategy which will determine its purpose, role, functions, and activities, and how they should be organised. This project will be concluded during 1996, and the resulting plan will be implemented during the following year. In that phase, the resources and competencies of the Department will be developed to ensure that it is able to implement policy. The status of the forestry entity in Government will be reviewed to ensure maximum administrative authority. An independent department is the likely preferred option.

3.2.2 SAFCOL: The role of Government in industrial forestry

Generally (and this refers also to the forests of the former homelands), the future of the Stateowned forest industry will be determined with reference to Government policy on restructuring of public enterprises.

SAFCOL, as a registered State company, has the task of seeing to the profitable, sustainable management of the former Government industrial forests. In line with policy on the reconstruction of State assets, Government is reviewing SAFCOL, in consultations with a wide range of stakeholders, with a view to resolving its future ownership, in such a way as to ensure future viability and maximum national benefit.

A special relationship exists between Government and SAFCOL, arising from the historical origins of the latter. Government expects the company to set the example in industry in terms of:

- human resources development;
- industrial relations;
- labour practices;
- social responsibility;
- beneficiation;
- environmental responsibility; and
- sustainable management.

It will use its current and future share in the equity to influence SAFCOL in this way, through the Minister for Public Enterprises, without jeopardising its competitiveness and profitability.

3.2.3 Managing the transition of the forest resources of the former homelands

Government is responsible for the forest resources of the former homelands, for those employed on these State forests, and for the arrangements with the firms and communities dependent on these resources. However, Government does not intend to remain in industrial forestry in the long term. It will consult widely as to the best way forward.

The objectives in addressing the forests of the former homelands are to:

- incorporate these fully into the Department;
- to ensure that management of the resources is placed on a sound footing;
- investigate using an agent to do so, while negotiating with relevant stakeholders to establish the best eventual arrangement for each circumstance;
- evaluate the state and nature of these resources;
- assign conservation and management of natural ecosystems to appropriate parties;
- dispose of the industrial forests and community woodlots and forests in the most beneficial way, after proper and full consultation;
- ensure that these resources are managed for the benefit of local communities while satisfying national interest; and
- pursue a course which would benefit current employees while maintaining efficiency.

3.2.4 The role of Provincial government

Provincial government competencies include several that are relevant to the forest sector. These include competencies for provincial economic development strategies, rural development, agriculture, environment, and nature conservation. Provincial governments are furthermore responsible for coordinating the RDP within each province, supporting local government in generating and implementing RDP projects within the strategic development framework for the provinces.

Government will identify the appropriate provincial Members of Executive Councils in each instance and work closely with their offices to establish the role of the forest sector in the strategy for sustainable development in the relevant province. This would need to be taken to the level of districts, and will be based on the comparative advantages of forestry within the setting of any given district, and the aspirations and priorities of local people. Furthermore, the Department will delegate certain functions, including the management of State Forests, to the province in cases where this would be appropriate and beneficial, within the framework of national policy, strategy, plans and standards.

3.2.5 The role of local government

Democratisation requires that local communities determine the provision of services in their areas, investment in infrastructure, and local economic development. Therefore, the Government will work with primary local authorities, such as rural councils, with Rural District Councils or their equivalents, local coordinating bodies, and Community Development Facilitators to ensure that forestry programmes fit into local development programmes.

3.2.6 The role of the private sector

The corporations and smaller firms in the private sector use the forest resource to generate employment, profits for further investment, human resources development, and many other benefits. In the forest sector, private firms contribute to the RDP in many ways, especially in rural development in those districts where natural resources favour forestry. The strong linkages between forestry and its processing industries offer good opportunities for the creation and maintenance of rewarding employment opportunities in rural districts.

Firms in the private sector will need to adapt and innovate to remain competitive while meeting environmental standards. Improved efficiency will be required to meet any costs of environmental management (though environmental standards often bring efficiencies too), to increase forest product yields and improve the efficiency of processing raw materials. Similarly, firms cannot simply pursue profits, but must seek to satisfy their entire stakeholder community, including the local communities affected by their operations.

The role of the organised private sector at this stage must be to ensure that profitable operations also contribute to social equity and an improved quality of life, especially among rural communities. It will also need to develop a partnership with Government, organised labour and other stakeholders to ensure that the industrial forest sector is unified in its strategy to address sustainability, human resources development, research and innovation and other factors that determine a

competitive industry.

3.2.7 Government's relationship with the community

Strong institutions of civil society are needed to ensure that local communities are able to influence local and other levels of Government, so that local development will carry the authority of the community. On the other hand, civil society structures should not compete with local government institutions, but rather complement and invigorate them. The Government will assist in developing the role of civil society structures, such as women's clubs, treeplanting and conservation societies. It will attempt to play an effective role by disseminating information on the forest sector widely and equitably, through a variety of mechanisms.

3.2.8 The role of the National Forestry Advisory Council

The Forestry Council was dissolved in September 1995 by an amendment of the Forest Act and is to be replaced by the National Forestry Advisory Council.

The function of the Council is to provide advice directly to the Minister of Water Affairs and Forestry on all matters of forest policy and on the national strategy for sustainable forest development. The Minister has stated that he will seek the advice of the Council and be bound by unanimous resolutions taken by it.

The new Council is intended to include representatives of the various stakeholders in the forest sector, as well as any other person regarded by the Minister as able to give advice on forestry matters.

