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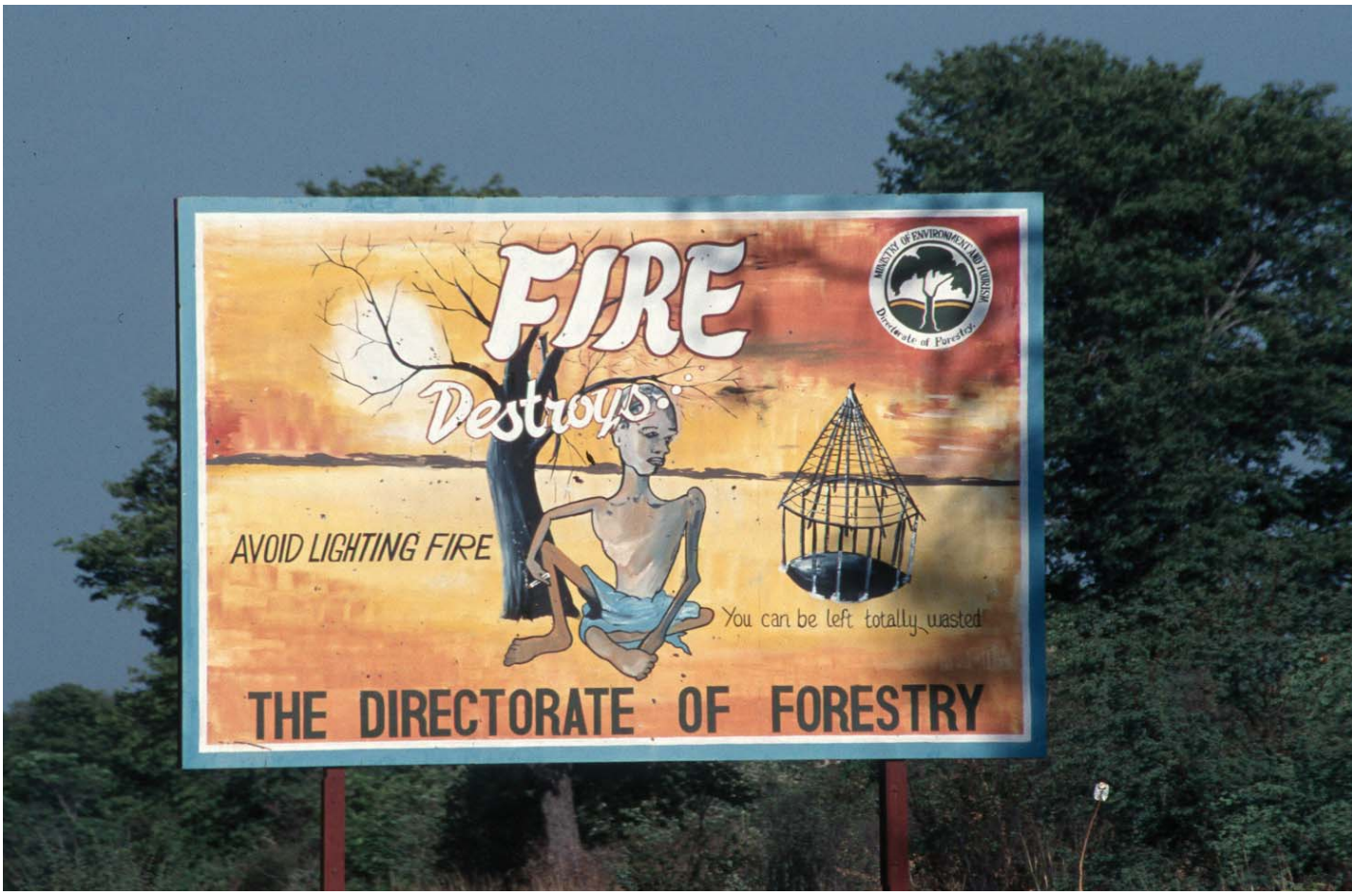
# CHANGING MANAGEMENT: conservation for use




*Educational programmes, including many billboards placed along major roads in the north-east Namibia, have been used to alert Namibians to the dangers of bush fires.*

The overall concept of forestry has changed a good deal in recent years, especially in developing countries such as Namibia. New policies and approaches are being adopted, and management processes are being adjusted in two main directions. The first is to move away from a concentration on silviculture, which is largely focussed on growing trees to yield poles or timber for furniture and building, to practices that give prominence to indigenous woodland habitats. Less emphasis is placed on *conventional forestry* and more on *environmental management*.

The second move is to place the management of forests and woodlands in the hands of the public, particularly in communal areas (see page 15). More broadly, this second approach seeks to promote the wise use, management and conservation of resources by people who use them. In this sense, conservation is designed to protect natural resources *for* use, rather than *from* use. This forms part of a wider trend termed community-based natural resource management, now often known as CBNRM. Other kinds of natural resources can be managed using CBNRM and much has been done to promote CBNRM for the management of rural water supplies and wildlife in Namibia. The key principles of CBNRM are that ownership and control over natural resources should lie with local people who have traditional rights to those resources, and that benefits from the use of natural resources should go to those people. These benefits should create incentives so that people take responsibility for managing the resources in a sustainable manner. CBNRM also often brings new sets of natural resources into production and the market place. Foresters introduced CBNRM concepts to woodland management as far back as the late 1970s, calling this approach community, social or participatory forestry.

Three factors stimulated the changes in Namibia. The first was the realization that conventional silviculture was at best a weak enterprise. Indigenous timber resources were clearly limited (see page 49), and since little information was available on what volumes could be cut on a sustainable basis, it seemed prudent not to harvest them. Also, it was clear that yields from plantations were so low that the prospects of developing productive plantations were poor (see page 54). In essence, alternative approaches to forestry were desirable.

Second, was the need to seek ways for forestry to help rural development, reduce poverty and redress imbalances caused by previous policies of racial segregation and discrimination. On the latter score, people were not allowed to own land in the so-called homelands and therefore did not have secure rights over resources in those areas. Although land ownership in communal areas is still not allowed, giving rural people rights to own and manage woodland resources through CBNRM practices was deemed an important step towards improving socio-economic conditions.

Third, came new thinking and approaches to forestry strongly influenced by foreign experience and technical advice, in particular the concept of community forestry that had been advocated and adopted by such organizations as the Food and Agriculture Organization (FAO). Since the first development projects started in 1991, there has been a succession of projects, programmes and advisors, many of which directly or indirectly helped encourage the changes.

The period of development really got going in the mid-1990s in Namibia, and much of the change can be grouped in three processes: (a) development of policy, strategy and legislation; (b) the institutional and staff development of the Directorate of Forestry, and (c) the introduction of community forestry. It was also in the mid-1990's, specifically in 1994, that the Directorate of Forestry joined the Ministry of Environment & Tourism after being part of the Ministry of Agriculture, Water & Rural Development. As this book was being completed, the government announced that the Directorate would move back to what would now be called the Ministry of Agriculture, Water and Forestry. This was to be effective from the 21st of March 2005.

