

**UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP)
BIODIVERSITY PLANNING SUPPORT PROGRAMME (BPSP)**

**Integrating Biodiversity into the Tourism Sector:
Best Practice and Country Case Studies**

Case study of South Africa

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Background to the Case Study

The United Nations Environment Programme's (UNEP) Biodiversity Planning Support Programme (BPSP) has a mandate to provide assistance to national biodiversity planners as they develop and implement their national biodiversity strategy and action plans, or equivalent plans, programmes and policies.

The integration of biodiversity into other sectors of the national economy and civil society has been identified as a critical indicator of successful implementation of sustainable development practices and objectives of the Convention on Biological Diversity (CBD).

Tourism is one of the fastest growing economic sectors and has an ecological footprint that reaches to almost every part of the Earth. As such, it has great potential to influence biodiversity conservation and sustainable use, in both positive and negative ways.

Sustainable tourism has been highlighted recently as an area of major concern both within the CBD and was the focus of attention at the recent Conference of parties in Nairobi. In its final decisions, the CoP requested parties to submit case studies of best practise in sustainable tourism

Outside the of the mechanism of the CBD, a large number of other initiatives linking biodiversity and tourism have been undertaken by other organisations, ranging from the World Tourism Organisation and UNESCO to numerous private tourism companies.

Whilst these initiatives are welcome, there is a danger that the sheer volume and diversity of initiatives on biodiversity and tourism becomes a barrier to effective implementation of the right policies at the national level. It has been observed that national biodiversity planners will value any guidance to assist them to rapidly 'sift' through the available information and find that which best suits their particular requirements.

BPSP therefore commissioned this study of the integration of biodiversity into the tourism sector with a specific focus on how best to incorporate 'global best practice' into national biodiversity strategy and action plans (NBSAPs). The study has included 12 case studies in selected countries to guide biodiversity planners to the best global information on biodiversity and tourism.

This report presents the findings of the South African Case Study.

1. OVERVIEW OF PRESENT STATE OF TOURISM DEVELOPMENT IN THE COUNTRY

1.1 Relative importance in the national economy

The tourism sector is the fourth largest generator of foreign exchange in South Africa and lies third, after manufacturing (24.4%) and mining and quarrying (8.6%), in its contribution to the economy at 8.2%. Although South Africa attracted just 0.9% of the total world tourism arrivals internationally in 1998 (ranking it 25th in the world as a tourism destination) it represents the economic sector of most significant growth in the country (DEA&T, 1999a)

The increasing importance of the tourism sector is reflected in the increase in tourism export earnings from 5.2% of total exports in 1988 to 13.2% in 1998 (DEA&T, 1999a). There has also been a 37% increase in foreign tourist arrivals to South Africa since 1994 (SATOUR, 1999). Predictions from the World Travel and Tourism Council indicate that the travel and tourism industry will grow from an estimated R69.8 bn¹ industry in 1998 to R270.2 bn by 2010 (WTTC, 1998). This represents a growth of 84.3% over the time period, or an increase of 5.5% per annum (ibid).

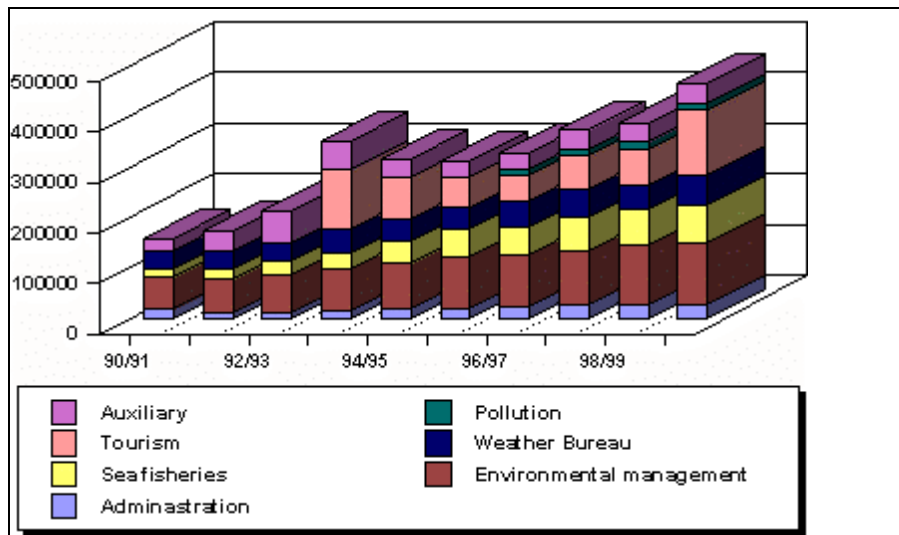
1.2 Relative priority in national planning policy

The Ministry of Environmental Affairs and Tourism (DEA&T) is one of 21 South African Government departments, and acts as the lead agency for tourism policy and planning. The tourism department was created within the DEA&T in 1994, and its responsibilities include (DEA&T, 1996, 1999b):

- **Raising the profile** of the tourism industry and putting it in a position to compete with other sectors for funding and national resources.
- To **unleash the sector's potential** as a leader in wealth-creation and employment generation.
- To **link the management** of tourism with critical environmental products that it uses (e.g. national parks, protected areas and cultural resources) by formulating a cohesive development strategy and introducing specific environmental functions relating to monitoring, regulation and impact assessment.
- To carry out **critical co-ordination** between ministries whose mandates and activities directly impact on tourism (namely the Ministries of Finance; Public Works; Transport; Trade and Industry; Arts, Culture, Science and Technology; Labour; Education; Home Affairs and Foreign Affairs.)
- To **facilitate creative and strategic interaction** between the tourism policy and policies guiding the management of land, water, energy and other natural resources.

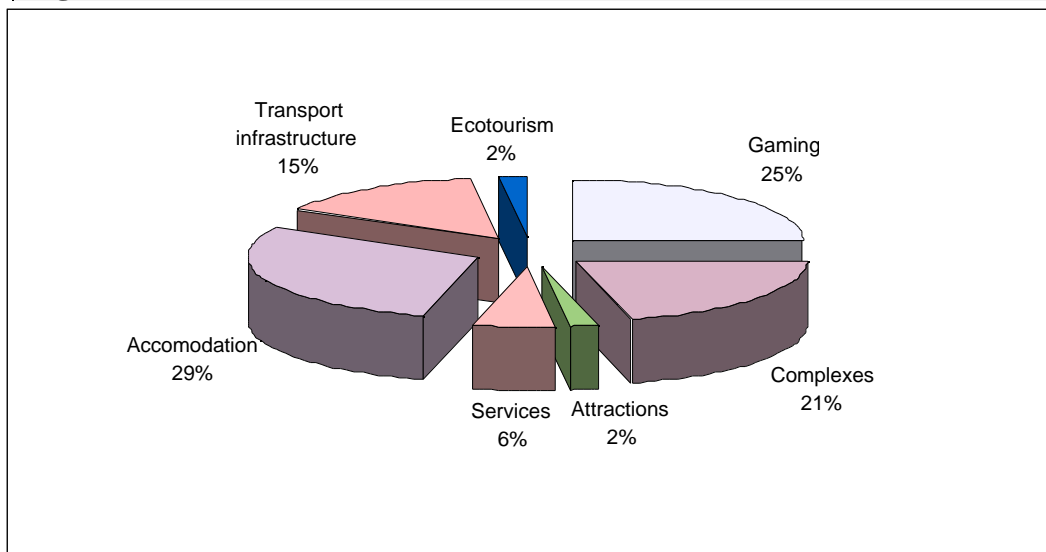
There has been a progressive increase in the overall budget of the DEA&T in Rands since 1990 (see Figure 1.1). However, the increase is insignificant in real terms, despite the addition of a tourism component in 1993/4 and a significant proportion of the budget being allocated to this function. The environmental budget is relatively low at only 1-2% of government expenditure (DEA&T, 1999b).

Figure 1.1: Budget Allocation: Department of Environmental Affairs and Tourism (DEA&T, 1999b)



Major investment in the tourism industry between 1995 and 1998 constituted R44.9 bn. This spending was split between seven sub-sectors, as shown in Figure 1.2.

Figure 1.2: Investment in tourism sub-sectors, 1994-1998 (DEA&T, 1999a)



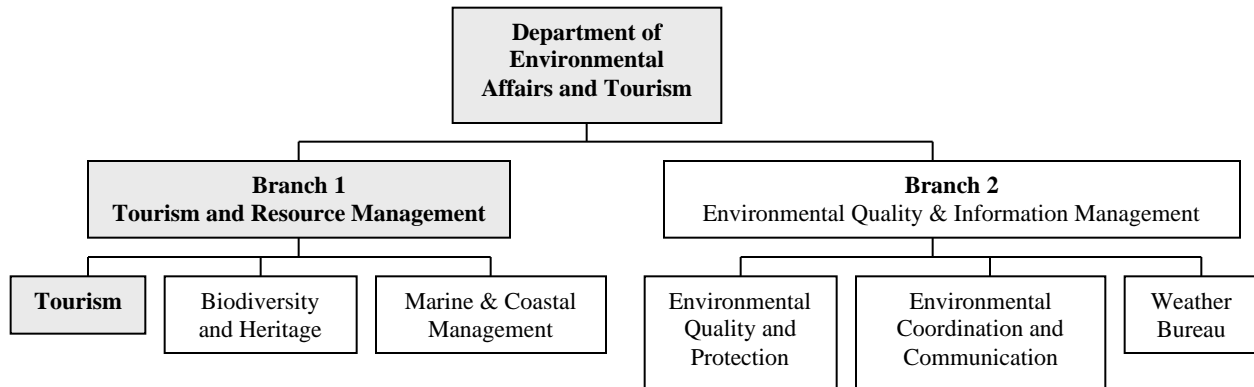
However, a report commissioned by the DEA&T and the Tourism Infrastructure Working Group to review infrastructure in support of international and domestic tourism found that although tourism plays an important part in many South African government initiatives, there are many people involved who are predominately focused on their own projects, and who lack wider vision. Within government, tourism was found to lack the profile, leadership, resources and tools to rectify this. A preponderance of overlapping tourism initiatives and tourism planning programmes have received South African governmental endorsement (DEA&T, 1999c). Kruger National Park illustrates the number of planning initiatives which overlap, as regions of it are incorporated within the Maputo Corridor Spatial Development Initiative (SDI), the Gaza-Kruger-Gonarezhou Transfrontier Conservation Area (TFCA), and the Kruger to Canyons Biosphere Reserve. Although these initiatives are not mutually exclusive they have different priorities in terms of biodiversity

1.3 Institutional structure of tourism government planning and policy

The responsibilities for carrying out the tourism mandate for South Africa lie with government and statutory bodies. The role of these is described in Figure 1.3.

Figure 1.3: Institutional Structure of Tourism in Government (DEA&T, 1996; 1999b)

The structure of the Department of Environmental Affairs and Tourism:



The focus areas of the Tourism branch are:

- To create the conditions for responsible tourism growth and development.
- To promote the conservation and development of natural and cultural resources for sustainable and equitable use.
- To promote and enhance the quality and safety of the environment.
- To provide accessible environmental and tourism information for sound planning and decision making.

Outside the government, the national tourism agency is South African Tourism (SATOUR). This statutory body is currently responsible for national tourism promotion and marketing. The White Paper on Tourism (DEA&T, 1996) and the Tourism Amendment Bill (DEA&T, 1999c) suggested that an alternative national tourism agency should be used to fulfil roles and responsibilities including (DEA&T, 1996):

- International marketing and tourism promotion.
- Research, market intelligence and information management.
- Industry standards.
- Product development.
- Human resource development.
- Facilitation and co-ordination of tourism development in the nine South African provinces.
- Policy support (e.g advice and assistance to DEA&T regarding formulation and implementation of tourism policy).
- Incorporating reporting from specialist committees with expertise in finance; marketing; product development; environment; education and training; community involvement; information management and research; and ad hoc committees (e.g. with expertise in crime or transport).

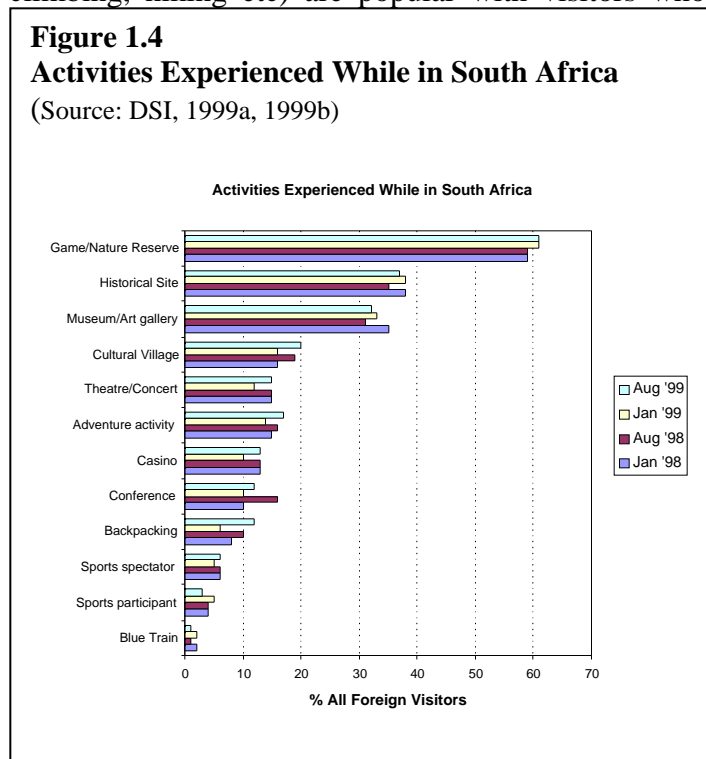
Within each of South Africa's nine provinces, there are Provincial Tourism Organisations (PTOs). These act as the ultimate deliverers and drivers of tourism industry at the provincial level. Their responsibilities are (DEA&T, 1996; Pers. Comm. Mr Poultney, THETA, 2001):

- to reflect the national tourism organisation structure;
- to assist community organisations in organising themselves to have access to greater representation; and
- to administer the registration of guides

1.4 Dominant types of tourism practice

Of the 39.4 million South African tourism arrivals in 1996, 77.3% were domestic leisure arrivals, while 12.6% were foreign arrivals (DEA&T, 1999a). 5.9 million visitors made up the foreign tourist market to South Africa in 1999, with 72% of them originating from within Africa and 28% from overseas (DEA&T, 2000a). Just over 80% of all foreign arrivals in 1998 visited for reasons that included a holiday (DEA&T, 1999a). On average foreign arrivals in 1996 spent R608 per day while domestic tourists spent R281 per trip (ibid).