3.3 Strategy and action planning

Policy needs to be turned into strategy. The Department will develop a national strategy for sustainable forest development in South Africa. This strategy will address South Africa's needs, but meet the criteria of National Forestry Action Plans as established by the FAO, in order to ensure that South Africa meets international standards.

The first phase will be completed before the end of 1996, and will incorporate at least the following elements:

- the forest sector integrated into resource management strategy: linkage with landuse planning and integrated catchment management, resolved to district and quaternary catchment levels
- community forestry
- industrial forestry
- conservation of natural forests and woodlands

- research, development, and innovation.

These elements of strategy will involve wide participation in their development, and consultation with the National Advisory Council.

3.4 Women in forestry

The Department recognises the historical disadvantages which women have suffered, and that women provide the key to rural development and to sustainable forest development. Therefore, the Department will incorporate measures into all its policy instruments to ensure the empowerment of women. This will include a programme of corrective action and redress in its own employment equity policy. It will include a provision that at least one-third of the members of the National Forestry Advisory Council, and of all other advisory and statutory structures, should be women, within the next three years.

Furthermore, the employment equity policy of the Department will be used as a model against which to evaluate the policies and programmes of other organisations in the sector.

3.5 Research, technology and innovation

Currently, South Africa is developing its new policy for science, technology and innovation. Government will promote research, technology and innovation in the forest sector. The policy regarding the forest sector will reflect national policy for science and technology. However, it is also necessary to build, where necessary, and maintain science and technology capacity that is appropriate to the development of forestry and the innovation that is needed to ensure progressive improvement in forest policy and practice.

Consequently, the Department will conduct an evaluation and assessment of current capacity and programmes in South Africa, from which a new strategy for research, technology development, and innovation in forestry will be developed. This will be done in wide consultation with interested and affected parties.

The broad goals of the new strategy would include:

- a framework for investment in R&D that would direct research toward the overall goals of forest policy
- a mutually reinforcing relationship between the R&D community in universities, the science councils, industry, NGOs, and Government
- an equitable system for information dissemination and technology transfer, with special attention to local needs
- incentives and benefits which would encourage the private sector to invest in innovation

- linkage with the Department of Trade and Industry's Local Business Service Centres and manufacturing service centres to ensure rapid innovation in SMMEs and by small farmers, via for example technology packages
- studying and recording traditional knowledge and investigating its potential applications
- adequate protection of intellectual property, including traditional knowledge.

3.6 Education and training

Government recognises that communities who understand forestry and its relationships with their environments and livelihoods are an essential part of an effective policy. Furthermore, sustainable development of the sector requires well educated, skilled and competent workers and managers.

Although larger companies in the forest sector and SATGA maintain training programmes for forest and forest products workers, this training does not reach all current and potential workers in the sector, nor are the skills formally recognised. Consequently, it is Government policy to support the educational components of the rural development strategy of the RDP, to promote the revision of curricula at tertiary education institutions involved in forestry, and to ensure the recognition of skills of workers in the forest sector by the South African Qualifications Authority in the National Qualification Framework. Forestry firms will be encouraged to participate in training incentive schemes as much as possible. Consultation with the relevant industry associations and trade unions will determine the approach adopted for skills recognition.

These elements would be provided for in the envisaged labour agreement. Government recognises that several firms have programmes for literacy and life skills, but that illiteracy is still pervasive, and a barrier to progress. Government will therefore investigate ways of promoting basic literacy and numeracy among forest workers, and implement the appropriate solution.

4. CONCLUSION

The forest sector in South Africa provides many benefits and is well positioned to contribute further to economic growth. However, the opportunities offered by industrial forestry need to be enhanced by pursuing greater competitiveness in the sector, by linking it more strongly to rural development objectives, and by urgently pursuing wider access to these benefits. The costs and benefits of this industry in terms of water resources and the environment in general need to be properly evaluated. These results must be used to guide further effective and efficient development of the use of land and water toward what is most beneficial. The

policy outlined in this White Paper is directed toward these ends.

Many needs of urban and rural communities can be addressed through community forestry, which has had little consequence in South Africa in the past. A fundamental change in the strategy for community forestry is under way, to address the benefits to be found through improved management of natural forests and woodlands, as well as the need for new plantings.

Finally, the full extent of our natural forests and woodlands has now been drawn under the umbrella of a unified policy for the entire sector. Through this, the Department will address South Africa's obligations to current and future generations in ensuring sustainable development of these resources, while ensuring the optimum accrual of benefits to local communities.

Implementation of this policy will begin immediately.

The goals for implementing policy over the next five years are as follows:

- restructuring the forestry function in Government
 - reforming the Forest Act
 - establishing the new National Forestry Advisory Council and its structures and procedures
 - completing the national strategy for sustainable forest development, including a programme for the greening of the environment
 - implementing the national strategy
 - establishing the future of the forests of the former homelands
 - achieving significant progress in domestic beneficiation of products
 - creating capacity in communities: empowering civil society and women (institution building, and the equitable dissemination of information) to participate fully in the sector
 - determining the programme for donorfunded projects
 - initiating community forestry projects
 - establishing systems to take stock of the sector (inventory, monitoring and evaluation)
 - cooperating with neighbours in SADC in developing a regional forestry action plan, and concluding all agreements with neighbours on bilateral relations
 - taking cognizance of international forestry conventions and implementing appropriate provisions in South Africa.
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