## PLANNING NEW SYSTEMS OF MANAGEMENT

The earliest policies were formulated in the *Namibia 1992 Forest Policy Statement*. Much of the emphasis in this document was on wood products, perhaps with too much optimism on how much wood could realistically be obtained from indigenous woodlands and plantations. But the policy also laid the basis for legislative control of forest products and land uses, the need for forestry to contribute to national and rural development, and the role of forestry in contributing to the maintenance of biodiversity.

The Directorate of Forestry released a second guiding document in 1996 in the form of *Namibia Forestry Strategic Plan: forest biodiversity for present and future generations*. It was this document that set the scene for the involvement of rural communities in forest management and the development of community forests. The *Strategic Plan* also introduced the need for Namibia to help limit climate change by stressing the importance of its woodlands as carbon sinks (see page 78).

A third major policy document was compiled and released in 2001 as the *Development Forestry Policy for Namibia*. It declared the mission of the Directorate for Forestry "to practise and promote the sustainable and participatory management of forest resources and other woody vegetation, and to enhance socio-economic development and environmental stability". It also moved towards actual implementation by declaring nine strategic objectives:

1. To implement forest policy and legislation, and to educate the public on these key documents.
2. To institutionalise the culture of strategic and forest management planning in the sector.
3. To implement the strategy of environmental forestry.

4. To implement the strategy for community involvement in forestry in the whole country.
5. To uphold the principles and practices of forest protection or conservation for national and global benefits.
6. To promote and implement afforestation and reforestation programmes.
7. To conduct forest research and provide information for forest management.
8. To institute a system for human resources development and organizational effectiveness.
9. To provide baseline data on, and promote forest products and forest-based industries.

The final stage in the phase of policy development also came in 2001 when the *Forest Act of 2001* was promulgated. The Act requires the parent Ministry and Directorate of Forestry to embark on several new activities. For example, the Minister is to appoint the Forestry Council to provide overall guidance on forestry policy and management. Five kinds of classified forest areas may be declared for purposes of conservation and management: State Forests, Regional Forests, Community Forests, Forest Management Areas, and Fire Management Areas. The Act stipulates that the Directorate has a management plan for every classified forest area. Interestingly, through its interpretation of natural resources to be used by community forests (see page 93) and the requirement that an inventory be maintained for every state, regional and community forest, the Act moves the concept of forest resources into a broad realm. Thus, each inventory must contain a record of the type and quantity of forest produce, which is defined as "anything which grows or is naturally found in a forest" and includes "any living organism or product of it" and "any inanimate object of mineral, historical, anthropological or cultural value".

## THE DIRECTORATE OF FORESTRY

Although formal government forestry began some 120 years ago when the German government issued the first regulations to control the cutting of trees in 1894 (see page 16), it remained a tiny sector. By the time Namibia became independent in 1990, there was just a handful of foresters employed in different departments. Much has been done since then to develop the Directorate of Forestry into a very large organisation. At the end of 2004, its staff establishment consisted of 646 posts, of which 555 or 86% of positions were filled. The majority of posts are for unskilled work hands, labourers, forest guards and watchmen. Thirty-eight positions are for professional staff having a degree, 23 of these posts being filled at the end of 2004. Sixty-five of another 74 technical posts requiring a diploma in forestry or a related technical field were filled. One of the main achievements of the Namibia-Finland Forestry Programme (NFFP) has been to fund the training of many Namibians as foresters, both within the Directorate of Forestry and at Ogongo Agricultural College where most people study to obtain forestry diplomas. Other donors to have funded training include Australia, Britain, Canada and Luxembourg. As a result, the Directorate is very well staffed with qualified Namibians. In total, the NFFP sponsored the studies of five MSc, 11 BSc, three MBA, one MPPA, and 32 Forestry Diploma students between 2001 and 2004. Numerous other students have been funded to attend shorter, in-service courses.

The Director has two Deputy Directors in charge of Divisions of Forest Research and Forest Management. They and other head office staff are based in Windhoek, while most Forest Research staff work at research stations in Okahandja, Walvis Bay, Kanovlei and Hamoye, and for the National Remote Sensing Centre and National Forest Inventory in Windhoek. Most staff in the Forest Management division work at three regional offices, 12 district offices, 15 forest stations and 34 nurseries across Namibia, which is split into three regional sub-divisions: North-east, North-west and South Central (Figure 23). Each region is managed from a regional office, respectively at Rundu, Ongwediva and Windhoek. To these regional centres are attached district offices and forest stations. The Forest Management Division has a fourth subdivision responsible for Extension and Training.

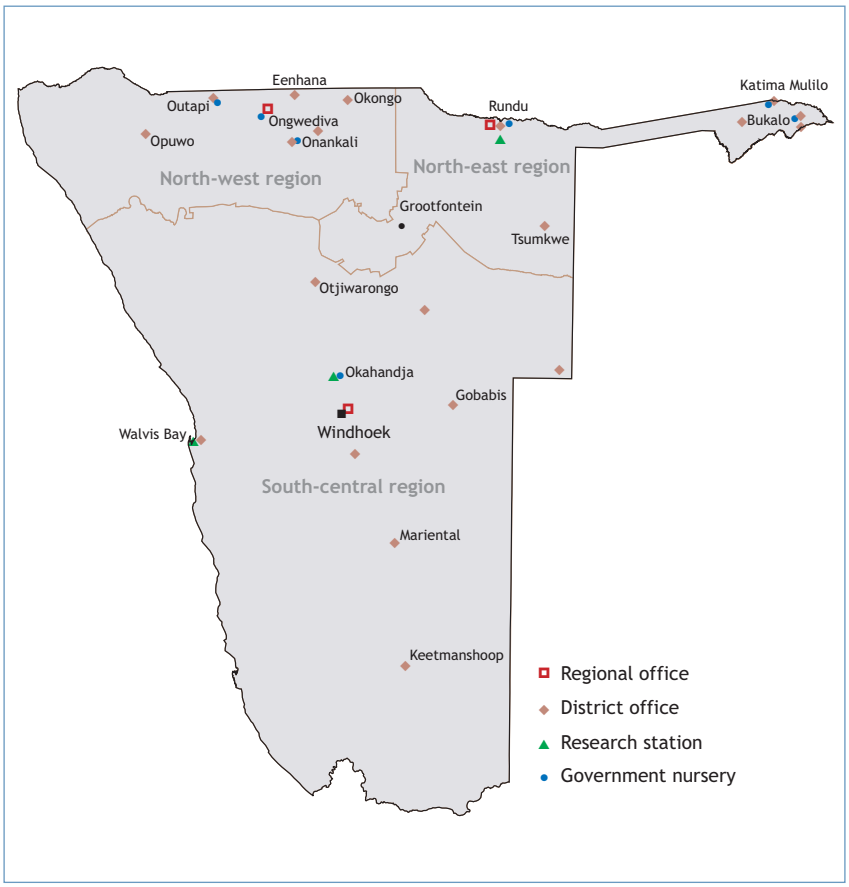



Figure 23.
The three regions in terms of which forestry is administered in Namibia, and the regional offices, district offices, research stations and nurseries.