South Africa hosts a diverse array of tourism forms. These include conventional beach holidays around major centres such as Cape Town and Durban, with excellent shopping opportunities in major cities. There are facilities for conferences, exhibitions and sport, in addition to casinos within extensive resorts. The dominant forms of nature-based and adventure tourism in the country include safari tourism, whale watching, white water rafting, hiking, bird-watching, 4x4 trails, bush survival, deep-sea fishing, hunting, and diving. There are also great opportunities for tourists interested in the culture of South Africa with its rich tribal history, plentiful museums, unique archaeological sites and battlefields, and monuments (DEA&T, 1996). The most popular activity undertaken by the foreign visitor market is visiting game and nature reserves (61% of visitors in August 1999), followed by visits to historical sites (37%) (DSI, 1999a). Adventure activities (e.g. scuba diving, mountain climbing, hiking etc) are popular with visitors who stay longer than a



month, young visitors, and those from Australia and Holland (ibid). A breakdown of other activities is shown in Figure 1.4.

1.5 Participation and degree of interaction of different sectors and stakeholders in the tourism process

Since the first democratic elections in 1994 there has been a great emphasis on the consultation and participation of stakeholders in all sectors of government policy and planning. This is reflected within the 1996 White Paper on the Development and Promotion of Tourism in South Africa which

states that government is committed to facilitating responsible tourism through the following participative processes (DEA&T, 1996):

- Working closely with international funding agencies; local and international private sectors, Non Governmental Organisations (NGOs) and other relevant partners to define responsible tourism and establish standards;
- Encouraging the development of partnerships and joint ventures between the tourism private sector and local communities;
- Working closely to assist local communities to identify and develop their tourism potential;
- Proactive participation of all stakeholders (private sector, government, local communities, previously neglected people, consumers, NGOs, the media, employees and others).

The development of the White Paper itself incorporated a two-year process of consultation with different sectors and stakeholders. Initially an Interim Tourism Task Team (ITTT) was appointed by DEA&T to represent business, the labour movement, community organisations, national and provincial government. The ITTT was charged with drafting a Green Paper on Tourism for discussion. Subsequent country-wide workshops gained comment from over 500 people, nearly 100 interviews were conducted with key stakeholder experts in the tourism industry, and over 100 written submissions were reviewed (DEA&T, 1996).

Key players identified within government that should contribute towards the development and promotion of the tourism industry include those described in Table 1.1:

Stakeholder group	Functions
National government	<ul style="list-style-type: none"> • Facilitation and implementation: Establish safety, stability, security, provision of incentives for investment, enabling legal and fiscal frameworks, facilitation of active labour market policy, allocation of finances for tourism promotion and development, effective marketing and encourage foreign investment. • Coordination: With international, regional and provincial government with respect to tourism development; of tourism-related efforts of government departments and related institutions; with NGOs, labour and community organisations, training institutions, universities and other bodies. • Planning and policy making: Formulation, monitoring and updating of a national tourism policy and strategy; development of integrated national tourism plans. • Regulation and monitoring: Application of environmental management principles in land-use development proposals to facilitate sustainable use of resources; formulation of development guidelines and regulations to facilitate sustainable and responsible development. • Development promotion: Equitable development of all destinations with tourism potential; promotion of community involvement; promote the spread of responsible tourism; promote the development of major tourism projects with national and country-wide impacts (e.g. trans-border protected areas).
Provincial government	<ul style="list-style-type: none"> • Planning and policy making: Responsible for the formulation of tourism policies applicable to their areas, and are partners in the implementation of national policies, strategies and objectives. • Development promotion: Agreement an international marketing strategy with national tourism organisations that is co-ordinated nationally while executed with the participation and support of provincial organisations. Responsibility for domestic marketing in competition with other provinces. • Tourism development: More prominent than national government, with the involvement of local communities, environmental management, safety and security of visitors, tourism plant development, and infrastructure provision.
Local government	<ul style="list-style-type: none"> • Responsible land-use planning and control over land-use and land allocation • Provision and maintenance of tourist services, sites and attractions • Marketing of specific local attractions • Control of public health and safety • Facilitation of local community participation in the tourism industry • Ownership and maintenance of certain plant (e.g. ports and airports) • Facilitate establishment of public transport • License establishment in line with a national framework • Promote and financially support local publicity associations

The DEA&T commissioned the Cluster Consortium to develop a national action framework for

identified as a strategy to, "*follow our political miracle with an economic miracle*" (DTI, 1997). This process is understood as collaborative economic development to upgrade competitiveness. Clusters create a opportunities for business, government, labour and related organisations in an industry sector to jointly overcome constraints and discover opportunities for growth. The collaborative approach was expanded to include local economic communities, while a Tourism Leadership Group, comprising DEA&T, other government departments (Transport and Trade and Industry), business, labour, SATOUR, the National Economic Development and Labour Council (NEDLAC) and the Industrial Development Corporation (IDC) has been constituted. A major stumbling block identified to date by the consortium is the absence of a coherent, broadly developed and supported, and effectively co-ordinated tourism strategy. This, it is noted, is a key reason why "*South Africa's tourism opportunity remains undefined, unarticulated, and unexplored*" (The Cluster Consortium, 1999; Urquhart, 1999).

The DEA&T describes the functions of the **private sector** within tourism development as the following (DEA&T, 1996):

- **Investment** in the tourism industry.
- **Operation and management** of tourism efficiently and profitably.
- **Promotion** of individual tourism services.
- **Training** and re-training of the workforce to upgrade skills continuously.
- Continuous **refurbishment** of plant and equipment.
- Ensure **safety, security and health** of visitors.
- Operate according to **appropriate standards**.
- **Satisfy** customers.
- **Collaborate with government** in planning, promotion and marketing of tourism.
- **Efficiently organise** itself to speak with one voice.
- **Represent the interests of private business** on major national and provincial tourism body boards.
- Develop **socially and environmentally responsible tourism**.
- **Involve local communities and previously neglected groups** in the tourism industry through establishing partnerships, out-sourcing, purchase of goods and services from communities.
- **Enable communities to benefit from tourism** development (e.g. water reticulation and village electrification through tourism investment).

The extent of implementation of these functions varies between private operators, depending on their business and ethical objectives. For example, it is typical for the private sector to concentrate on the areas of operation that enhance profitability and improve the quality of their service. The generation of socially and environmentally responsible tourism, and that which involves local communities and previously neglected groups, is increasingly encouraged by tender requirements for concessions within government controlled land. However, this process affects a minority of private operators, and therefore socially and environmentally responsible activities within South Africa are predominately practised by companies which have their own ethical or marketing incentives to do so.

There are a number of organisations that have been created since 1996 to represent the tourism private sector and liase with government. They include:

- **Tourism and Hospitality Education and Training Authority (THETA):** The Education and Training Authority for the Tourism, Hospitality and Sport economic sector.
- **The Federated Hospitality Association of South Africa (FEDHASA):** Which acts as a watchdog on all new and planned legislation and amendments, and then researches the impact

- **Tourism Business Council of South Africa (TBCSA):** A body representing all aspects of tourism which aims to effectively represent the private sector at national and provincial government levels.
- **The Business Trust:** Working on job creation and human capacity development within the tourism sector in order to tackle poverty and widen economic participation.

The role of **communities** in tourism development is defined by the DEA&T (1996) as follows:

- Be **organised** to play a more effective role in the tourism industry and interact with government and role players at all levels.
- **Identify and exploit** potential tourism resources and attractions within communities.
- **Use opportunities** for tourism training, awareness and finance incentives for tourism development.
- **Seek partnerships** with established private sector tourism.
- Support and promote **responsible and sustainable tourism** development, including being tourists.
- **Oppose developments that are harmful** to the local environment and community culture.
- **Participate in decision-making** of planned and proposed major tourism developments.
- Work to **enhance positive benefits** of tourism and **minimise negative impacts**.
- Organise to **maximise** the sharing of information and experience.
- Have **representation** in national, provincial and local tourism structures.
- **Encourage the press** to proactively provide tourism information to communities.
- **Work closely with NGOs** to educate communities about tourism.
- Make information on community tourism resources and attitudes **transparent and accessible** to all levels of government.
- **Sensitise** the private sector, tourism parastatals, environmental agencies and NGOs to the importance of community involvement.

In practice, these are frequently activities that are not initiated by communities, but instead occur in reaction to invitations from other stakeholders, to participate or contribute towards a process. The level of their involvement in tourism development varies with respect to their capacity, opportunity, education, training, and location. Various private operators, conservation authorities, and NGOs work with rural communities to improve their stake in tourism development. However, unemployment in South Africa is very high (37% in 1997 with an annual growth rate of 2%: South African Institute for Race Relations, 1998). Therefore poor rural communities are seldom in a financial position to turn down opportunities for any form of employment or economic development, even if they are harmful to the environment or culture. In addition, they seldom understand the full environmental implications of a development.

The DEA&T have highlighted the role of **women** in tourism development. Urban drift, among men who migrate to cities and mines for employment, has been particularly damaging to rural women. They suffer from hard labour in fields, poor access to infrastructure and water, and also bear the impact of HIV/AIDS. Therefore the role of women in tourism is envisaged to benefit family life through the role of women in shaping a responsible tourism industry as policy-makers, entrepreneurs, entertainers, travel agents, tour guides, restaurateurs, workers, managers, guest house operators and other leading business roles. They are encouraged to organise community projects that have positive environmental, social and economic impacts (DEA&T, 1996). There are no statistics available to determine the extent to which women are fulfilling these roles, but there is anecdotal evidence suggesting a prevalence of women employed in the housekeeping and catering sectors of tourism, whereas men tend to work in maintenance and technical jobs. This is despite roughly equal numbers of men and women being employed in the industry (Futter & Wood, 1997).

The DEA&T expects environmental and community-based **NGOs** to (DEA&T, 1996):

- **Contribute** to the development of plans and policies for the tourism industry.
- Assist the government in **developing standards** for responsible tourism.
- Assist the government, private sector and communities in implementing, monitoring and evaluating **responsible tourism**.
- **Attract funding** from donors to develop community-based tourism projects.
- **Assist communities** in organising themselves, preparing and implementing tourism projects.
- Assist government in conducting **tourism and environmental awareness programmes** among communities and the tourism industry.
- Liaise between the private sector and communities to generate **more community involvement** in tourism and stronger private sector commitment.
- Deliver **education** to local communities.

NGOs that are actively working with government regarding tourism development currently include:

- **WWF-SA:** Working on resource management education and sustainable development with communities;
- **PondoCROP:** Working to identify potential tourism enterprise opportunities;
- **Triple Trust:** Working on capacity building and training business skills (Pers. Com. M. Mosola, Tourism Directorate, DEA&T, 2001), and
- **Community Public Private Partnership:** Working with DEA&T to develop guidelines for the commercialisation of protected areas with the involvement of communities (Pers Comm. V. Mahlati, CPPP, 2001).

Conservation agencies in South Africa, such as South African National Parks and Provincial Conservation Authorities, have a vital role to play in the sustainable development of tourism. DEA&T (1996) defines their roles to:

- Ensure the **protection of biological diversity** within the network of protected areas and other areas contributing towards conservation and tourism.
- Proactively integrate areas under their control into the **tourism resource** base by providing controlled access to and use of protected areas to the public and commercial operators.
- **Provide tourist facilities** and experiences in a responsible manner, where appropriate.
- Promote the **diversity of tourism** offered within and adjacent to protected areas.
- Offer a range of tourism experiences **accessible** to the average South Africa.
- Facilitate and support the establishment of **biosphere reserves, conservancies and community owned reserves**.
- Facilitate and support the establishment of **partnership tourism ventures** between communities, private operators and conservation agencies inside or adjacent to protected areas.
- Promote and provide **opportunities to integrate** their operations with tourism activities inside protected areas.
- Assist tourism authorities in the conduct of **environmental tourism awareness** programmes.
- **Contribute** to the development of policies and plans for the tourism industry.

The conservation agencies strengths are the conservation of biodiversity within protected areas, and ensuring that tourism within them is conducted appropriately (rather than simply focussing on profitable, market-driven tourism). There is extensive involvement of nature conservation agencies within the mid and lower segments of the tourism market. The rationale for this involvement is their obligation to service the greater public by ensuring equitable access to protected areas. The agencies are increasingly calling upon the private sector to take over operations that have not been

(particularly at the higher price levels). Negotiating and designing ventures where both biodiversity conservation and tourism potential are maximised is not a simple process, but one with which the conservation agencies are becoming increasingly familiar. There are opportunities for partnerships between nature conservation agencies, the private sector, and communities which can promote tourism, ensure community benefits and involvement in protected areas, and generate revenue for biodiversity conservation: All essential ingredients for sustainable tourism (Pers. Comm. T. Sandwith, KZNNCS, 2001).

1.6 Education and training in tourism

There has previously been no education at the primary or high-school levels in tourism (DEA&T, 2000b). Meanwhile, tourism and hospitality training at the tertiary level has only been available at a small number of public and private institutions in South Africa (DEA&T, 1996). Skills training for the majority of uneducated people at the lowest levels (e.g. waiters, cleaners) is mainly done in-house on an apprenticeship basis. The quality of in-house training varies greatly between private operators, and there has been little standardisation in the past. Opportunities for advancement to management level in tourism are rare for the uneducated or illiterate, while almost impossible for those who cannot speak English.

The government appears to realise that the quality and standards of tourism education have not been ideal in the past. In response it has been running a two-year pilot project teaching travel and tourism at a number of schools. Depending on performance of this pilot sample during the 2001 matriculation results, tourism may be introduced at a high school level throughout the country. In addition, THETA is currently assessing consistency within tourism education and training, and is drafting an accreditation framework which includes quality assurances (Pers. Com. Mr M. Mosola, DEA&T, 2001). This ensures that commercial training has facets including outcome-based training; assessment schemes with structured training plans; quality management procedures; and that they comply with occupational health and safety procedures (Anon, 2000a).

There are other improvements in investment for education and training in the pipeline. In October 2000, R15.7 million was received by DEA&T from the Spanish government to fund a new South African Tourism Institute (SATI), which will be used to spearhead tourism education and skills training. It is planned that the SATI will specifically focus on upgrading the skills of teachers, trainers and assessors within the tourism industry, and will be used as a vehicle to fast-track tourism training programmes at various levels. The first part of the initiative will be introduced at school level by way of a specifically developed knowledge and skills transfer programme aimed at schoolteachers. A further training programme will be implemented to develop the skills of approximately 3,000 on-the-job trainers and assessors currently working within the field of tourism. A budget of R1.5 million has also been set aside for worthy tourism projects in need of special assistance, while a tourism bursary fund will also be established (DEAT, 2000e).

1.7 Compliance with existing international guidelines on best practice for sustainable tourism

There are many sets of international guidelines on best practice for tourism that have been designed by different organisations and forums, including the following:

- Campaign for Environmentally Responsible Tourism (CERT)
- Economic and Social Commission for Asia and the Pacific (ESCAP)
- Green Flag International
- Green Globe

- Pacific Asia Travel Association
- The Association of Independent Tour Operators (AITO)
- The Center for Responsible Tourism
- The Ecotourism Society
- The Field Studies Council
- The National Audubon Society
- Tourism Concern
- United Nations Environment Programme/World Tourism Organization/World Conservation Union
- United States Department of the Interior National Park Service

There are no indications that South Africa's tourism industry follows any of the existing sets of international guidelines consistently. However, it must be realised that such a plethora of guidelines is not conducive to clarity regarding what 'best practice' for sustainable tourism actually entails. Although many of the themes within guidelines are similar, they often have fundamentally different priorities.