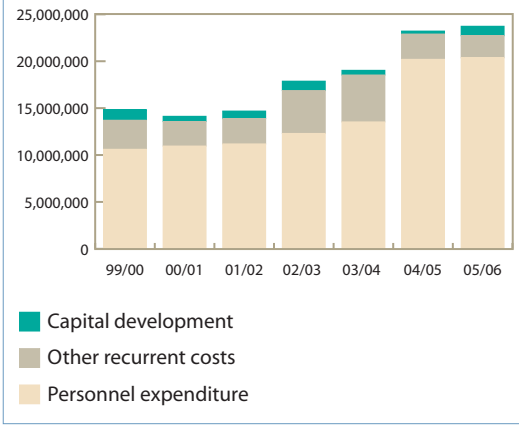



Figure 24.
Expenditure on forestry has increased rapidly between the 1999/2000 and 2005/20006 budget years. Most funds are now allocated to remuneration, leaving less available for other recurrent costs or capital developments.

The operational budget for forestry amounted to N$23,727,000 in the 2005/2006 financial year, having risen from N$14,839,000 in 1999/2000. Personnel expenditures rose from 72% of the budget in 1999/2000 to 86% in 2005/2006. Over the same period, other revenue and capital spending dropped respectively from 21 and 8% to 10 and 4% of the total forestry budget (Figure 24).

Over the past 10 years, much of the Directorate's work has been concentrated around the following activities:

*Law enforcement* Permits have been required for many years for the harvesting, transportation and marketing of wood products, including charcoal. The essence of the control system is that permits are needed whenever wood products are to be sold or transported in bulk. The only wood products exempt from the permit system are those used for domestic purposes in small quantities (filling less than the back of a light delivery vehicle or *bakkie*). In addition, the Directorate issues export permits for charcoal and transit permits for Angolan and Zambian timber to be exported en route to markets elsewhere, mainly in South Africa. A total of 9,479 permits was issued in 2003 for the harvesting, transport and marketing of wood products.[1] The Forestry Act of 2001 describes a great many legal provisions for the use and protection of woodlands and wood products, but specific regulations have yet to be gazetted for these controls.

*Research* The most important research in recent years has been the compilation of 31 forest inventories since 1996. Five inventories were for regions (Caprivi, Omusati, Oshana, Oshikoto and Otjozondjupa) while the others covered selected forest areas, many of which are planned to become community forests. The principal aim of the inven-

tories was to provide estimates of woody biomass in these areas, especially for species of potential commercial value. Some of the results of this work are presented in the section on woody biomass (see page 49). Several studies have been started on growth (mainly on Mopane and Eucalypts) and propagation (Kiaat and fruit trees), but the results of most of these projects have yet to be finalised. An exception is the work on growth rings (see page 38).[2] Likewise the results of several studies conducted for degree purposes by staff of the Directorate of Forestry await publication. Most plantations were really established as experiments to investigate their viability, sometimes using different seed stocks, but maintenance of most of these trials stopped during the 1990s.[3]

*Fire management* The main response of the Directorate of Forestry to the problem of widespread and frequent bush fires (see page 107) has been to encourage the rural public in communal areas to prevent and control fires. Much of this work has been led and funded by the Namibia Finland Forestry Programme (NFFP). Fire Management Units in select villages have been established, members of the units being trained and given basic equipment to fight fires. Community members have also been paid to clear firebreaks, and a total of 2,118 kilometres of firebreaks were cleared in 2003. The Directorate, NFFP and the German-funded Community Forestry in Northeast Namibia (CFNEN) projects paid for the clearing. In addition, posters, billboards and theatre plays have been produced to create awareness about fire hazards.

*Farm or agro-forestry* Even though the Directorate of Forestry left the Ministry of Agriculture, Water & Rural Development in 1994, it continued to play a major role in promoting horticulture (this function is likely to escalate now that the Directorate has re-joined the Ministry of Agriculture, Water and Forestry). The whole programme is based on Namibia's goal of improving rural livelihoods and the country's food security. Approximately 60,000 seedlings were distributed to the public and schools from 34 nurseries in 2003. Many of these were sold, earning a total of about N$280,000 in that year.[4] While most seedlings are fruit trees, large numbers of Eucalyptus, shade and ornamental trees were also germinated and distributed. Few indigenous trees are produced. The CFNEN project is also promoting the development of gardens for fruit and vegetables and private nurseries. By 2007, it is intended that about 150 fruit and vegetable gardens and eight private nurseries be established. Average potential profits for each garden are estimated to be N$30,000/year after five years, while each tree nursery could earn a profit of N$100,000/year after seven years of development.[5]

*Community forestry* The development of community forestry, as described in detail below, has perhaps represented the biggest change in forestry policy and practice. Most activities have been supported by the NFFP, CFNEN and Danish Community Forestry and Extension Development Project. The first Community Forestry Officer (CFO) was appointed as a staff member of the Directorate in 2004.

*Education* Activities to promote the value of trees are largely directed at schools, to which seedlings are donated to encourage the cultivation of trees. Competitions between schools are run annually, those schools having developed the best gardens and orchards being rewarded during ceremonies held on Arbor Day each year. The Directorate of Forestry has also promoted the production and distribution of posters to publicize a "Tree of the year" each Arbor Day. Other activities to promote awareness of trees and woodlands have been held during annual Environment Days.

These are now the main activities of the Directorate of Forestry. Implementing provisions of the *Forest Act of 2001* and the *Development Forestry Policy for Namibia of 2001* will, however, require the organisation to make considerable structural and positional changes. The shift of the Directorate to the

new Ministry of Agriculture, Water and Forestry will bring about other changes. The point was made earlier that most of the changes are embodied in the idea of moving from *commercial forestry* to *environmental management*. The change also seeks to develop rural economies by giving people ownership of natural resources, and to increase yields of both wood and other commodities. To align the Directorate with these new approaches, proposals have been made to reorganise it around the following five programme areas. The proposals also take into account that some functions may become the responsibility of the 13 regional governments:

*Policy, planning, regulation, monitoring and information* are core functions of the Directorate to be implemented from the central head office. An ambitious range of indicators has been compiled to monitor performance of the forestry sector, and some of the indicators are to be provided through management information systems that must be designed and built.

*Community Based Forest Management* This is the programme for continued development and promotion of community forests. It is possible that regional governments will take responsibility for these areas, perhaps in collaboration with conservancies and the CBNRM sub-division of the Ministry of Environment & Tourism.

*Tree planting and farm forestry* The principal intention is to produce seedlings and support tree planting on both freehold and communal farmland. The activities are likely to be emphasized by the Ministry of Agriculture, Water and Forestry and run on a decentralized basis by the regional governments.

*Forest conservation and protection* Some functions will be retained at a central level, especially those relating to state forests, while issues concerned with regional and community forests, and fire management could be the responsibility of the 13 regions.


*Forestry research* Although studies should be relevant to regional concerns, research would be a core activity run from research stations operating under the guidance of head office.

Namibian forestry has enjoyed considerable technical and financial assistance from foreign sources over the years. The Finnish Government has provided more support, and over a longer period, than any other foreign source. The first phase of support began in 1991, while the fourth and final phase ended in April 2005. Management, institutional, policy and capacity development have been the major foci of Finnish support, both to the Directorate of Forestry and the Ogongo Agricultural College. Additional assistance has been given to research (largely through the development and implementation of forest inventories), the provision of buildings and vehicles, fire management, and community forest development.

*The Directorate of Forestry runs 34 nurseries across the country. Fruit, shade, timber and ornamental trees are propagated for sale to the public and for distribution to schools. Demands for trees in rural areas of northern Namibia have risen in recent years.*

FOREIGN ASSISTANCE PROJECTS TO THE FORESTRY SECTOR IN NAMIBIA SINCE 1991

| Project | Donor | Budget N$ | Period |
|---|---|---|---|
| National Remote Sensing Centre | Denmark | 3,000,000 | 1993 - 1996 |
| Vegetation mapping | Sweden | 4,721,000 | 1993 - 1996 |
| Public Sector Forestry Capacity Building | Finland | 4,100,000 | 1991 - 1996 |
| National forest inventory | Finland | 3,300,000 | 1995 - 1996 |
| Forest fire control | Finland | 900,000 | 1996 |
| Forest research and development | Britain | 3,510,000 | 1994 - 1997 |
| Kavango forest support | Luxembourg | 1,692,000 | 1994 - 1997 |
| Support to forestry sector | Australia | 1,500,000 | 1995 - 1997 |
| Community Forestry and Extension Development Project | Denmark | 6,765,000 | 1997 - 1999 |
| Volunteer services to forestry | Germany | 1,050,000 | 1996 - 1998 |
| Indigenous fruit tree promotion | FAO | 190,000 | 2001 - 2003 |
| Namibia-Finland Forestry Programme Phase I | Finland | 50,480,000 | 1997 - 2001 |
| Namibia-Finland Forestry Programme Phase II | Finland | 45,678,000 | 2001 - 2005 |
| Community Forestry in North-Eastern Namibia | Germany | 22,864,000 | 2004 - 2007 |
| Support to National Forest Programmes | FAO | 382,000 | 2003 - 2005 |
| National Tree Seed Centre (SADC programme) | Canada | 2,800,000 | 1994 - 2000 |
| Sustainable Management of Indigenous Forests with Community Participation (SADC programme) | Germany | 4,078,000 | 1998 - 2006 |
| Improvement and Strengthening of Forestry Colleges in the SADC Region (SADC programme) | Finland | 1,935,000 | 1989 – 2002 |
| Improvement and Strengthening of Forestry Research Institutions in the SADC Region (SADC programme) | Finland | 640,000 | 1990 – 1992 |
| TOTAL | | 159,585,000 | |

*Donor funds converted to Namibian dollars using exchange rates of N$8/Euro and N$6 per US$. The table does not include projects which provided the services of volunteers from Sweden and Germany. Information on a project supported by the Netherlands was not available. The four projects listed last in the table formed part of regional projects for the Southern African Development Community (SADC); the figures are those allocated to Namibia. The Directorate of Forestry provided counterpart support to most projects.*

The other major donor to the forestry sector is the German government. Its current project (Community Forestry in North-Eastern Namibia – CFEN) began with a pilot study in 2001 to assess the potential for community forestry development. Formal implementation began in 2003 and the project should last until 2011. The development of community forests is the major goal of this project, which aims at having 28 such areas gazetted in its first four years. This target is needed to demonstrate progress and maintain funding for the second four-year phase. The project also helps communities to establish fruit and vegetable gardens and privately-run nurseries.

Other assistance has come from a variety of agencies and countries. Research activities and projects have been supported by the British, Danish, Canadian, Dutch and Australian governments; mapping and remote sensing work has been funded by Sweden, Finland and Denmark; a beekeeping project received assistance from Britain; support to formulate forestry legislation came from the Food & Agriculture Organization (FAO), which has also helped fund a project aimed at domesticating indigenous fruit. Support for various activities in Kavango and north-central Namibia was provided by Luxembourg and Denmark, respectively.

Various donors have given financial and technical assistance to different components of a broad programme to develop the commercial value of indigenous plants. The programme is co-ordinated by the Indigenous Plant Task Force of what was the Ministry of Agriculture, Water & Rural Development, and brings together many people and organizations involved in testing and developing the potential of plant products. That Ministry has also funded components of this work. At the end of 2004, a total of 34 potential products were being considered tested and promoted (page 72).

## COMMUNITY FORESTRY

Since the publication of the *Namibia Forestry Strategic Plan: forest biodiversity for present and future generations* in 1996, the development of community forestry has been centred very much on community forests, but three other programmes also contribute to the overall concept of community involvement and benefits. The first is farm forestry which promotes the planting of fruit and shade trees by rural people, and generally stimulates people to attach greater value to trees. A second programme encourages rural people in communal areas to manage and control bush fires, mainly by organising villagers into fire management and control units. Thirdly, many projects are working to develop non-timber forest products, especially those that can be harvested and marketed by poorer rural communities. These are the products mentioned above.

**COMMUNITY FORESTS AS SHOWN IN FIGURE 25 AND APPROVED IN EARLY 2005**

| Region | Name | Size in hectares | Number of beneficiaries |
|---|---|---|---|
| Caprivi | Bukalo | 5,341 | 4,000 |
| Caprivi | Kwandu* | 19,936 | 4,300 |
| Caprivi | Lubuta | 17,003 | 1,800 |
| Caprivi | Masida | 19,408 | 1,200 |
| Caprivi | Sikanjabuka | 4,186 | 850 |
| Kavango | Hans Kanyinga | 27,348 | 1,300 |
| Kavango | Mbeyo | 41,331 | 3,000 |
| Kavango | Ncamagoro | 25,687 | 3,500 |
| Kavango | Ncaute | 11,949 | 500 |
| Kavango | Ncumcara | 13,198 | 3,000 |
| Ohangwena | Okongo | 76,758 | 1,100 |
| Omusati | Uukolonkadhi* | 85,042 | 11,100 |
| Otjozondjupa | M'Kata* | 47,534 | 600 |
| TOTAL | | 394,721 | 36,250 |

** These community forests are also wholly or largely conservancies (see below).*

Active work to develop community forests began in 1995, and the Minister of Environment and Tourism approved the first 13 community forests early in 2005. These community forests are listed in the table above, together with another 16 areas being developed.