None of the tourism organisations representing the private sector {e.g. the Tourism Business Council of South African (TBCSA); Tourism, Hospitality and Sport Education and Training Authority (THETA); and the Federated Hospitality Association of South Africa (FEDHASA)} mention them within their literature; they merely have codes of conduct for their members within the organisations. This is despite the fact that South Africa assisted in the drafting of the Berlin Declaration in 1997 and agreed to principles of environmental management; financial and business sustainability; tourism planning; economic instruments and incentives; and socio-cultural impacts and development (Berlin Declaration, 1997).

The government of South Africa is currently undergoing tourism law reform. This process identifies legal obstacles, gaps and changes that are required for tourism development to prosper. For example, a new Tourism Amendment Act has been passed by parliament and is awaiting presidential approval (Pers. Comm. M. Mosola, DEA&T, 2001). Once approved, the national registrar at the DEA&T will create a new national database of all tour guides, and a code of conduct for their activities. The Act aims to facilitate entry of disadvantaged sectors of the community into the tourist-guiding sector by recognising prior learning and experience, while the development of standards within the sector will be facilitated by THETA (Mabudafhasi, 2000; Pers. Comm. C. Poultney, THETA, 2001). In addition, the law reform will include review of international tourism guidelines, and there are currently discussions between the DEA&T and the United Nations Development Programme (UNDP) regarding financial assistance for the development of a national sustainable tourism plan (Pers. Comm. M. Mosola, DEA&T, 2001).

1.8 Brief description of main ecotourism attractions of South Africa

There are many definitions of ecotourism that are proffered in the literature which place different emphasis on the extent of conservation and community development that is important. For the purposes of this report, the World Conservation Union (IUCN) definition is utilised:

"Ecotourism is environmentally responsible travel and visitation to relatively undisturbed natural areas, in order to enjoy and appreciate nature (and any accompanying cultural features - both past and present) that promotes conservation, has low negative visitor impact, and provides for beneficially active socio-economic involvement of local populations" (Ceballos-Lascurain, 1996).

Although there are many famous attractions within the country which offer nature-based

them can be said to host ‘*environmentally responsible travel*’ or involve ‘*socio-economic involvement of local populations.*’ A selection of the ecotourism destinations in South Africa is shown in Table 1.2.

Table 1.2: Selected examples of South African ecotourism destinations	
Attraction	Description of ecotourism activities and community benefits
National Parks	
Kruger National Park (KNP)	<ul style="list-style-type: none"> • Photographic safari tourism within nearly 2 million hectares of bushveld; environmental education; captive breeding of rare species; habitat manipulation; environmental and conservation management; research and monitoring programs. • Community development forums between the Social Ecology department of SANP and neighbouring communities; preferential purchasing of products from local rural entrepreneurs and black-empowerment companies; facilitation of entrepreneurial activities which financially benefit communities and the park (Spenceley, 2001). • The Makuleke people have regained ownership of a piece of land within KNP from which they were forcibly removed in 1969. They have full rights to commercialise it but it will be managed according to the KNP master plan. A number of community associations have been developed, economic partnerships are being investigated and training of the people is taking place (Koch, Undated).
Cape Peninsula National Park	<ul style="list-style-type: none"> • Visitor management for recreational users within an area which conserves a significant proportion of the Cape Floral Kingdom; a biodiversity ‘hotspot’. It holds over 2,285 plant species (of which 90% are endemic) in addition to 111 endemic invertebrates & an endemic vertebrate (the Table Mountain Ghost Frog). • Employment of local people’s entrepreneurial groups in alien plant removal; establishing partnerships with neighbouring communities; environmental education centres; volunteer initiatives such as guiding and training (Anon, Undated a)
Provincial Game Parks & Reserves	
Hluhluwe-Umfolozi Park (HUP)	<ul style="list-style-type: none"> • Photographic safari tourism within a well designed network of tourist roads, with a range of accommodation infrastructure, hides and picnic areas. HUP is renowned for the largest population density of southern white rhino, and all surviving populations are derived from Umfolozi animals. Rare species such as rhino have been translocated to other reserves nationally and internationally. Environmental education facilities exist for visitors and school children. • Development of a community craft and indigenous plant stall at an entrance to HUP; a community levy on all visitors which is used to fund local development initiatives; liaison forums with local tribal authorities, and education, tourism and community development partnerships; facilitation of access to natural resources where deemed sustainable (Münster & Sandwith, 1998)
Madikwe Game Reserve	<ul style="list-style-type: none"> • Photographic safari tourism is conducted within this 60,000 ha reserve which has visitor accommodation to cover the whole market spectrum, including private luxury concessions. The reserve started reintroducing game from 1991, and more than 8,000 animals of 28 species have been released to date. • The reserve functions to mutually benefit the North West Parks Board, the private sector and the local communities. Local labour was used to remove unwanted structures during establishment and from fencing, and now from employment and business opportunities. Local people are represented on the Reserve’s management forum (North West Parks and Tourism Board, Undated)
Private Lodges & Game Reserves	
Ndumo Wilderness Camp	<ul style="list-style-type: none"> • Luxury photographic tourism occurs within this luxury lodge in an exclusive area of Ndumo Game Reserve. Lease fees are paid to KwaZulu-Natal Nature Conservation Service and facilitate funding of conservation activities. • The lodge is part owned by a finance corporation, KZNNCS, and the local community. The community receives monthly dividends from the company. The local community has shares in the lodge management company. Employees are all local except for management staff (Poultney & Spenceley, 2000).
Phinda Private Game Reserve	<ul style="list-style-type: none"> • Phinda Private Game Reserve consists of extensively rehabilitated farmland and land leased from neighbouring landowners, which has been restocked with over 1,500 animals of 28 species. The reserve is managed in partnership with the local community.

	<p>photographic tourism is operated within the reserve.</p> <ul style="list-style-type: none"> Community development initiatives are funded by donations to a Rural Investment Fund. They have included the construction of a new road; a regional runway; clinic services; school classrooms and equipment; educational bursaries; small business support; workshops; health education; drama; and tourism development (Terblanche & Howse, 2000)
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It should be carefully noted that the definition of ecotourism used does not reflect the historical impact of conservation on communities. South Africa's previous apartheid policies and forced removals of people from areas that became protected areas are not 'relevant' to the definition. The IUCN definition does not reflect whether on balance communities have benefited or lost over time with respect to tourism practice. All of the community aspects described in Table 1.2 have occurred within the last decade.

2. OVERVIEW OF PRESENT STATE OF BIODIVERSITY CONSERVATION AND PLANNING

2.1 Relative priority in national planning policy

The Convention on Biological Diversity (CBD) was ratified by South Africa on 2 November 1995 in recognition of the opportunities offered by the convention for integrated planning and development (DEA&T, 2000c). Subsequently the government developed a National Policy on the Conservation and Sustainable Use of South Africa's Biological Diversity in 1997 (DEA&T, 1997a). This policy will be used to develop a full strategy and action plan for the conservation of biological diversity for implementation (DEA&T, 2000c). The DEA&T notes that biodiversity has been closely interwoven with all aspects of South African society for a long time, and that it is one of the mainstays of important economic sectors such as tourism, recreation, agriculture, forestry, horticulture and fisheries (ibid). It recognises the synergies between biodiversity conservation and sustainable economic development.

The South African Biodiversity Policy recognises the country's constitutional and legislative responsibilities for biodiversity conservation. It also recognises the importance of creating conditions conducive to integrated planning and development, for the conservation and sustainable use of national biological resources (DEA&T, 2000d). The Biodiversity Policy states that the government's mission is to, '*. . . strive to conserve South Africa's biological diversity and to thereby maintain ecological processes and systems whilst providing lasting development benefits to the nation through the ecologically sustainable, socially equitable, and economically efficient use of biological resources*' (DEA&T, 1997a).

Six goals for the Biodiversity Policy and strategy were formulated in relation to existing and overriding government priorities and objectives of the CBD. The goals are as follows (DEA&T, 2000c):

- Goal 1:** Conserve the diversity of landscapes, ecosystems, habitats, communities, populations, species and genes in South Africa.
- Goal 2:** Use biological resources sustainable and minimise adverse impacts on biological diversity
- Goal 3:** Ensure that benefits derived from the use and development of South Africa's genetic resources serve national interests.
- Goal 4:** Expand the human capacity to conserve biodiversity, to manage its use, and to address factors threatening it.
- Goal 5:** Create conditions and incentives that support the conservation and sustainable use of biodiversity.

The Biodiversity Policy was formulated during a period in which South Africa was also developing other relevant policies. These include the National Environmental Management Policy for South Africa (now the National Environmental Management Act No. 107, 1998), and in which the Biodiversity Policy was considered a ‘supporting pillar’ (it even had the same goals). Policies on fisheries, integrated pollution control and waste management, coastal zone management and environmental education are under development by the DEA&T (DEA&T, 2000e). In addition, some of the policies recently developed by government institutions on land, energy, trade and industry, science and technology, population, forestry, water and sanitation, and minerals and mining reflect the principles and some goals described within the Biodiversity Policy (ibid). The DEA&T notes that this is, ‘. . . a clear indication that the participative policy development processes creates the opportunity for cross fertilisation and contributes substantially to cross sectoral acceptance of the importance of the sustainable use and conservation of biological diversity.’ (ibid, pp 27).

Since 1994 over thirty policies and laws have been developed which impact upon environmental and natural resources (See Table 2.1). In addition to national policies, South Africa had become a signatory to 17 international environmental conventions by 1999 (DEA&T, 1999b).

Table 2.1: Policies impacting upon environmental and natural resources which have been developed since 1994
Constitution of the Republic of South Africa, Act 106, 1996
Growth, Employment and Redistribution Strategy (GEAR), 1996
Development Facilitation Act, No. 67, 1995
Water Services Act, No. 108, 1997
Genetically Manipulated Organisms (GMO) Act, No. 15, 1997
National Water Act, No. 36, 1998
National Forests Act, No. 84, 1998
Marine Living Resources Act, No. 18, 1998
National Veld and Forest Fire Act, No. 101, 1998
National Environmental Management Act, No. 107, 1998
Agricultural Laws Rationalisation Act, No. 72, 1998
World Heritage Convention Act, No. 49, 1999
National Heritage Resources Act, No. 25, 1999
White Paper on the Reconstruction and Development Programme, 1994
White Paper on Science and Technology, 1996
White Paper on the Development and Promotion of Tourism, 1996
White Paper on the Conservation and Sustainable Use of South Africa’s Biological Diversity, 1997
White Paper on Population Policy, 1997
White Paper on South Africa Land Policy, 1997
White Paper on Disaster Management, 1997
White Paper on Land Policy, 1997
White Paper on Integrated Environmental Management, 1998
White Paper on Minerals and Mining Policy for South Africa, 1998
White Paper on an Energy Policy for South Africa, 1998
White Paper on Integrated Pollution and Waste Management for South Africa, 2000
White Paper on Sustainable Coastal Development, 2000
Draft White Paper on Environmental Education, Under discussion
Policy on Trade and Environment, Under discussion
Environmental Impact Assessment Regulations
Climate Change Discussion Document, 1998
Desertification Policy Process, Under development

The National Environmental Management Act is a precursor for a National Environmental Strategy and Action Plan. The goal is, ‘. . . to move from the previous situation of unrestrained and environmentally insensitive development to sustainable development with the aim of achieving a

The White Paper on the Conservation and Sustainable Use of South Africa's Biological Diversity is currently being adapted to form a Biodiversity Chapter within the National Environmental Management Act. The first draft of this is currently under discussion between national authorities, provincial authorities, and parastatals. In addition, a draft concept outline for the National Biodiversity Strategy and Action Plan (NBSAP) has been proposed, and is currently under review (Pers. Comm. Dr M. Wolfson, National Botanical Institute, 2001). Funding is being sought for its implementation by the DEA&T from the Global Environment Fund (GEF) (Pers. Comm. K. Njobe, DEA&T, 2001). The NBSAP had not been implemented sooner because there was a perception that the White Paper was already dealing with many of the issues within the Convention of Biological Diversity. However, there has been a realisation that the NBSAP can be used to fill in some of the gaps that exist within policy, and make more objectives actionable (ibid). The rationale for its development are that (DEA&T, 2000f):

- it will set out medium to long term (5-10 years) strategies with respect to biodiversity management;
- it will translate policy objectives into actions with timeframes, as well as address gaps in the White Paper;
- it will enable DEA&T to develop a coherent portfolio of biodiversity programmes and projects;
- it will be a tool for DEA&T to effectively co-ordinate, monitor and evaluate biodiversity related actions in the country;
- it will be a tool for DEA&T to strategically mobilise and deploy resources with respect to biodiversity management (e.g. donor funding for biodiversity management);
- it will inform capacity developments needs with respect to biodiversity management; and
- it will clarify the roles of stakeholders (e.g. national government departments, provincial government departments, statutory bodies, research institutions, universities and non-government organisations.)

The NBSAP is envisaged to form an integral part of the National Environmental Strategy and Action Plan (DEA&T, 2000e). It is hoped that both the NBSAP and the Biodiversity Chapter of the National Environmental Management Act will be passed during 2001.