All community forests are in the northern communal areas of Namibia (Figure 25). Together they cover an area of almost 3,950 square kilometres and approximately 36,250 people living within them will share the benefits of these areas.

In terms of the Forest Act of 2001, the Minister of Environment and Tourism (now the Minister of Agriculture, Water and Forestry) proclaims each gazetted area to be administered for the purpose of a community forest. The Act stipulates that people living in a community forest area then have the rights "to manage and use forest produce and other natural resources of the forest, to graze animals and to authorize others to exercise those rights, and to collect and retain fees and impose conditions for the use of the forest produce or natural resources".

*A pit-saw in operation, in this case mounted on stilts instead of in a pit in the ground. Cutting timber in this way is not easy, especially if straight planks with an even thickness are to be produced.*

It is also clear from the Act that the beneficiaries are those people who have traditional rights over areas included in community forests.

The key points are management and use by local people. Management is led by a management committee with which the Minister enters into an agreement as part of the gazetting process. The agreement stipulates that the area be managed according to a management plan, and in the interests of those having rights to the area. It is also expected that there should be close linkages between the committee and local traditional authority whose consent is required before a community forest can be approved.

The agreement with the Minister of Agriculture, Water and Forestry is really a contract that the community forest be managed according to specific guidelines. Management practices focus on natural resources, including granting permissions and permits for the use of woodland products, the control of fires by clearing firebreaks, approving the burning of any areas (to clear new fields or stimulate new grass growth, for instance) and extinguishing wild fires. In addition to empowering communities, local management also reduces the government's responsibilities, usually filling a management vacuum because most community forest areas are remote and little has been done to manage their natural resources.

Perhaps the most important innovation brought about by community forests change is that now people have *exclusive commercial rights* over resources rather than mere *communal rights* to use resources that belong to the state. Exclusivity is of special importance in communal areas because it provides for control over natural resources and, indirectly, security of tenure over land. There are no formal deeds to land in communal areas, and there is a great risk of wealthy, influential individuals occupying large tracts of land and claiming all their resources. By 2001, at least a quarter of all communal land had already been occupied for the exclusive use of wealthy, large-scale farmers.[6]

Other than empowering people to manage and own woodland resources, the other major goal is to provide greater material and financial benefits. The management committee will decide how income from natural resources in a community forest is to be used, guided by the broad intention that funds be distributed and used equitably. Thus, income will go into a community fund to pay for developments (for example, new boreholes or school facilities), maintenance (fuel and repairs for water pumps, for instance) and operational expenses, including salaries for community forest staff.

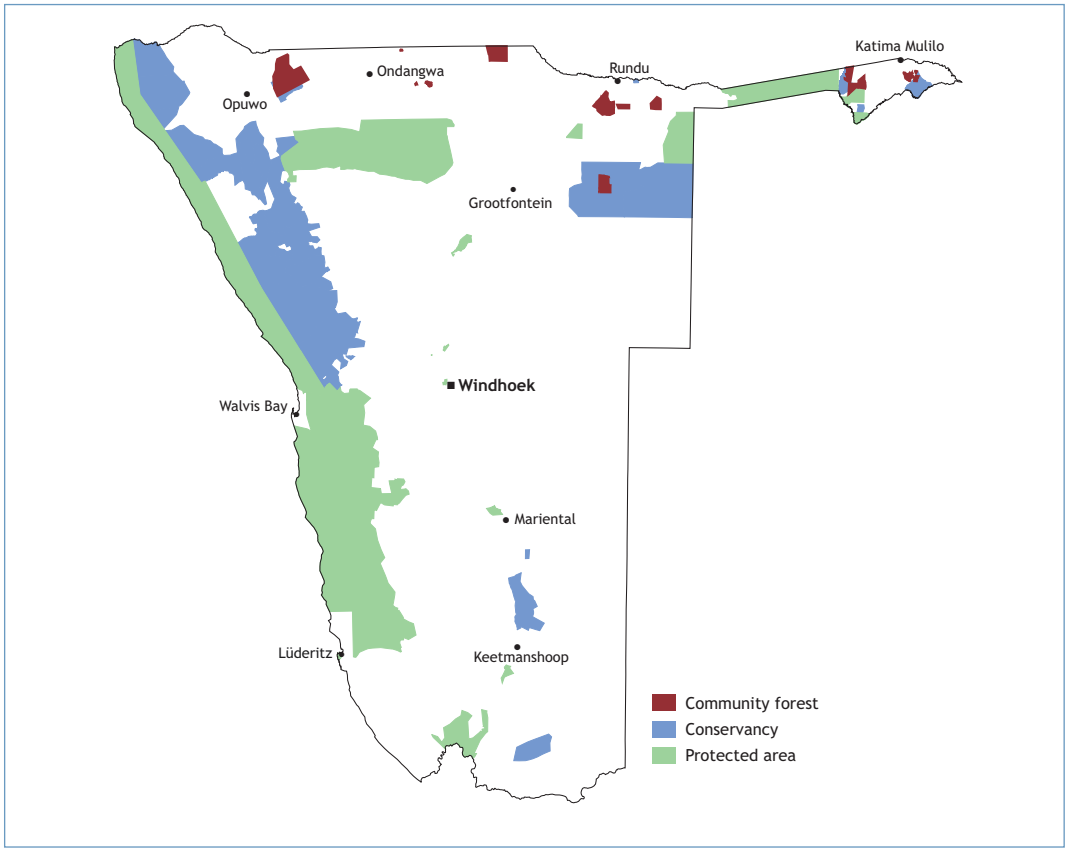
*North-eastern Namibia is littered with large, dead trees killed by fire. Community forest members are now beginning to harvest timber from the carcasses.*

The only study (to our knowledge) to estimate potential income was conducted in Kavango and Caprivi. The investigation found that most income is expected to come from the sales of timber, wood for craft production, poles for construction, firewood, grazing, honey, wild fruits, the clearing of firebreaks, permits and grazing fees (listed in order of value).[7] It is expected that produce will be harvested and sold by community members or sold to outsiders who wish to harvest for themselves. For example, merchants who sell firewood in towns may collect wood in a community forest. They would be charged for the wood and for permits to transport and sell the firewood. Permit sales will also give communities further authority and ownership over their resources.

This study suggested that annual profits for each community forest could rise to N$200,000 - N$250,000 after about eight years of development. The estimates seem high if community forests focus on the kinds of resources listed above. For example, M'kata community forest has more abundant timber resources than most others (see page 51), and yet the planned annual quota of 40 live Kiaat would be worth only about $10,000. The estimates are also based on the assumption that ready markets will be found. But finding buyers may prove difficult given the small population (and hence market) in Namibia. The costs of transporting goods over the considerable distances from most community forests to bigger urban markets would often be substantial. Finally, community forests with little woodland are unlikely to be able to sell much produce.

These cautionary comments are based on the assumption that plant products remain the focus of community forests. However, the provisions of the Forest Act allow a much broader range of products to be used to generate income, including wildlife and tourism, which are likely to bring much greater returns and benefits (see below).[8] There is also considerable potential from the harvesting and possible cultivation of some of the non-timber products described on pages 72, some of which are already earning substantial sums.

Figure 25. Thirteen community forests have been proclaimed and another 16 are now being developed in Namibia, while 31 conservancies had been proclaimed by the end of 2004. Some community forests are also conservancies, while the boundaries of some others overlap to a greater or lesser degree.




The development of community forests has been a slow process. The first 13 community forests are to be gazetted some 10 years after the programme began. Much of the delay was due to two factors. First, the Ministry of Environment and Tourism was reluctant to gazette community forests in the absence of clear rules, since no regulations had been promulgated in terms of the Forest Act of 2001. Second, the development of each community forest entailed the preparation of exhaustive information and documentation since each application for approval had to be accompanied by a management plan based on an inventory of wood resources, a constitution and a monitoring system.

Consultations on community forest development were also complicated by the fact that the Ministry of Environment and Tourism was establishing conservancies at the same time, often in exactly the same areas. Conservancies (here limited to those in communal areas and thus different from those on freehold farms) were also designed to give rural communities rights over natural resources and the benefits to be gained from them. They thus serve purposes that are really identical to those of community forests.[9] The only difference is in the resources on which they focus: wildlife and tourism for conservancies, woodland and its products for community forests. The first conservancy was gazetted in 1998, and 31 conservancies had been declared and gazetted by the end of 2004, covering almost 80,000 square kilometres and containing about 100,000 residents (Figure 25). The 31 conservancies together earned about N$8.3 million during 2003, although the variation between them was great. Some newer conservancies had no income while several others rich in wildlife and attractive to tourists each earned over N$1 million in 2003. Most income has come in the form of salaries and cash levies from tourism establishments and trophy hunters with which

the conservancies have joint venture agreements. Smaller sums were earned from meat harvests, craft and the sale of wildlife.

Conservancies grew under the overall umbrella of the Ministry of Environment and Tourism's CBNRM (Community Based Natural Resource Management) programme, which has gained international acclaim for its success. It also attracted substantial funding, and it is a pity that community forests developed independently without benefiting from the experience and standing provided by the CBNRM programme. Why should two systems with such similar aims have developed separately within the Ministry?

Much of the explanation has to do with the interests of people involved in the two programmes: different people took initiatives to develop different projects based on their own perspectives and expertise. Wildlife enthusiasts created conservancies, while foresters established community forests. The projects were then adopted by different donors and NGOs, and developed under different directorates in the same Ministry.

Different legislation was also developed for the two systems: the 1996 Amendment of the Nature Conservation Ordinance for conservancies and the Forest Act of 2001 for community forests. The legislation provides communities with similar rights: conservancies have rights over wildlife (which arguably include all plants and animals) and community forests have rights over the produce of woodlands and other natural resources of the forest (which include wildlife and grazing).

There were some differences in approach to the development of community forests and conservancies. The focus in conservancy development was to implement and register them quickly before detailed development planning started. Communities therefore began to get rights, benefits and incentives quite soon, whereas extensive planning and consultation took place before applications were made to declare community forests. Another aspect given emphasis in community forests is for the areas to be managed to provide resources for day-to-day subsistence use. Thus, the areas should be managed to ensure adequate supplies of non-cash commodities, such as grazing, firewood and poles for the construction of rural homes. The management of community forests to achieve such varied goals is arguably more complex than in conservancies, which have concentrated on the clearer goals of obtaining high returns from wildlife and tourism. It will be interesting to see how community forests balance the need for subsistence resources against – or in conjunction – with potentially lucrative returns from using resources in other ways.


*Some community forests and conservancies overlap geographically, such as in the Uukwaluudhi area shown in Figure 25 between Opuwo and Ondangwa. There are good reasons to promote the integration of these two community-based natural resource management programmes.*

Despite these differences, the essence of the systems is the same: they give management and secure ownership over natural resources, and generate incomes from commodities that have seldom been marketed in communal areas. It is logical for conservancies and community forests to operate very closely, or preferably to be united into one system. The Ministries of Environment and Tourism and of Agriculture, Water and Forestry should collaborate to make this possible. All natural resources in an area should be pooled, and decisions left to those with rights to the resources to decide how best to manage them for their benefit. Of course, this should happen according to appropriate policies and guidelines that promote sustainability and the maintenance of a healthy environment. In many cases, high value incomes from wildlife and tourism will provide the greatest incentives for communities to manage and conserve their forest and woodland habitats.

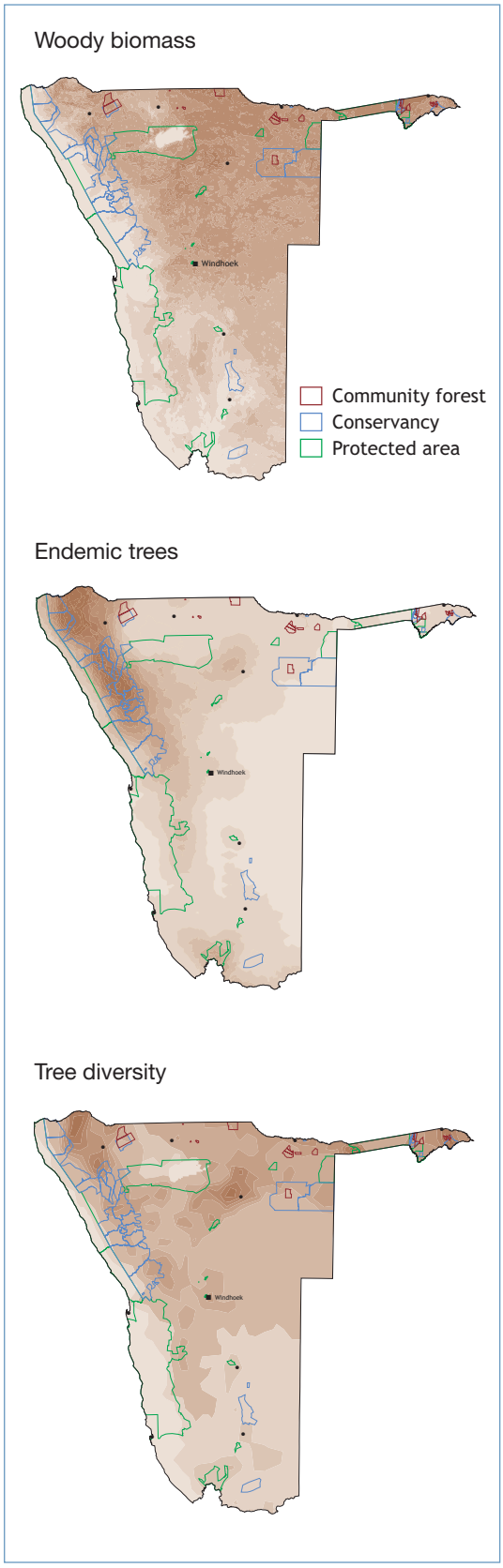



Figure 26. The network of land that is managed directly or indirectly according to conservation principles in Namibia compared to indices of tree diversity and endemism (page 43) and woody biomass (page 51).