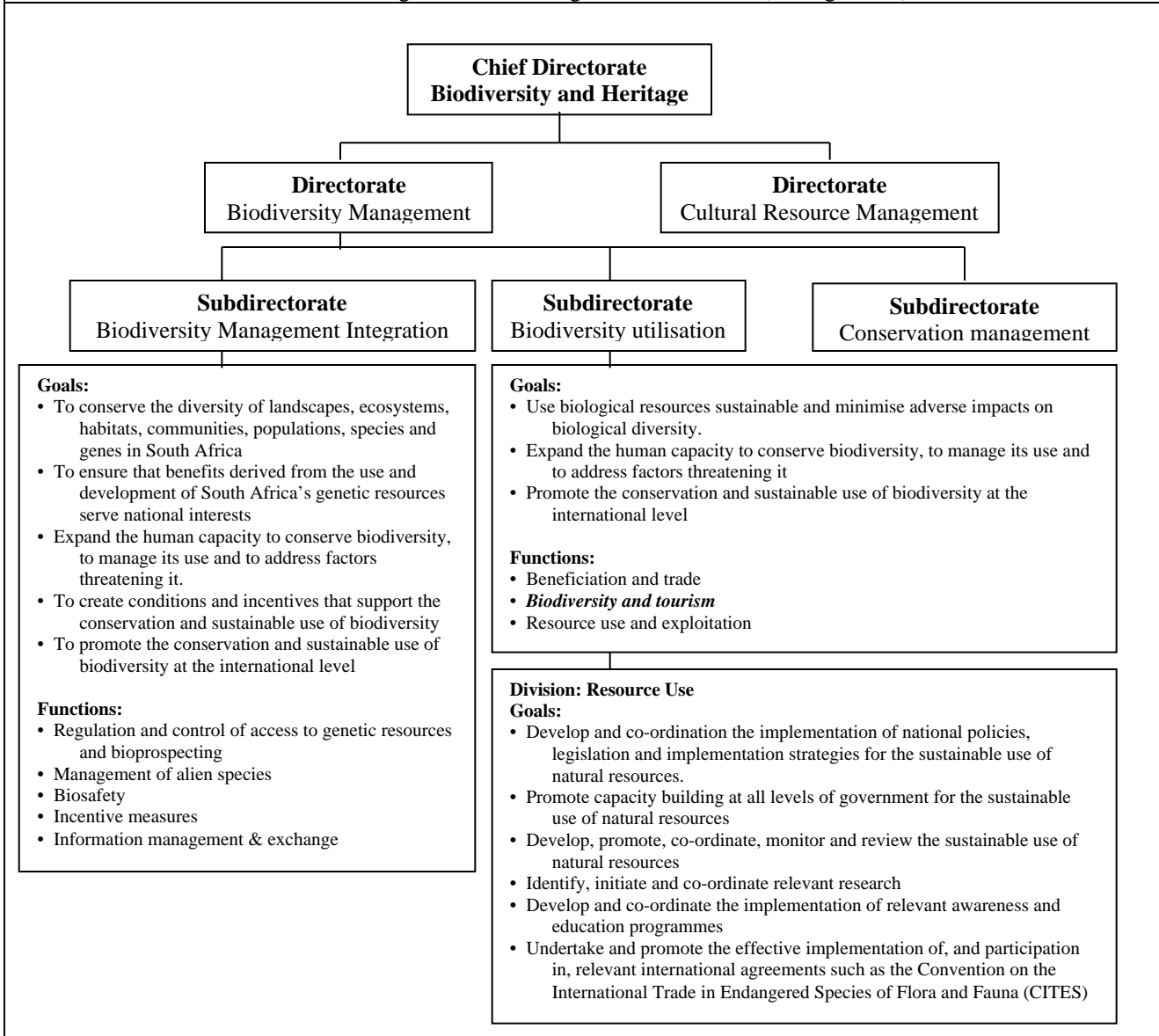
There is a perception among government representatives that the government is integrating biodiversity conservation and tourism. It is doing this by (Pers Comm, K. Njobe, DEA&T, 2001; Pers Comm. M. Mosola, DEA&T, 2001):

- expanding protected areas while unleashing their tourism potential (e.g. the Greater Addo National Park);
- promoting World Heritage Sites which enhance the protection of conservation areas, while increasing international public awareness with respect to nature-based tourism potential (e.g. the Greater St Lucia Wetland Park);
- encouraging Spatial Development Initiatives (SDIs) which have tourism development as their primary economic focus (e.g. the Lubombo and Wild Coast SDIs);
- endorsing Transfrontier Conservation Areas (TFCAs), which increase the geographical area available to conservation and encourage international cooperation on conservation, while strategically enhancing tourism potential (e.g. the gazetted Kgalagadi TFCA, and the ministerially endorsed Maloti-Drakensberg TFCA, the Gaza-Kruger-Gonarezhou TFCA, and the Maputaland TFCA);
- generating strategies such as 'Tourism in GEAR', which involve extensive commercialisation of protected areas and job creation schemes.

Both national and provincial governments have the power to legislate on environmental matters, with the exception of national parks, national botanical gardens and marine resources, where national government is in authority. In cases of conflict between national and provincial government, national legislation prevails (DEA&T, 2000e). In addition to tourism, the DEA&T is also the lead government agent for the environment and is responsible for developing national environmental policy and for co-ordinating central and provincial government institutions. The structure of DEA&T (Figure 1.3 in Section 1.3) depicted the Biodiversity and Heritage Chief Directorate to be at the same institutional level as the Tourism Chief Directorate. The structure of the Biodiversity and Heritage Chief Directorate is shown in Figure 2.1.

Figure 2.1: Institutional structure of the Chief Directorate: Biodiversity and Heritage

Source: www.environment.gov.za/soer/nsoer/general/whois4.htm (see Figure 1.3)



Outside DEA&T, the main government role players at a national level are the Departments of Agriculture; Land Affairs; Water Affairs and Forestry; the South African National Parks Board and the National Botanical Institute. The environment and nature conservation departments within the nine provincial authorities are responsible at a provincial level (DEA&T, 2000c).

2.3 Perceived degree of participation of the country in the Convention of Biological Diversity (CBD), and perceived benefits of being a part of CBD

The South African government perceives that it has partially fulfilled its obligations of the CBD as per article 6 through the publication of its White Paper on Conservation and Sustainable Use of South Africa's Biological Diversity. This partially satisfied the requirements of the National Biodiversity Strategy and Action Plan, and suggested specific actions and actions (e.g. institutional arrangements and legislative reforms) at a higher level than suggested by Article 6a of the CBD (DEA&T, 2000f).

The government perceives that it has demonstrated a strong commitment to safeguarding global biodiversity conservation through active participation in a number of international agreements, and in through scientific and technical collaboration. However, it recognises its historical political isolation from the international community and that it must endeavour to strengthen efforts to cooperate on environmental matters. In this regard the South African Government aims to promote the CBD through (DEA&T, 2000c):

- ensuring that the essential ecosystem services and biological resources required to meet basic human needs are protected and maintained;
- not restricting economic development unnecessarily, and ensuring that such development is sustainable;
- enhancing the provision of jobs related to the conservation of biodiversity and sustainable use of biological resources;
- ensuring that opportunities derived from the conservation of biodiversity and sustainable use of biological resources favour the poor;
- enhancing the development of human resources necessary to conserve biodiversity and use biological resources sustainably; and
- increasing participation in the institutions of civil society engaged in conserving and using biodiversity.

International perceptions regarding the degree of participation of South Africa in the CBD has been most recently reflected in the acceptance of the offer to hold the Rio +10 Earth Summit of the United Nations Conference on Environment and Development in June 2002 (UNCED 2002). There is currently a consensus that the Summit should focus on '*poverty, development and the environment*' and on the balance between economic development, social development and environmental protection as independent and mutually reinforcing components of sustainable development (DEA&T, 2000g).

Adherence to the CBD by South Africa is critical for global biodiversity conservation in terms of the richness of its biodiversity. South Africa is ranked 15th of the megadiversity countries in terms of species diversity and 10th considering endemism. It is ranked 6th as regards total plant diversity and among the top 4 as regards plant endemism (Mittermeier *et al*, 1997). An overview is shown in Table 2.2.

Table 2.2: Overview of South Africa's Biological Diversity (DEA&T, 1997a, 1999b, 2000e)

Flora

South Africa is the only country on Earth to have an entire plant kingdom within its national confines; the Cape Floral Kingdom; and contains one third of the world's succulent plant species.

23,400 taxa of vascular plants, with 560 endemic genera.

18,000 species of vascular plants of which 80% are endemic.

8 biodiversity 'hot-spots' (species rich areas with high levels of endemism, which are under threat from large scale habitat modification and transformation) containing 3.5% of the world's flora on 0.2% of the earth's surface.

The highest concentration of threatened plant groups in the world (3,435 groups are globally threatened with extinction) constituting 36% of plant taxa considered threatened.

Fauna

South Africa rates as the 24th richest country in the world in terms of faunal endemism.

5.8% of the world mammal species, 8% of world bird species, 4.6% of reptiles and 16% of marine fish species are found within South Africa and its waters.

10% of the mammal species are considered 'threatened', as are 2% of birds species, 12% of reptile species, and 16% of amphibian species.

The DEA&T acknowledges that there are considerable benefits for South Africa in conserving biodiversity. A large proportion of the population depends fundamentally upon access to biological resources for food, fuel, medicine, housing material and economic security. A decline in biodiversity would have serious consequences for many South Africans, and the greatest impacts would be upon rural populations of people who are most dependent on biological resources for basic subsistence. The DEA&T notes that if the resource base were undermined, the future well-being of many people and industries could well be jeopardised unless an effective plan of action relating to the conservation and sustainable use of biological resources is implemented (DEA&T, 2000e). Specifically, service benefits identified from the conservation of biodiversity by the government include (DEA&T, 1997a):

- maintenance of the hydrological cycle, and therefore the provision of clean water;
- maintenance of atmospheric quality, which provides pure air and helps to control the climate;
- the generation and conservation of soils that are essential to agriculture and forestry, with protection from erosion and encouraging nutrient cycling;
- pollutant breakdown and absorption;
- control of potential crop pests and disease vectors;
- pollination of crops;
- maintenance of genetically materials from which crops, domestic animals, medicine and industrial products have been developed; and
- insurance, and a basis for adaptation, against large changes in climate and ecosystem processes.

The South African government has also recognised that population pressure and the exploitation of natural resources has led to a loss of genetic resources and a 'steady deterioration' of habitats and ecosystems. It notes that in order to curb this trend it will be necessary to co-ordinate the sustainable use and conservation of natural resources, through the co-ordination of the protected area system, botanical and zoological gardens and gene banks. It will also be necessary to educate South Africans regarding mechanisms to sustainably use biological resources outside protected

A summary of the National State of the Environment Report is shown in Table 2.3. The physical compilation of the report indicates the level of concern that the government has for biodiversity conservation and the number of factors that impact on it.

Table 2.3: Impacts on Biodiversity Conservation in South Africa (Adapted from DEA&T, 1999b)

Climate: Depletion of the upper atmosphere on stratospheric ozone, through resultant acid rain, rising carbon dioxide levels, increased rainfall, and rising temperatures.

Terrestrial ecosystems: Crop cultivation or grazing on 86% of the land (122 million hectares), intensification of agricultural production, rapid population growth, urbanisation, industrialisation, waste and pollution, increase in mobility of people, introduction of alien species, incongruent government policies (e.g. nature conservation laws vs. encouraging monoculture and intensive use of agrochemicals resulting in degradation of soils and vegetation), international demand for resources (e.g. timber, wild animals, medicinal and horticultural plants, elephant ivory and rhino horn).

Apartheid policies which forced large numbers of people to leave their land and move to 'homeland' areas, which resulted in intensive use of natural resources (e.g. land for agriculture, fuel wood, space for housing) with 8 million people concentrated on 13% of the land. Forced removals from areas which became protected areas alienated people from the concept of conservation. Subsequent land reform since 1994 has led to over 6 million hectares of previously state-owned land being more intensively cultivated, and it is anticipated that further reform will lead to loss of natural habitats and a potential loss in biodiversity. Plantation forests on 1% of the land area (1.5 million hectares) are demanding in terms of their water consumption.

There is acknowledgement that effective land-use planning and optimal resource allocation would minimise habitat loss and maintain biodiversity. In addition, poverty alleviation, population stabilisation and the formalisation of production of plants and animals for medicinal and horticultural markets will reduce pressures on biological resources.

Freshwater systems: Catchment degradation, regulation of flow by impoundments; pollution; overextraction of water; breakdown of natural biogeographical barriers lead to extensive habitat lost, decreased biodiversity and increase in invasive and pest species. Many perennial rivers have become seasonal, while previously regularly flooded floodplains have become less productive due to attenuation, and many estuaries no longer have natural openings to the sea.

Marine and Coastal systems: Population growth and associated development around commercial ports, over fishing, and pollution (e.g. oil spills, sewage outfalls). Degradation of estuaries contributes to decreases in biodiversity and prevents the natural regulation of water quality and nutrient cycling.

The South African government is making great headway in the establishing enabling legislation for the implementation of biodiversity conservation, with some of the most environmentally advanced policy in the world. However, there has been an overemphasis on planning rather than implementation, whilst the capacity to implement programmes is severely limited. In addition, various studies suggest that biodiversity is often the last aspect considered within Environmental Impact Assessments. Even more so, the great challenge remains in bringing the importance of biodiversity conservation (both within protected areas and the broader rural landscape) into the mindset of everyday South Africans. For the majority of rural communities, the focus is on survival rather than medium and long-term planning (Pers. Comm. B. Corcoran, KZNNCS, 2001).

2.4 Overview of the role of NGOs and local communities in biodiversity conservation

Prior to the end of apartheid, there was little consultation with NGOs or communities regarding policy. An explicit example of this and its impact lies in the creation of South Africa's protected areas. These were often established through the forced removal of communities from their homes without adequate compensation or consultation. Coupled with the lack of access to vital natural resources within these areas, protected areas have been inaccessible to the majority of the nation's

A clear indication in the change of stance with regard to consultation was made in the National Report to the Fourth Conference of the Parties to CBD. This stated that the government belief that they would only achieve their conservation objectives, ‘ . . . *with the assistance and co-operation of all the people of South Africa.*’ (DEA&T, 2000c). Similarly, the South African National Report on the Convention on Biological Diversity states that interested and affected individuals and groups should have opportunity to participate in decision making regarding the conservation and utilisation of biological resources (DEA&T, 2000e, Section 3.3.10, pp 34). It also states that traditional knowledge, practices and cultures which support the conservation and sustainable use of biodiversity will, where possible, be recognised, protected maintained, promoted, and used with the approval and involvement of those who possess the knowledge (ibid, Section 3.3.11, pp 35).

Within the White Paper on Biological Diversity, DEA&T cite the role of **NGOs** as very important. They note that many successful efforts to conserve and sustainably use biodiversity in South Africa have come about due to the commitment of conservation and development NGOs. DEA&T (1997a) note that they will continue to play a crucial role in:

- realising the goals and objectives of the policy through the implementation of specific projects and programmes;
- providing an essential independent monitoring and ‘watchdog’ role, to ensure adherence to the commitments noted within the policy
- advising Government on the implementation of specific aspects of the policy;
- implementing development work, capacity-building and environmental education and training.

As a reflection of this, a number of NGOs participated in the Management and Advisory Team to develop the National Environmental Management Policy and within the Discussion Document Drafting Team and Reference Group (DEA&T, 1997b). Also, a number of South African NGOs participated in the production of the White Paper on Biological Diversity (1997a), including the following (DEA&T, 1997c):

- Environmental Justice Networking Forum (EJNF)
- Group for Environmental Monitoring (GEM)
- Habitat Council
- Indigenous Plant Use Forum
- Land and Agricultural Policy Centre (L&APC)
- Wildlife Society of Southern Africa
- World Wide Fund for Nature – South Africa (WWF-SA)

DEA&T note that **communities** that have previously been excluded from policy discussions are expected to play a vital role in biodiversity conservation and sustainable use, although it is anticipated that the mechanisms to do so will vary from community to community. Roles they are expected to play include (DEA&T, 1997a):

- Managing and using local resources to ensure their conservation and sustainable use;
- Employing local knowledge and skills to assist monitoring and inventory work; and
- Rehabilitating degraded ecosystems.

Local communities have been involved in decisions relating to the creation of new protected areas, the alteration of protected area boundaries, and the development and implementation of management plans. Their involvement is considered crucial to an integrated and effective protected area system (DEA&T, 2000e). Further involvement of communities is envisaged through the use of

and communal areas. Such mechanisms include biosphere reserves, community-based wildlife management schemes; tourism plans; development projects; and the use of conservation grants or incentives (DEA&T, 2000e). A number of the provincial conservation authorities are attempting to transform neutral or negative attitudes towards conservation and protected areas into mutually beneficial relationships. These are not only systems that allow the distribution of natural resources such as wood or thatching grass, but there are shared responsibilities between communities and conservation agencies for conservation programmes. Liaison forums are being created and some joint management bodies are also under discussion (DEA&T, 2000e). For example, both South African National Parks and the KwaZulu-Natal Nature Conservation Service have created consultative community forums which include members of the conservation services and representatives of interest groups including community members (DEA&T, 1999b).

In the case of KZNNCS, the KwaZulu-Natal Nature Conservation Management Act 1999 has made provision for the Minister of Agriculture and Environmental Affairs to appoint a Local Board including traditional authorities, NGOs, organised agriculture, tourism bodies and parties with a direct or indirect interest in a specific reserve. Their functions are to compile management plans for the protected area, to enhance communication between the protected area and local community; and to integrate local activities to promote sustainable use of natural resources. This statutory basis for community participation has facilitated the maintenance of the relationship with the provision of a more level power gradient between community and authority (Sandwith, 2000). The first four boards were established in October 2000 (Pers. Comm. T. Sandwith, KZNNCS, 2001).

In order that local communities can better understand the benefits of biodiversity conservation, some protected areas have initiated environmental education centres for local people (especially children) while markets for the sale of local arts and crafts and the encouragement of employment have been established in others. Local communities have benefited from the meat of culled animals in some areas, while some conservation authorities have embarked on infrastructural improvements such as schools and healthcare projects in neighbouring areas (DEA&T, 1999b). KZNNCS's Community Trust funds community projects from 90% of levies paid by tourists per visit to protected areas. The remaining 10% of the levies accrues within a capital fund which can be distributed at the discretion of the Trustees. Since the launch of the levy in February 1998, over R7 million (~US\$0.9 m) has been amassed. An example of how the capital funds are distributed is in the case of the Hluhluwe-Umfolozi Park (HUP). Here an application was made by the ten tribal authorities around the Park who agreed to pool the funds and invest in an equity share of a tourism development in conjunction with KZNNCS. Therefore, the Trust may become an important mechanism to achieve economic and social sustainability, which is based on (and contributes to) biodiversity conservation (Sandwith, 2000).

Other ways in which benefits have been accrued by people in and around protected areas are through their employment as local producers and workers; facilitating joint ventures; providing environmental education; promoting community management and the management of protected areas. For example, the Ministry of Water Affairs and Forestry has raised funds for community based projects involved in the removal of alien plants from key catchment areas, streams, river banks and wetlands since 1995. This 'Working for Water' programme has not only benefited biodiversity conservation through alien plant removal, but has also employed thousands of rural people and has increased the flow of water in many cleared areas. In addition, the negative impacts of wildlife are to be decreased by minimising the damage caused to people and their property (DEA&T, 2000e).

The forums, employment and entrepreneurial development allow local communities to actively participate and benefit from biodiversity conservation. However, constraints on the effective

participation of NGOs and communities lie in low capacity; limited education and understanding; and limited opportunities to contribute.

In addition to NGOs and communities, the role of the scientific community, business and industry, traditional healers, farmers, and women are also considered important in implementing the CBD (DEA&T, 1997a).

2.5 Overview of National System of National Parks and Protected Areas

Constitutional basis

The South African National Parks and the National Botanical Institute are the two national statutory bodies directly responsible to the government for ensuring that South Africa’s biological heritage is conserved and used sustainably (DEA&T, 1997a).

Types of Protected Area that exist with respect to South African legislation are shown in Table 2.4.

South African Legislation	Protected Area	National Administration
Defence Act 44 of 1957	Defence Area	South Africa National Defence Force
National Environmental Management Act 107, 1998	<ul style="list-style-type: none"> • Special Nature Reserve • Protected Natural Environment 	Assigned to provinces
	Limited Development Area	Local authority/government institution
National Forests Act, 1998	<ul style="list-style-type: none"> • Forest Nature Reserve and Wilderness Area • State Forest 	DWAF: delegated to provinces
Forest Amendment Act, 1991	National Botanical Garden	National Botanical Institute
Lake Areas Development Act 139, 1975	Lake Area	South African National Parks
Mountain Catchment Areas Act 63, 1970	Mountain Catchment Area	Assigned to provinces
National Monuments Act 28, 1969	<ul style="list-style-type: none"> • National Monument • Conservation Area 	National Monuments Council & provinces
National Parks Act 57, 1976	National Park	South African National Parks
Sea Birds & Seals Protection Act 46, 1973	Most South African Islands	DEA&T
Marine Living Resources Act 18, 1998	<ul style="list-style-type: none"> • Marine Reserve • Restricted Area 	DEA&T
World Heritage Convention Act 49 of 1999	World Heritage Sites	Specific Authorities comprising DEA&T, provincial conservation and tourism authorities
Various provincial ordinances	Provincial, Local and Private Nature Reserves	9 provincial administrations, local authorities, private landowners
No legal status (Proposed Wetland Conservation Act)	Ramsar Site	DEA&T and conservation authorities
No legal status	Sites of Conservation Significance	Private landowners
	Private Conservancies	Farmers
	Biosphere Reserves	Conservation authority/ neighbours
Not legally enforceable	Natural Heritage Sites	Private landowners

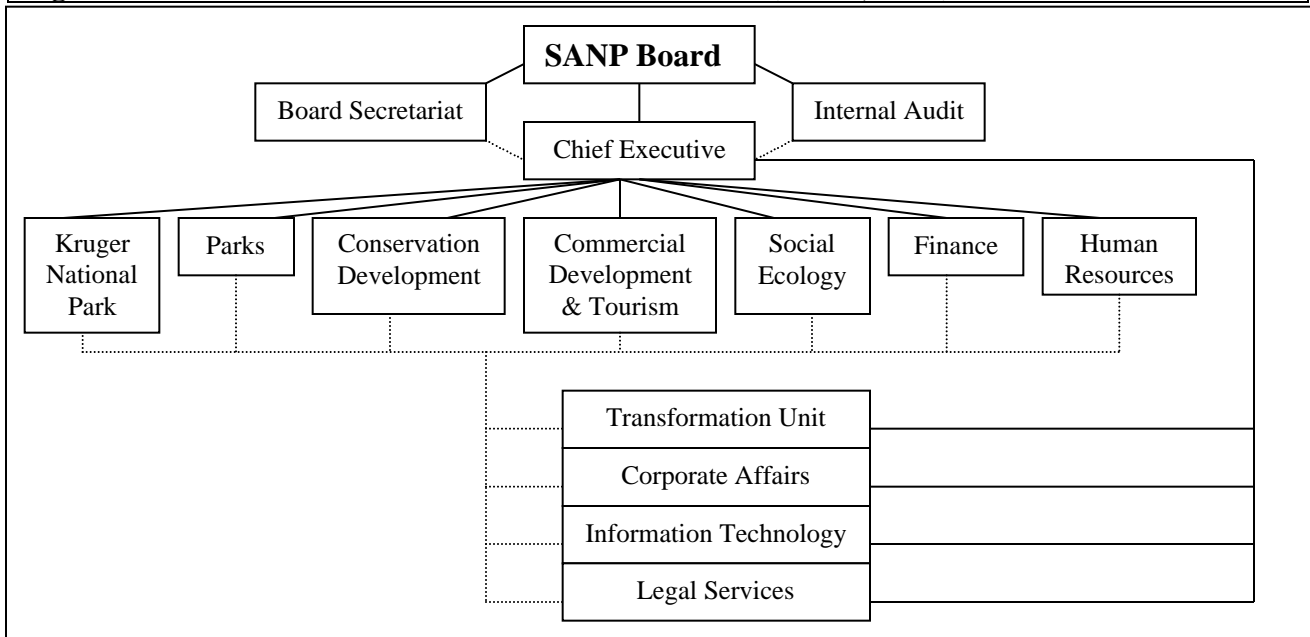
Administrative structure

The structure of South African National Parks, which is responsible for National Parks, is shown in Figure 2.2.

Provincial environmental and conservation departments are responsible for conservation within

in developing strong collaboration between provincial departments responsible for activities relating to biodiversity conservation. They provide conservation extension services, regulate and monitor the use of biological resources, prevent the loss of biodiversity, and develop and manage protected areas. The conservation agencies are also empowered to promote sustainable development outside protected areas through creating partnerships with communities, NGOs, the private sector and other government departments (DEA&T, 1997a).

Figure 2.2: Structure of South African National Parks (SANP, 1998)



The management of terrestrial and marine protected areas in the past has not formed part of a planned network within South Africa, and has been, ‘. . . poorly co-ordinated between the range of responsible authorities, resulting in variable and often conflicting policies being applied.’ (DEA&T, 2000e, pp 44). However, a national strategy for nature conservation is being developed by DEA&T that will address formally and informally protected areas. It is planning to initiate a programme of comprehensive review of protected areas in addition to a strategy for national protected areas (ibid).

Operational budget

State expenditure allocated to Biodiversity Conservation in 1996 was R532 million. Of this, the South African National Parks board was allocated R46.2 m and the National Botanical Institute received R31.9 m, while the nine provincial nature conservation departments had R436.4 m distributed between them (see allocations in Table 2.5). The remaining funds were distributed between DEA&T directorates and units (R5.3 m), the Department of Arts, Culture, Science and Technology (Zoological Gardens and Museums) (R8.1 m) and the South African Defence Force (R4.0 m) (DEA&T, 1997a).

The operational budgets for National Parks and specific reserves within KwaZulu-Natal are shown in Tables 2.7 and 2.8 respectively.

Table 2.5: State Expenditure allocated to Biodiversity Conservation in Provincial Government, 1996. Source: DEA&T, 1997a

KwaZulu-Natal	R128 308 000
Eastern Cape	R 54 362 000
Mpumalanga	R 47 130 000
Northern Province	R 45 888 000
Free State	R 43 867 000
Western Cape	R 41 884 000
North-West Province	R 38 490 000
Gauteng	R 22 227 000
Northern Cape	R 14 283 000
Total to Provincial Nature Conservation Authorities	R 436 439 000

Brief description of main protected areas

South Africa has 422 formally protected areas covering approximately 6% of the land surface area and containing an estimated 74% of plant, 93% of mammal, 97% of bird, and 92% of amphibian and reptile species found nationally. There are also 160 privately owned reserves (DEA&T, 1999b). In addition there are sixteen Ramsar Sites that are recognised in relation to the Convention on Wetlands of International Importance especially as Waterfowl Habitat, covering around 488,859 hectares of the country (DEA&T, 1999b, 2000e). There are 57 Marine Protected Areas along the coast (DEA&T, 1999b) representing most biogeographic regions, and including two of the largest no-take reserves in the world (DEA&T, 2000e).

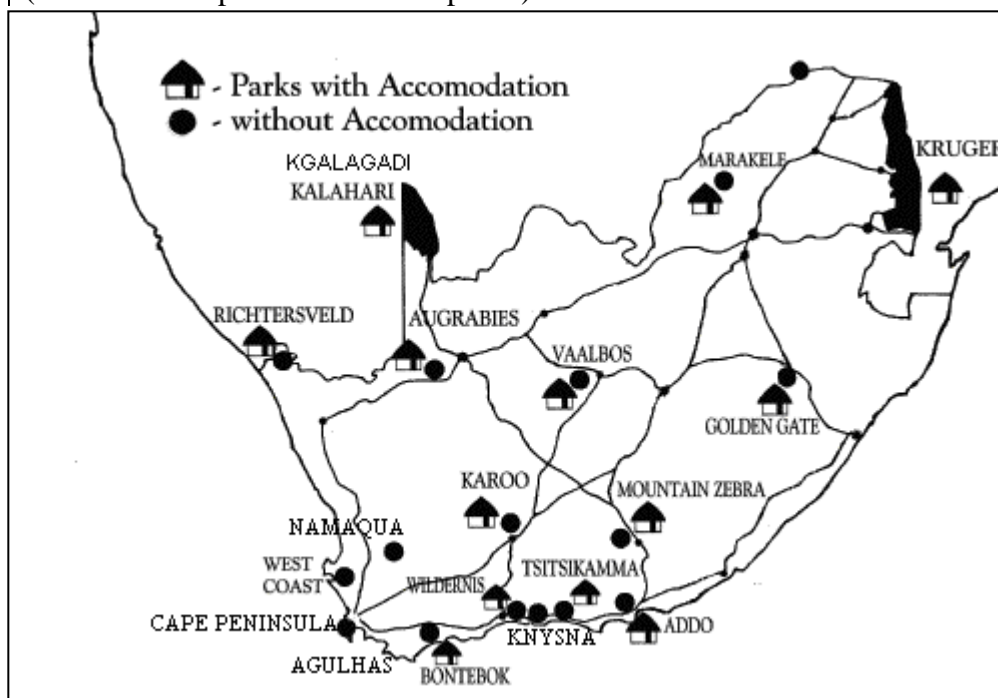
A summary of the types of protected area within South Africa, their function and legal status is shown in Table 2.6. It is possible to link these areas to IUCN protected area categories, but this varies with respect to the management objectives of individual areas rather than with each Protected Area-type. A number of examples of linkages with the IUCN categories are shown in Table, but this list should be seen as a general guide only.

Table 2.6: IUCN Protected Areas and Potential Equivalent South African Areas (DEA&T, 1997a)

IUCN Protected Area Category	Management Objective	Potential Equivalent South African Areas
Ia: Scientific Reserve Ib: Wilderness Area	Scientific research and monitoring Wilderness protection, subsistence and recreation	Special Nature Reserve
		Forest Nature Reserve and Wilderness Area
II: National Parks and Equivalent Reserves	Ecosystem protection and recreation	National Park
		State Forest
II: National Parks and Equivalent Reserves IV: Habitat and Wildlife Management Areas	Ecosystem protection and recreation Conservation through management intervention	Provincial, Local and Private Nature Reserves
III: Natural Monuments and Areas of Cultural Significance	Conservation of specific natural or cultural features	National Botanical Garden
		National Monument
		Sites of Conservation Significance
		Natural Heritage Sites
IV: Habitat and Wildlife Management Areas	Conservation through management intervention	Private Conservancies
V: Protected Land and Seascapes	Land and seascape conservation and recreation	Protected Natural Environment
VI: Managed Resource Protection Area	Sustainable use of natural ecosystems	Mountain Catchment Area
		Limited Development Area
		Biosphere Reserves

Figure 2.3: Location of South African National Parks

(Source: www.parks-sa.co.za/map.htm)



Present park visitation and operational budgets

Visitation levels and operational budgets for each of the National Parks are shown in Table 2.7.