## FOREST AND WOODLAND CONSERVATION

Woodlands and forests have been formally conserved in Namibia in several ways: in national parks and game reserves, through the banning of timber harvesting in 2003, permit controls on harvesting, transporting and selling wood products, and the declaration of 50 specially protected species (see the table opposite). Provisions in the Forest Act of 2001 allow the government to declare woodland and forest areas as conservation areas in several different forms (see page 88). The Act also states no one may cut, remove or destroy 'any living tree, bush of shrub growing within 100 metres of a river, stream or watercourse.[10]

The Caprivi State Forest was signposted as such, but never declared a legally protected area. The Directorate of Forestry intends to rectify this, in addition to proclaiming other state forests at Hamoye and Kanovlei. The state forests, national parks and game reserves are formally protected areas, land on which conservation is an explicit management goal. To these can be added community forests and conservancies, where conservation is part of the management objective. Many freehold farms are run as private nature reserves on which habitat conservation is important. Figure 26 shows that Namibia has an impressive network of areas set aside for conservation management. These maps also show how the distribution of conservation areas relates to indices of diversity, endemism and woody biomass. Not surprisingly, most community forest and proposed state forests are in the north-eastern parts of the country where rainfall, diversity and wood biomass is highest. Most endemic species, by contrast, are in north-western Namibia where they are better protected by communal area conservancies, national parks and game reserves.

## FUTURE CONSIDERATIONS

The changes to the forestry sector have been substantial. Almost all staff have been appointed in the past several years, many of them newly trained. Its mandate is now quite different from before, guided by new policies and legislation that largely move the whole sector to the management and conservation of

**Species of trees that are specially protected in terms of the Preservation of Trees and Forests Ordinance of 1952 and the Proclamation of the SWA Administration, No. 486 in 1972**

| Latin scientific name | Common name | Latin scientific name | Common name |
|---|---|---|---|
| *Acacia erioloba* | Camel Thorn | *Lannea discolor* | Omundjimune |
| *Acacia haematoxylon* | Grey Camel Thorn | *Maerua schinzii* | Ringwood Tree |
| *Acacia monti-usti* | Brandberg Acacia | *Ochna pulchra* | Lekkerbreek |
| *Acacia robynsiana* | Whip-stick Thorn | *Olea europaea* | Wild Olive |
| *Acacia sieberiana* | Paperbark Thorn | *Ozoroa crassinervia* | Namibian Resin Tree |
| *Acanthosicyos horridus* | !Nara | *Pappea capensis* | Jacket-plum |
| *Adansonia digitata* | Baobab | *Parkinsonia africana* | Wild Green-hair Tree |
| *Albizia anthelmintica* | Worm-bark False-thorn | *Peltophorum africanum* | Weeping Wattle |
| *Baikiaea plurijuga* | Zambezi Teak | *Philenoptera nelsii* | Kalahari Apple-leaf |
| *Berchemia discolor* | Bird Plum | *Philenoptera violacea* | Apple-leaf |
| *Boscia albitrunca* | Shepherd's Tree | *Pterocarpus angolensis* | Kiaat |
| *Burkea africana* | Burkea | *Rhus lancea* | Karee |
| *Colophospermum mopane* | Mopane | *Rhus pendulina* | White Karee |
| *Combretum imberbe* | Leadwood | *Salix mucronata* | Wild Willow |
| *Elaedendron transvaalensis* | Transvaal Saffron | *Schinziophyton rautanenii* | Mangetti |
| *Entandrophragma spicatum* | Owambo Mahogany | *Schotia afra* | Small-leaved Boer-bean |
| *Erythrina decora* | Namib Coral Tree | *Sclerocarya birrea* | Marula |
| *Euclea pseudebenus* | Ebony Tree | *Securidaca longepedunculata* | Violet Tree |
| *Faidherbia albida* | Ana Tree | *Spirostachys africana* | Tamboti |
| *Ficas cordata* | Namaqua Fig | *Sterculia africana* | African Star-chestnut |
| *Ficus burkei* | Common Wild Fig | *Sterculia quinqueloba* | Large-leaved Star-chestnut |
| *Ficus sycomorus* | Sycamore Fig | *Strychnos cocculoides* | Corky Monkey Orange |
| *Guibourtia coleosperma* | Ushivi | *Strychnos pungens* | Spine-leaved Monkey Orange |
| *Gyrocarpus americanus* | Propeller Tree | *Strychnos spinosa* | Spiny Monkey Orange |
| *Kirkia acuminata* | White Syringa | *Tamarix usneoides* | Wild Tamarisk |

indigenous woodlands for the benefit of rural people and country as a whole. This is an encouraging and stimulating shift. But how does the theory match the practice, and what are the main challenges?

Perhaps it is too early to answer the question of how effectively new policies and legislation are being implemented, but there are clear signs that more progress is needed. For example, despite the Forestry Act being promulgated in 2001, by early 2005 the first Forest Council had not been appointed. Other than the 13 Community Forests, no other classified forests had been proclaimed. The Directorate also needs to confirm its presence and role in activities where it should be more actively engaged, two examples being the promotion of non-timber forest products and reforesting of areas that now lie fallow and unproductive. If natural resources and fire are mainly to be managed by rural people, forestry officials will have to spend more time (and other resources) supporting and encouraging these distant communities.