Table 2.7: National Park Visitor Statistics and Operational Budgets 1 April 99 – 31 March 00
Sources: * Pers. Comm. A. Pelsler, SANP, 2001; ** Pers. Comm. D. Fourie, SANP, 2001

NATIONAL PARK	* NUMBER OF VISITORS	* % OCCUPANCY	**EXPENDITURE
TOTAL SANP	+ 2,683,289		R 345,517,421
Cape Peninsula National Park	1 173 320	No Accommodation	R 28,776,306
Kruger National Park	898 191	67.0	R 171,931,342
Tsitsikamma National Park	188 994	83.2	R 9,219,980
Addo Elephant National Park	93 768	80.7	R 7,950,493
West Coast National Park	81 914	41.8	R 4,319,412
Augrabies Falls National Park	73 614	61.1	R 6,162,051
Golden Gate Highlands National Park	43 744	57.0	R 7,632,864
Wilderness National Park	28 653	53.2	R 4,109,907
Karoo National Park	28 516	79.9	R 5,434,835
Kalahari Gemsbok National Park	26 185	83.5	R 7,311,705
Bontebok National Park	15 678	66.6	R 812,949
Mountain Zebra National Park	14 202	52.1	R 2,527,972
Marakele National Park	10 369	66.5	R 1,450,462
Richersveld National Park	3 608	34.4	R 1,723,682
Vaalbos National Park	2 533	32.2	R 1,129,893
Knysna National Park	No information		R 680,000
Agulhas National Park (New)	No information		R 476,510
Namaqua National Park (New)	No information		R 604,836

The province of KwaZulu-Natal does not have any National Parks. This is due to historical political reasons rather than an indication of their conservation value. Visitation levels to a number

**Table 2.8: KwaZulu-Natal Visitor Statistics and Operational Budgets For Selected Reserves
(1 April 98 – 31 March 99)**

KZNNCS RESERVE	NUMBER OF DAY VISITORS	% OCCUPANCY FOR A RANGE OF ACCOMMODATION	*EXPENDITURE
TOTAL KZNNCS			R 274, 227, 422
Selected Reserves and Camps:			
• Umfolozi **	76, 145	55-87%	R 11, 115, 144
• Cape Vidal ***	75, 043	26-74%	R 4, 592, 909
• Hluhluwe **	73, 885	69-87%	R 16, 294, 159
• Mkuze Game Reserve ***	19, 428	37-74%	R 7, 462, 163
• Giants Castle (Drakensberg) ****	19, 254	49-84%	R 2, 948, 700
• Ithala Game Reserve ****	12, 153	35-72%	R 8, 478, 312
Sources *Finance Division, KZNNCS, 2001, Unpublished Data; **Anon (1999a); ***Anon (1999b); ****Anon (1999c)			

Tourism aspects

The extent, quality and diversity of tourism infrastructure and facilities varies greatly among protected areas in South Africa. There are parks which have no overnight accommodation at all, and do not monitor the numbers of day visitors entering (e.g. Knysna National Park) while others have extensive tar and gravel road networks; luxury and budget accommodation; 4x4 routes; wilderness trails; bush barbecues; guided safari drives; golf courses and swimming pools (e.g. Kruger National Park).

There is no national policy which deals specifically with the level or extent to which protected areas must be developed or how they should be conserved. It is the responsibility of the South African National Parks and the Provincial Conservation Authorities to determine how best to implement these aspects of their roles in relation to biodiversity conservation.

Many of the reserves have management plans which utilise a system of zoning to plan regions with varying levels of tourism development. For example, Kruger National Park has a section of its master plan devoted to the zonation of the Park. This allows for regions without any tourism activity which are retained for their wilderness qualities and for conservation, while other high-development regions are devoted to tourism development and visitor activities. This system allows strategic management of the Park to maximise its potential to capture revenue from tourism, without extending the negative impacts of tourism development to all areas. Recent commercialisation programmes within National Parks have allowed a number of under-utilised camps and regions of the park to be tendered out to private operators. This has been necessary since although SANP is an excellent conservation management organisation, it has not been oriented to the hospitality industry. There has been a realisation that the private sector, which is geared to the satisfaction of tourists within a free-market system, is better placed to develop and operate profitable accommodation facilities than SANP. When placed within the stringent Integrated Environmental Management process and planning constraints of SANP it may be possible to maximise both biodiversity conservation and tourism potential.

3. OVERVIEW OF LINKS BETWEEN TOURISM DEVELOPMENT AND BIODIVERSITY CONSERVATION AND PLANNING (BCP)

3.1 Description and critique of existing national strategy, plan or policy applied to any interaction between tourism development and biodiversity conservation and planning (i.e.

There are a number of policy links between tourism development and biodiversity conservation and planning within South Africa. These include sections within the White Paper on the Development and Promotion of Tourism in South Africa (1996), the National Report on the Convention of Biodiversity (2000), and the White Paper on Environmental Management Policy (1997).

3.1.1 *White Paper on the Development & Promotion of Tourism in South Africa (DEA&T, 1996)*

Within the White Paper, one of the reasons cited for encouraging tourism growth nationally is that when responsibly practised it '*allows for the protection of biodiversity*'. It is noted that unlike mining and 'smoke stack' industries, it can benefit the environment. There is recognition that nature-based tourism relies on the maintenance and repair of natural features such as lakes, rivers, estuaries and wildlife areas. There is also recognition that a number of state and private sector projects have spent large amounts on the rehabilitation of land damaged by commercial farming (DEA&T, 1996).

The White Paper proposes that '*responsible tourism*' should be practised through, '*. . . the promotion of balanced and sustainable tourism and focus on the development of environmentally based tourism activities (e.g. game viewing and diving)*.' (DEA&T, 1996, pp 19). It promotes the key aspects of responsible tourism including the (DEA&T, 1996):

- avoidance of waste and over-consumption;
- sustainable use of local resources;
- maintenance and encouragement of natural, economic, social and cultural diversity;
- involvement of local communities in planning and decision making;
- assessment of environmental, social and economic impacts of tourism developments; and
- monitoring of tourism impacts with open disclosure of information.

One of the guiding principles for the development of responsible tourism in South Africa given in the White Paper is that it should be, '*. . . underpinned by sustainable environmental practices*' (DEA&T, 1996, pp 21). Although its environmental objectives do not cite biodiversity conservation specifically, they include (DEA&T, 1996, pp 23):

- to make the South African tourism industry a leader in responsible environmental practices;
- to require integrated environmental management principles for all tourism projects and major economic development projects;
- to encourage the conservation and sustainable use of tourism resources; and
- to contribute to the development of a co-ordinated country-wide environmental strategy.

Therefore it is clear that in creating a national tourism policy, the conservation of biodiversity has been addressed. It is, however, in the implementation of the policy that there have been problems. Many of the White Paper's contents (e.g. the key aspects of responsible tourism, above) are not supported by accreditation, certification, or enforcement mechanisms. In addition, there are no recommended mechanisms that can be used to determine whether a tour operator is sustainably or unsustainably consuming resources, nor as to how they should monitor their impacts. There are certainly no penalties for failing to implement these aspects, and therefore it simply acts as a government 'wish list'.

Tenable incentives, guidelines, certification systems, enforcement and regulations are all tools that can be used to facilitate the implementation of responsible tourism. The only planning tool that is

Management process, which includes Environmental Impact Assessments {EIA} prior to development. However, this does not deal with the sustainable operation of the development, and there is no process of critical review of EIAs by independent NGOs.

3.1.2 The National Report on the Convention on Biological Diversity (DEA&T, 2000d)

The National Report on the CBD notes that the South African government aims to achieve its objective of promoting and developing economic opportunities that are compatible with the conservation and sustainable use of biodiversity, partially through the effective implementation of its tourism policy. This entails (DEA&T, 2000e):

- the development of tourism as a sustainable and responsible economic activity;
- support of the integration of tourism into broader land-use plans, and the development of tourism as a competitive form of land use;
- promotion of the linking of tourism benefits to the environmental products, and the cross-subsidisation of conservation by tourism;
- require tourism projects to be subject to Integrated Environmental Management procedures; and
- encouraging the development of partnership tourism ventures between local communities, the private sector and conservation agencies.

However, there is a lack of guidance with respect to what level of tourism development is 'sustainable and responsible'. For example, the encouragement of joint ventures between communities, the private sector and conservation agencies needs to be coupled with guidance to all stakeholders with respect to best practice, benefits, and pitfalls with the use of real-world examples as illustrations. The development of joint ventures is frequently a complex and lengthy process, in which mediators and consultants are often required. Guidance should also reflect market processes (e.g. market demand; overcapitalisation), and understand that tourism is not a consistent industry; all stakeholders should be aware that it is a fickle business; even in areas of outstanding biodiversity.

3.1.3 The White Paper on Environmental Management Policy

The White Paper on Environmental Management Policy (now the National Environmental Management Act) detailed specific objectives relating to sustainable resource use and impact management regarding tourism. These were (DEA&T, 1997b):

- to ensure that tourism is sustainable and not damaging to the environment; and
- to ensure that local communities (particularly previously disadvantaged communities) benefit through active participation in tourism associated with protected areas and sites.

The Policy notes that the government has identified tourism as an activity that has great potential for job creation and economic growth. The competitive advantage that South Africa holds comes from its relatively well developed infrastructure with relatively easy access to areas of diverse fauna, flora, cultural resources and geographical features. It acknowledges that the potential for tourism development will be realised only if the development does not degrade the environment or reduce biodiversity (DEA&T, 1997b).

As previously mentioned in section 2.1, the Act will be amended to include a chapter on Biodiversity, derived from the National Report on the Convention on Biological Diversity. The first draft of this chapter does not mention the tourism industry explicitly (nor does it mention any other industry), but it alludes to tourism through comments regarding '*sustainable use*' of

management plans for protected areas which include, '*commercial facilities and visitor services*'. The draft chapter notes that a National Biodiversity Action Plan should be prepared and adopted within one year of the publication of the draft Biodiversity Chapter, and that it should include a biodiversity status report that is updated annually (DEA&T, 2000f).

It is important that the NBASP is more explicit than the Biodiversity Chapter with regard to the costs and benefits of utilising tourism for biodiversity conservation. The Plan should also review other industries (e.g. sustainable agriculture) that may, in certain circumstances, be preferable to tourism.

3.1.4 Planning strategies

Several key areas for developments have been identified across the country in Spatial Development Initiatives (SDIs). These aim to promote industrial, commercial and tertiary sector activities, with knock on employment opportunities. They are frequently related to tourism development, such as in the Maputo Corridor SDI, the Lubombo SDI, and the Wild Coast SDI. They incorporate private and public sector partnerships and investment, and to some extent deal with the principles laid out in the Berlin Declaration (1997). However, the SDIs are often located in areas with plentiful natural resources but widespread poverty and weak institutional capacity to manage development sustainably (DEA&T, 1999b). Therefore guarantees that tourism development planning incorporates biodiversity conservation appropriately are not assured in all instances.

Transfrontier Conservation Area (TFCA) agreements reflect the integration of biodiversity conservation, tourism development and socio-economic development issues across international boundaries. For example, within a description of the Gaza-Kruger-Gonarezhou (GKG) TFCA, which, '*. . . will be a world class ecotourism destinations, with extensive private sector involvement, but managed to optimise benefits for biodiversity conservation and economic development of local communities.*' (Anon, 2000b). The government is currently signatory to four transfrontier conservation area agreements; the Kgalagadi TFCA (the first gazetted TFCA in Africa); the Gaza-Kruger-Gonarezhou TFCA; the Maputaland TFCA; and the Maloti-Drakensberg TFCA.

3.2 Analysis of main perceived problems and constraints at the national level (including negative linkages and threats of tourism to biodiversity conservation).

3.2.1 Political

Historical Policy

Historically there has been a lack of inclusive, effective national, provincial and local structures for the development, management and promotion of tourism. Previous apartheid policies placed fundamental constraints upon the development of the tourism industry, as potential tourists did not wish to travel to a nation with such policies (DEA&T, 1996). In 1948 the National Party came to power with the policy of race segregation and the country was alienated from the international community. The Republic of South Africa was formed in 1961. Internal dissent, including impending economic collapse and external pressure, in the mid 1980's and early 1990's forced change. The first democratic election took place in 1994 (DEA&T, 1999a).

Forced removals of indigenous South Africans from land that subsequently became protected have become a major stumbling block with respect to the perception of many people with regard to conservation. The legacy of the policy has partially included a dramatic swing towards the involvement of all stakeholders in conservation and tourism planning. However, past apartheid

understanding to participate effectively in these processes. Therefore mediators, such as NGOs and consultants, are required in order to empower them to communicate.

Although the Ministry of Environmental Affairs and Tourism allows tourism and environment to be combined within one department, the two divisions do not work closely together, and historically the tourism division had a vastly inadequate capacity by comparison. For example, until July 1995 there were around 1000 staff members in the environmental division, but only a handful within tourism which was only able to provide minimal liaison and administration (DEA&T, 1996). The DEA&T (1997a) also notes that local government faces particular problems in implementing the CBD in that it has minimal capacity, infrastructure and resources with which to implement it effectively.

With the lack of capacity in DEA&T, SATOUR carried out government activities such as the grading and classification of accommodation, training, research and development, promotion and product development in addition to its primary role of marketing tourism. However, SATOUR was functioning during apartheid, and is associated by some with the 'old' South Africa. Restructuring to give greater representation to previously neglected people and increased responsibility to South Africa's provincial tourism authorities is still underway (DEA&T, 1996).

Current Policy

Major concerns regarding previous biodiversity conservation policy came to light during the consultation process preceding the development of the White Paper on Biological Diversity. These included the following (DEA&T, 1997a):

- fragmented, polarised and inefficient administrative and legislative structures created by apartheid resulting in 17 government departments having primary responsibility for nature conservation;
- divided responsibilities with duplication of effort, a profusion of laws and a lack of co-ordination, conflicts of interest;
- ineffective enforcement rendering much legislation ineffectual;
- a lack of capacity within government agencies to monitor infringements in policy;
- the lack of integration of biodiversity considerations into national decision making;
- weak political will with respect to environmental conservation;
- the insufficient and declining allocation of resources to conservation;
- the need to link biodiversity conservation to the needs of South Africa's people; and
- the importance of integrating conservation into an overall strategy for conserving and using natural resources sustainably.

Significant gaps in existing legislation were also identified (DEA&T, 1997a):

- *Lack of an integrated and holistic approach to biodiversity.* Although biodiversity incorporates ecosystem, species, genetic and landscape diversity, South African legislation has mainly focussed on species diversity in mammal and plants. It has also neglected to integrate biodiversity into all spheres of decision-making, within and across different economic sectors.
- *Biodiversity outside protected areas.* Where legislation does exist outside protected areas for the conservation and use of biodiversity, it is often fragmented, poorly applied and enforced.
- *Sectoral policies.* There is a need for policy to be integrated into all sectoral and cross-sectoral plans, programmes and policies at all levels of government and industry.
- *Access to genetic resources.* There is a need for legislation which establishes national sovereignty over national biological resources and to establish optimum guidelines for benefit sharing.

- *Wild animals as public and private resources.* Wild animals are classified in national common law as *res nullius* (objects which are owned by nobody, but which can be owned) and the degree of control necessary to legally establish ownership was difficult to establish. Private ownership of game through the Game Theft Act (105 of 1991) has provided an important incentive for conservation of wildlife that is kept for commercial or hunting purposes. However, not all wild animals are covered by this legislation, and issues of compensation for damage caused by wildlife and liability for damage has not been addressed.

3.2.2 *Economic*

The economy of South Africa is heavily dependent on natural resources for food and energy production, manufacturing inputs and for the disposal of waste. It is predicted that unless the economic growth rate increases in South Africa there is likely to be a greater dependence on natural resources for production that will be accompanied by low productivity. It is also predicted that jobless growth (where economic growth results from mechanisation or improved technologies) will exacerbate high poverty levels and encourage more criminal activity (DEA&T, 1999b).

The government has acknowledged that it presently invests insufficient financial resources in the conservation and sustainable use of biodiversity, and that it has a responsibility to increase them through external and internal financing mechanisms in order to achieve its policy goals (DEA&T, 2000e). There is a perception that where viable, tourism should be utilised as a tool to finance protected areas management and biodiversity conservation. However, in cases where tourism is not viable, the government should continue to subsidise conservation practices (Pers. Comm. Mr M. Mosola, DEA&T, 2001). However, some conservation authority staff perceive that it is not their job to become self-financing. For example KZNNCS's Chief Executive was quoted as saying, '*There's a bizarre belief that parks and tourism should pay for themselves and solve the problems of poverty. Tourism cannot be sold as a panacea for all ills. And we should never become self-sufficient.*' (Koch, 1994). Despite this, KZNNCS has invested in tourism as a source of revenue to sustain nature conservation management in response to decreased funding from the state. In 1998/9, 40% of the total budget of R255 million (US\$ 42 million) was derived from tourism revenue (Sandwith, 2000). However, the majority of facilities and parks across the country operate at below optimal occupancy level and do not generate sufficient funds to finance their operations. Therefore alternative sources of funding (e.g. donations and subsidies) may be required in the long term to fund areas which are not economically viable for tourism.

In reality, it may come to pass that the government is not in a position to subsidise conservation in areas that do not generate sufficient funds to finance their activities. In such cases, it will be the responsibility of the conservation authorities to increase revenue from protected areas that do have tourism potential in order to finance those areas of high biodiversity that do not.

A lack of identification of the tourism industry in industry figures presented by the South African Reserve Bank (DEA&T, 1999b) show a lack of understanding of this sector of the economy. Tourism factors such as retail, catering, accommodation are not allocated to this source. This is indicative of the historical inadequate funding and resources allocated to tourism, and the shortsightedness of the tourism sector.

Socio-economic gains that have been made from the use of biological resources and ecosystems may result in the loss of biodiversity or impaired ecosystem functioning. However, conventional economic indicators such as Gross National Product (GNP) do not have mechanisms to account for unsustainable depletion of biological resources as a loss to national wealth. Therefore, there is no economic means of evaluating and troubleshooting unsustainable tourism development

Tourism is one of the economic sectors identified which uses, and is directly dependent on, the renewal of biological resources but which may impact negatively on biodiversity through overuse (DEA&T, 2000e). However, in contradiction, tourism is also earmarked by DEA&T as a sector which may not directly depend upon the ecological processes or the consumptive use of biological resources, but which may inadvertently have impacts on biodiversity (DEA&T, 1997a). This confusion regarding the tourism sector within DEA&T is not conducive to creating a sustainable industry and minimising impacts.

3.2.3 Social

Despite the reformation of the South African education system since 1994, approximately 7.5 million people are functionally illiterate (18.4% of the population in 1996) while 19.3% of the population have had no education at all. This, coupled with factors including migration, drug and alcohol abuse, poor infrastructure and rapid urbanisation are believed to contribute towards the high crime rates in many urban areas. The risk of crime is a factor which acts as a great deterrent to tourism, and high national incidences of reported murder (25,900 in 1998), robbery (90,000), rape (52,700) and vehicle theft (321,100: SAPS, 1998) are not conducive to an attractive tourism destination. Nationally unemployment is high (37% in 1997), and highest among the black population; where levels of poverty are also highest at over 60%. Only 1% of the poor are white. Half of the population lives under the international poverty line of US\$2 per day (DEA&T, 1999b).

Health services are frequently under-resourced and lack the capacity to service demands placed upon them, many people use traditional healers (e.g. 80% of urban black people) (DEA&T, 1999b). Of the 36 million adults and children in the world living with HIV/AIDS in 2000, more than 70% were in sub-Saharan Africa. In 1999 South Africa reportedly had the highest prevalence of the disease on the continent, with an estimated 4.2 million infected people (UNAIDS). Projections for South Africa include a reduction in life expectancy to 40 years by 2010, and a loss of 20% of the work force by 2006 (DEA&T, 1999b).

Due to the previous government's policies, there has been little historical integration of local communities into the tourism industry. Subsequently, there are a number of issues and concerns that have been experienced by previously neglected people. These include (DEA&T, 1996):

- *'Tourism is for white people'* – there is a perception that tourism is predominately for the white upper and middle class only;
- Suspicion and mistrust – the creation of protected areas was not associated with any consultation or acceptance from local communities. Protected areas were linked to reduced access to natural and cultural resources, without any benefits;
- Lack of knowledge and understanding regarding what tourism is, and the opportunities that it presents;
- Lack of training opportunities to previously neglected people;
- Exploitation of cheap labour without benefits;
- Lack of access to finance to invest in tourism initiatives;
- Lack of market access as tourists are kept within hotels and resorts rather than exploring local bars and markets;
- Lack of participation of the majority of South Africans in all stages of tourism planning, development and implementation;
- Language barriers to those South Africans who do not speak English; there are 11 official languages in the country.

Major problems and issues lie before South Africa in terms of addressing these social problems.

Seriously addressing the HIV/AIDS issue requires fundamental adaptation of human behaviour through adopting sexual practises which reduce the chances of infection. This will be very difficult to accomplish, even with the use of well-designed public awareness and consistent health campaigns.

3.2.4 *Technical (managerial)*

There is an institutional gap in that there is no overall structure that oversees and co-ordinates biodiversity conservation and tourism planning in the nine provinces. Each of the provincial conservation authorities acts independently, and does not answer to a central regulating body. With respect to strategic conservation, this means that in areas with high tourism potential (e.g. KwaZulu-Natal), there is no mechanism to assist the funding of conservation areas in other provinces that are less fortunate with their provincial nature reserves (e.g. Mpumalanga). In addition, successful conservation and tourism strategies are not efficiently transferred between agencies.

There are also indications that the DEA&T has underestimated potential negative impacts of tourism on biological diversity, as illustrated by the very short list detailed within the White Paper on Biological Diversity (Table 3.1).

Impact	Causes Identified by DEA&T
Habitat loss and fragmentation	Construction of tourist-related facilities Exceeding the tourist carrying capacity Impacts of off-road vehicles
Overexploitation of Species	Recreational fishing Overexploitation of 'collectable' species
Air, Water and Soil Pollution	Litter (principally plastic waste)
Introduction of Harmful Alien Species	Introduction of exotic species for angling

This lack of awareness will clearly have fundamental implications for addressing the adverse impacts of tourism, and further investigation of the existing literature on impacts by government and its agencies is clearly required.

Despite policy of national and provincial conservation authorities endorsing tourism development and community participation, there have been implementation problems on the ground mainly due to the perceptions of people working within them. There are fears and concerns within the conservation sector regarding creeping incrementalism of tourism development and the fickleness of the tourism industry. There is also an unwillingness to relinquish control over conservation management of protected areas to parties whose priorities are different (e.g. to the tourism sector, whose priority is generally profit; and local communities, who generally desire natural resources from protected areas). The different focus, although not mutually exclusive from biodiversity conservation, is considered a threat by some. Although perceptions are changing within the national and provincial organisations as people adapt or move to alternative employment, there may be an uneasiness between stakeholders for some time to come.

3.2.5 *Human resources*

Time and again, it has been shown that conservation departments are very good at biodiversity conservation, but not sufficiently experienced in the business field to operate financially sustainable tourism. This lack of capacity within the conservation sector has led to the creation of an increasing number of private-public partnerships in protected area tourism concessions. Frequently these

conservation management role of the land. Meanwhile, the private operator manages an agreed tourism operation based on the natural resources (e.g KwaZulu-Natal Nature Conservation Service and Wilderness Safaris; South African National Parks and Conservation Corporation).

In South Africa there has been inadequate tourism education, training and awareness that has led to poor service in the tourism sector (see section 1.6).

Human resources are also inextricably linked to the HIV/AIDS pandemic. It is predicted that AIDS related illnesses are likely to kill an economically significant proportion of the working population (20%: DEA&T, 1999b). Therefore, education systems that aim to build the capacity of the workforce must also deal with this critical health issue.

3.2.6 Biodiversity conservation per se (at all three levels: ecosystem, species and genetic)

In relation to biological diversity, DEA&T note that it is not known to what extent viable populations of species are conserved within its protected area network, nor whether the conservation of genetic diversity can be taken as implicit (DEA&T, 2000e). The Department also notes that although all seven major habitat types in South Africa are represented in protected areas, there are gaps in conservation, such as the lowland fynbos, succulent karoo, Nama karoo, highveld grassland, and thicket biomes, which are not adequately protected (DEA&T, 1997b). Protected areas are frequently small and fragmented, and subject to management policies relating to such 'islands of biodiversity,' rather than in relation to a holistic land-use policy (DEA&T, 2000e).

National wetland conservation is described as, 'extremely poor' with the majority of such regions lying outside protected areas (DEA&T, 2000e). Of the 829 naturally-occurring freshwater wetlands, only 13.5% lie fully within a protected area, and only 3.9% are partially protected (Cowan & Van Riet, 1998). National marine protected areas do not protect the full diversity of coastal and marine habitats found within South Africa, and many are inadequately policed or poorly positioned (DEA&T, 2000e). Agricultural practices in some areas have led to flow reductions through protected areas, such as in the Crocodile River which runs through Kruger National Park (DEA&T, 1999b), and therefore affects water available to fauna within it.

It is also noted by the DEA&T that, despite much legislation relating to the conservation of biodiversity, the conservation of landscapes and ecosystems outside protected areas have not been given sufficient priority. The co-ordinated development of a law enforcement strategy, effective deterrents, and the strengthening of capacity is supported by DEA&T in balance with incentives to conformity with the law. Mechanisms such as legislation, planning controls, guidelines, and protected area designations are applied to conserve the wide range of biological resources (DEA&T, 2000e).

3.2.7 Examples of bad practices and failures with respect to linkages

Examples of bad practice or failures in linking biodiversity conservation and tourism development are not well documented with respect to entire projects that have been unsuccessful. However, there are examples of the *difficulties* of integrating tourism development and biodiversity conservation and planning within South Africa where parts of the process have not been optimised. These include linking tourism revenue with conservation management; marrying different priorities of conservation authorities and private operators; and situations where political activities conflict with legislation, biodiversity conservation and tourism potential. One example of each is given:

Linking tourism revenue with conservation management: Ngala Game Reserve is located within

An annual lease is paid by the operators of Ngala (ConsCorp) to the landowners, an arm of the World Wide Fund for Nature called the South Africa National Parks Trust (SANPT). There is a management agreement between SANPT and Kruger National Park which allows South African National Parks (SANP) to manage the land as part of Kruger, in relation to its master plan. However, none of the lease money paid by Ngala is accrued by SANP to fund conservation management of the land. This is because the management agreement between SANPT and SANP neglects to mention financing. The lease money is actually used by SANPT to purchase land alongside other protected areas within South Africa in order to facilitate their expansion. Although this is a worthy cause for conservation, it leaves a funding gap for the conservation area generating the tourism revenue, and therefore a deficit in finances to mitigate environmental degradation caused by tourism impacts (Spenceley, 2000). This example illustrates the difficulties in drafting equitable contractual agreements between conservation authorities, NGOs and private operators. A lack of foresight regarding potential problems can lead to the frustration of all stakeholders, and a failure to adequately finance conservation management.

See section 4.6 for a description of the predominately positive impacts of Ngala Game Reserve.

Different priorities and constraints of conservation authorities and private operators: Rocktail Bay Lodge is operated within a tripartite management agreement between the operator (Wilderness Safaris), the provincial conservation authority's commercial arm (Isivuno), and the local community. Wilderness Safaris has been involved in lengthy negotiations with KZNNCS (the landowners), in order to obtain permission to construct a launch site on the concession in order to initiate scuba diving activities for guests on the diverse coral reefs that are situated along the Indian Ocean coast. KZNNCS sees the development as a potential threat to the conservation of the coastline, which may open the way for increased boating activity in the area, and contribute to incremental development within the Maputaland Coastal Forest Reserve and proclaimed World Heritage Site (the Greater St Lucia Wetland Park; GSLWP). However, Wilderness Safaris needs such an attraction to increase occupancy levels at the lodge in order to boost revenue and (essentially) pay their lease. The need is perceived as urgent by Wilderness Safaris who require the facility, but the bureaucratic and legal process inherent within planning in protected areas is not conducive to speedy decision making (Poultney & Spenceley, 2000). This example illustrates the difficulties in aligning tourism development and biodiversity conservation where stakeholders are motivated and constrained in different ways.

See section 4.6 for a description of the predominately positive impacts of Rocktail Bay Lodge.

Political activities conflicting with legislation, biodiversity conservation and tourism potential: The Mbangweni and Tembe communities in northern KwaZulu-Natal were dispossessed of land within the current borders of the Ndumu Game Reserve during the period 1930-1960. Frustrated at the slow processing of their land claim by the State, these communities have threatened to invade the game reserve on several occasions during the past three years. In two very similar attempts to appease the communities, influential Government officials offered in 1998 and in 2000, respectively, to hand over portions of the Reserve to the claimants for agricultural purposes. Both proposals sparked public outrage and a corresponding barrage of media pressure. In both cases the officials involved demonstrated ignorance of applicable environmental legislation; international conventions governing land use in the proposed blocks; and failed to formulate the proposals through a transparent consultation process. In 1998 the official involved was censored and the proposal retracted. The situation led to a confrontation between reserve staff and the affected communities involving the vandalisation of fencing and the arrest of community members. In 2000 the proposal for excision of 200 ha was modified due to public pressure, to a scenario where claimants could utilise 200 ha of sensitive floodplain habitat for subsistence agricultural purposes

pressure based on its many pitfalls. Instead, the title deeds were given to the communities for a much larger portion of the Reserve, with the proviso that no change in land use would be permitted. Various attempts are now being made to assist the claimant communities through development-aid packages and 'co-management' of the Game Reserve.