These concerns lead some people to ask if Namibia should have a discrete forestry sector. The sector's role is also confounded by the fact

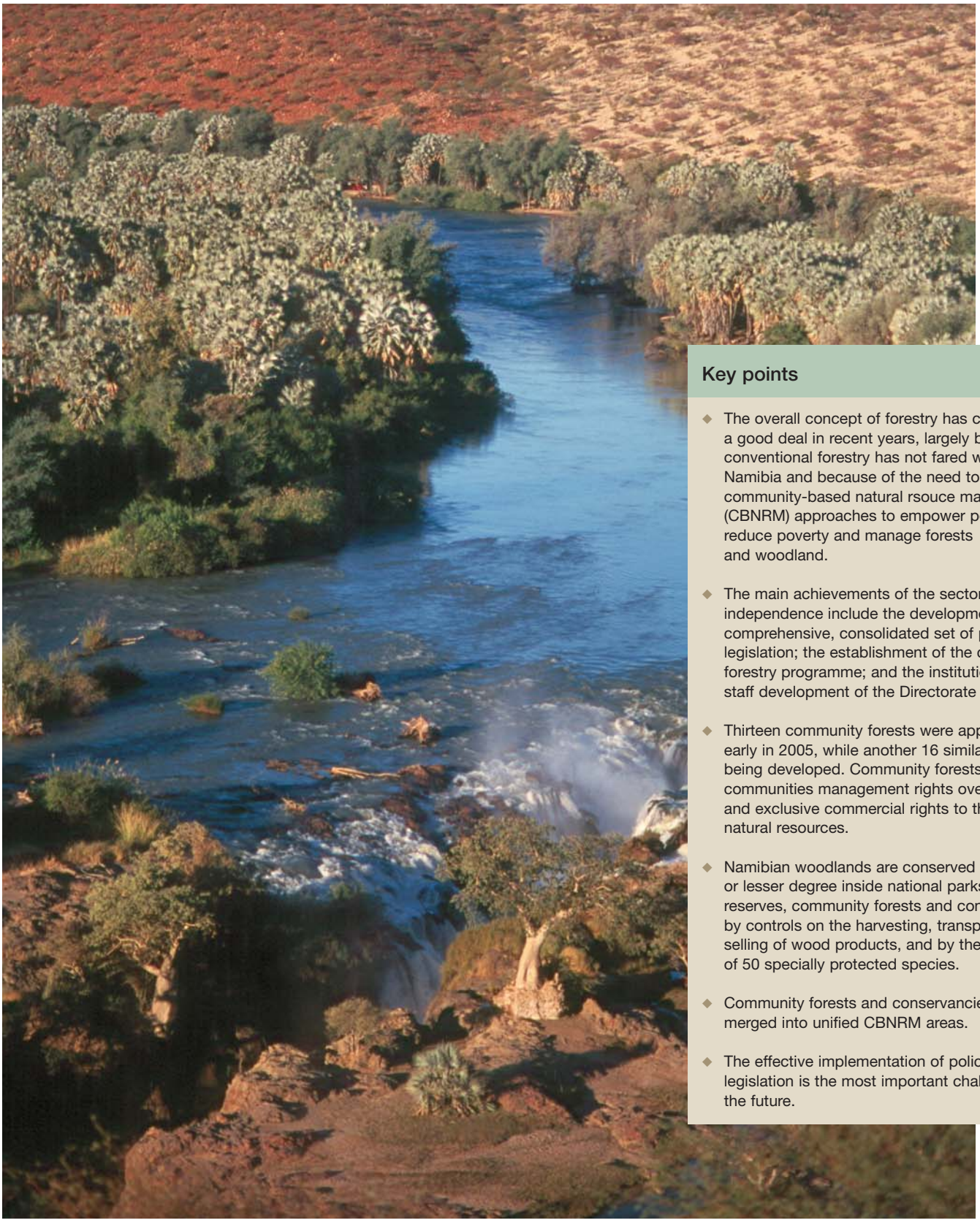
that the Directorate of Forestry has itself shifted attention to concentrate more fully on environmental management, rural development and the use of all plant and animal resources to be found in woodlands that cover over half the country (see page 11). A logical possibility would be to expand and transform the sector into one that manages all woodland resources under an umbrella of holistic, environmental management and conservation.

*Wildlife conservation is a well-established and profitable concept, made popular by such flagship animals as rhinos, elephants and lions. Woodland or forest conservation is not widely embraced, partly so because it lacks the dramatic icons on which to sell the importance of conservation. There are no botanical rhinos, elephants or lions, although Quiver Trees, Welwitschia and Baobabs go some way towards raising the profile of trees. Namibian forests also do not compare with the impressive forests in equatorial regions of the world.*

Another option is to broaden the role of forestry to focus on all vegetation, both woody and non-woody. One benefit in this would be to create much greater advocacy for plants and to have an organisation fully devoted to the study, management and conservation of plants indigenous to Namibia. Most so-called broad environmental management and conservation activities ride on the back of flagship species or concepts: desert elephants and rhinos, spectacular tourism attractions, rare species of birds or, indeed, plants such as Welwitschia. These are the icons for which many areas are managed – directly or indirectly – for conservation, both for the sake of preservation and the wise use of resources. Moreover, most conservation areas are declared because there are passionate protagonists who champion these favourite species, and it is usually due to their efforts that broader areas are conserved in which their 'icons' live. By contrast, few natural environments are managed for conservation in the absence of flagships and their advocates. Having an organisation that promotes the value of plants would help to raise the profile of these important organisms, regardless of whether they occur in forests, woodlands, shrub-lands or desert areas. The chances of having such an organization have, however, perhaps been reduced as a result of the Directorate's recent move to the Ministry of Agriculture, Water and Forestry. Indeed, the future will tell how the past 10 years' of development in an environmental setting will be carried forward in an organisation where agriculture is a priority.

Namibia now has three systems of community management of natural resources: commercial or freehold farm conservancies, communal area conservancies, and community forests. All three systems seek to promote the wise use and management of natural resources. The separate systems were designed to deal with different kinds of land tenure and natural resources. Distinctions between communal and freehold land are starting to blur as more people develop large farms in communal areas, and more previously disadvantaged people own or settle on freehold farms. Furthermore, differences in natural resource use and management between community forests and conservancies are ones of subtle emphasis. In time to come, one would hope that these borders and differences will be dismantled further and lead to a situation in which natural resources are managed effectively, profitably and sustainably by the people who own them, and with a minimum of sectoralism.

In summary, much has been achieved since independence in 1990 to formulate a new world of forestry in Namibia, a sector and enterprise that is much more in tune with the realities of available forest and woodland resources, and how they can best be used and managed. What remains is to turn these good intentions into worthwhile results for the benefit of Namibia's natural environment, its people and the broader globe.



## Key points

- The overall concept of forestry has change
  a good deal in recent years, largely becaus
  conventional forestry has not fared well in
  Namibia and because of the need to adopt
  community-based natural rsouce managem
  (CBNRM) approaches to empower people,
  reduce poverty and manage forests
  and woodland.

- The main achievements of the sector since
  independence include the development of
  comprehensive, consolidated set of policie
  legislation; the establishment of the commu
  forestry programme; and the institutional ar
  staff development of the Directorate of Fore

- Thirteen community forests were approved
  early in 2005, while another 16 similar areas
  being developed. Community forests give r
  communities management rights over their
  and exclusive commercial rights to the use
  natural resources.

- Namibian woodlands are conserved to a gr
  or lesser degree inside national parks and g
  reserves, community forests and conservan
  by controls on the harvesting, transportatio
  selling of wood products, and by the declar
  of 50 specially protected species.

- Community forests and conservancies shou
  merged into unified CBNRM areas.

- The effective implementation of policies an
  legislation is the most important challenge
  the future.