Although the conclusion is being hailed as a victory for conservation, the evolution of this solution has involved a flawed process with un-mandated and illegal promises to claimant communities. The situation endangered the future of highly protected public land (not only in Ndumu Game Reserve but also in a large number of other protected areas throughout South Africa) and its potential for capturing ecotourism revenue. The victory alluded to was reached in spite of, rather than because of, Government policy and intervention. (Pers. Comm. J. Pooley, Institute of Natural Resources, 2001).

4. PROPOSED STRATEGIES AND SOLUTIONS

The following are proposed strategies and solutions for improving biodiversity conservation and planning in the tourism sector in South Africa:

4.1 Policy-oriented

A number of strategies and solutions designed to address the problems have already been proposed by the government of South Africa. For example, there is recognition that considerations about biodiversity and its sustainable use must be integrated into all areas of national, provincial and local decision making, and across different sectors. In order to achieve this, the government aims to work in collaboration with interested and affected parties to (DEA&T, 2000e):

- ensure that existing domestic and foreign policy, plans and programmes support the conservation and sustainable use of biological resources and minimise adverse impacts on biodiversity;
- ensure the effective incorporation of biodiversity considerations into all new policies, plans and programmes;
- require all government departments responsible for activities affecting biodiversity (or for activities concerning the conservation or use of biodiversity) to develop sector-specific plans based upon agreed guidelines.

There are also common approaches proposed within policy to conserve and sustainably use biological resources, and to avoid or minimise adverse impacts. Those which impact directly on the tourism sector are (DEA&T, 1997a):

- to strengthen and streamline existing policies, or introduce new policies, legislation, incentives, and disincentives to avoid or minimise the adverse effects of human activities on biodiversity;
- enforcement of appropriate regulations to control activities which may have a detrimental effect on the environment;
- maintain, adjust or develop incentives that support the conservation and sustainable use of biodiversity, and stimulate local stewardship of areas;
- determine sustainable harvest rates and utilisation levels for species and ecosystems used for recreational purposes;
- undertake research, and develop and apply methods and technologies aimed at removing or reducing adverse impacts of harmful activities on biodiversity and improving their management;
- restore and rehabilitate degraded ecosystems;

- discourage development in areas where biodiversity and ecological function would be adversely affected;
- negotiate and liaise with neighbouring countries to maximise commonalities and minimise conflicts relating to cross-border areas such as mountain ranges, water catchments, marine and coastal regions in addition to areas required for animal migration.

The government of South Africa recognises that effective environmental management is key to the tourism sector. Specific principles and policy guidelines regarding solutions include (DEA&T, 1996):

- sustainable and responsible tourism development promotion through incentives to private enterprises and communities;
- mandatory implementation of Integrated Environmental Management procedures for all tourism projects;
- encouragement of social and environmental audits of tourism projects;
- encouragement of tourism development in areas where it offers a competitive form of land-use, and ensure that tourism is integrated into land-use plans;
- exploration of creative means to ensure that neighbouring communities participate in and benefit from economic activities generated in and around conservation areas;
- encourage the creation of successful pilot tourism programmes that tangibly demonstrate the benefits of ecologically sensitive tourism over other, more damaging forms of land use;
- promotion of sustainable and responsible water and energy consumption, and encouraging sustainable waste disposal, green packaging and recycling;
- support of mandatory environmental management in ecologically sensitive areas; and
- ensure that tourism does not deprive communities of the access to resources needed for their livelihoods.

In addition, DEA&T state that a national mechanism that represents key sectors should be established to oversee, co-ordinate, and better integrate government policies which directly or indirectly affect biodiversity (DEA&T, 1997a). In the promotion of conservation and sustainable use of biodiversity on an international level, the government also supports efforts to establish Southern African regional forums which will consider relevant biodiversity issues, such as transfrontier conservation initiatives and regional tourism linkages (DEA&T, 2000e).

Although much of the policy and many of the proposed strategies are admirable in their aspirations, there is a lack of awareness of the human resource requirements and financial costs entailed in many of them. Therefore policy strategies need to be combined with strategic and integrated action plans which have considered these implications in relation to tourism market forces. Much more consultation with the private sector is needed in relation to sustainable business operations in order that 'wish lists' become implementable. It is hoped that the law reform process will address many of these problems.

In addition, politicians in all relevant sectors require advice regarding the range and contents of new policy and its implications, in order that they are kept up-to-date with progress. Government, especially at a local level, requires better capacity and resources in order to implement these policies effectively on the ground.

4.2 Economic

With regard to environmental economics, the National Report on the CBD states that measures will be adopted to allow for the full economic costs and benefits of the conservation and utilisation of

far the Marine Fisheries Policy, the White Paper on Water Policy, and the conservation plans of the Department of Agriculture give recognition to the values of biodiversity conservation (DEA&T, 2000e). However, there are intrinsic difficulties in valuing natural resources for inclusion in national accounts, and a great deal of care must be taken within this process.

The use of taxes, subsidies and interest rates to reduce the negative environmental impacts of economic activity and enhance the positive effects have been suggested for use by the government. Taxing pollution, and subsidising products with less environmental damage, and altering interest rates to encourage certain land use patterns are economic mechanisms that could be used (DEA&T, 1999b).

Studies to evaluate different scenarios regarding tourism development and biodiversity conservation would be of great value to South Africa. In this period of flux during which inherited problems of inequitable land distribution and education are rectified, there is great potential to design tourism development that addresses these economic issues. If scenario analysis can be used to evaluate optimal forms of tourism development within the context of predicted market demand (e.g using predictions from agencies such as the World Tourism Organisation and the World Travel and Tourism Council) then tourism development could be optimised. Working in conjunction with experienced conservationists and community NGOs, the most advantageous forms of development can be designed.

4.3 Technical/managerial – including mechanisms for intersectoral co-ordination

There is need for a body to oversee and co-ordinate provincial conservation authorities in order that best conservation practice and tourism development models can be distributed. Options for the government to create legislation that will encourage uniform and coordinated approaches by provincial authorities in implementing biodiversity may form part of the Biodiversity Chapter within the National Environmental Management Act (Pers. Comm. K. Njobe, DEA&T, 2001). This body should also have advisors or staff who are experienced in profitable tourism development from the private sector.

There is also an urgent need for people working within conservation authorities to have a better understanding of the tourism sector, and what it requires to function profitably. A change in mind-set is required of many conservation managers, that they are not only required to conserve biological diversity, but they should also be compelled to facilitate financing of their operations (e.g. through tourism and donations) and contribute significantly towards poverty alleviation in rural areas. Workshops and other forums should be used to facilitate communication between stakeholders, which should act to reduce the threats perceived by some of the conservation sector.

4.4 Human resources (including education and training)

In relation to environmental education the government aims to solve some of the deficits in human capacity in order to conserve biodiversity by (DEA&T, 2000e):

- increasing public participation and awareness of the value and importance of biodiversity, and public involvement in its conservation and sustainable use;
- improving the understanding of biodiversity through research, improving biological inventories, monitoring systems, sharing information and utilising traditional knowledge; and
- strengthening existing management capacity through appropriate training in biodiversity management.

Tourism provides a number of opportunities for integrating local communities into the tourism planning and implementation sectors. Opportunities lie in servicing the industry (e.g. tour operators, travel agencies, guides, training services, and marketing services), supplying the industry (e.g. speciality agriculture, construction, interior décor, crafts, and laundry services) and operating tourism infrastructure, facilities and services (e.g. operating tourism accommodation, food and beverage outlets, transport services, attractions, museums, and entertainment) (DEA&T, 1996). Both business management and tourism education are required at all levels within South Africa. It is possible that the existing and forthcoming systems (see section 1.6) will not be sufficient to transform opportunities. The training and educational opportunities should be expanded to ensure that South Africa's workforce can meet the expectations of the tourism sector.

One group which is working to support the creation of jobs in the tourism sector, partially through training and development at the school level is the Business Trust (Anon, 2000c). In November 2000 the DEA&T launched a Tourism Enterprise Programme (TEP) in partnership with The Business Trust. The TEP aims to increase the economic participation of previously disadvantaged people by identifying and developing partnerships and synergies between emerging business, community business and corporate business. Around 4000 enterprises are likely to benefit from the scheme (DEA&T, 2000d). Also during 2000, a R115 m Tourism Learnership Project was launched by DEA&T and the Business Trust. This aims to improve the productivity, skills levels and services standards of the tourism sector. The training will generate National Qualifications (NQs) for the unemployed and those already working within the tourism sector, and will also develop a team of people to train and assess (HITB, 2000). It is predicted that within four years the TEP will award 10,000 national qualifications to employed people, and 5,000 learnerships for unemployed people (Anon, 2000a; Pers. Comm. C. Poultney, THETA, 2001).

However, in addition to training new members of the workforce, the country must also attempt to retain its existing valuable human resources. With the post-apartheid creation of 'black empowerment' policies, and positive discrimination towards the employment of previously disadvantaged groups (e.g. black people, women) there has been a simultaneous drop in opportunities for employment for white, educated people. Although black empowerment is critical to the transformation of the country, it is also vital that the nation should utilise expertise of those that have gained it, even though it was gained through inequitable processes. There is a current 'brain drain' of experienced and educated white people in South Africa, who are heading to countries such as the UK, Australia and Canada in search of work and hard currency. South Africa should adapt its employment policies to encourage these people to stay and help build the country while simultaneously promoting the employment and training of previously disadvantaged groups

In order to support national human resources, the country must also address fundamental issues of education, health and poverty. It is not only tourism which must be taught within South Africa, but decisive and strategic programmes must be designed to address illiteracy, poor standards of education (especially in rural areas), and language development. Tourism education should form part of this process, where livelihood issues are also taught (e.g. sustainable agriculture).

The health sector must seriously focus on sex-education and prevention of HIV/AIDS by working with educational sectors and utilising the media. There have recently been very public inconsistencies between presidential comments and national policy on HIV/AIDS which have confused the public regarding the danger of the illness, and the importance of anti-retroviral drugs. Through consistent, widespread public campaigns, countries such as Uganda have made great headway in addressing the disease. South Africa needs to adopt a similar approach.

4.5 Biodiversity conservation per se (at all three levels: ecosystem, species and genetic)

There are a number of initiatives proposed to encourage biodiversity conservation outside protected areas including conservancies, private nature reserves, the South African Natural Heritage Programme, biosphere reserves and contractual parks (DEA&T, 2000e). The financing of conservation management in some of these areas could be sought through the development of nature-based tourism operations.

To support this, monitoring of the effectiveness of the protected area network in conserving viable populations of species within functioning ecosystems should be addressed within the forthcoming NBSAP. This will allow critical information to be relayed to bodies working on conservation issues outside protected areas, with respect to which regions should be prioritised for targeting.

Integrating biodiversity conservation issues into land-use planning through environmental assessment procedures has been identified as important to biodiversity conservation in government. The use of Integrated Environmental Management principles in all planning controls and legislation is endorsed. In addition, the adoption of a bioregional approach to planning is supported where natural boundaries are used to facilitate the integration of conservation and development requirements, and where conservation is proactively incorporated into land-use plans. The potential impacts of projects, programmes, plans and policies on biodiversity are to be assessed and reflected in planning processes, where decision-making seeks to avoid impacts, minimise risks and mitigate adverse impacts where possible. Multiple natural resource activities which are compatible with the conservation and sustainable use of biodiversity are also to be investigated and implemented (DEA&T, 2000e). However, it is clear that the government requires more information and understanding about the potential negative impacts of tourism on biodiversity in order that mitigating actions can be designed. The apparent naivety of policy makers and planners with respect to impacts must be addressed through research and effective dissemination.

4.6 Examples of best practice in linking tourism development and biodiversity conservation planning (BCP)

Four examples of best practice linking tourism development and biodiversity conservation are given for South Africa in terms of two lodges (Rocktail Bay and Ngala Lodge); a national park (the greater Addo National Park) and a World Heritage Site (the Greater St Lucia Wetland Park). It should be noted that there were many potential tourism operations which could have been included within this section, and that these examples have been chosen illustrate a number of the pertinent issues linking tourism development and BCP in South Africa.

4.6.1 Name of project or development

Rocktail Bay Lodge (Poultney & Spenceley, 2000)

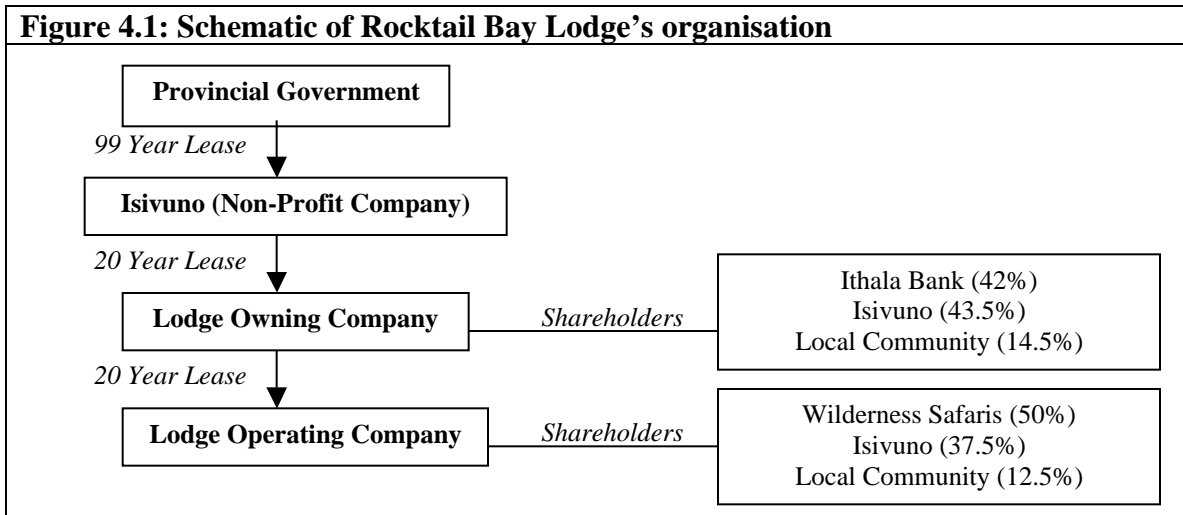
4.6.2 Exact location

Rocktail Bay is situated on the northern coastline of KwaZulu-Natal with the Indian Ocean, within the Maputaland Coastal Forest Reserve and the Greater St Lucia Wetland Park, a proclaimed World Heritage Site.

4.6.3 Management and co-ordination

The lodge is operated by Wilderness Safaris, who have a 50% share in the Lodge Operating

making company that was formed as the trading arm of KwaZulu Conservation Trust (now part of KZNNCS). The Lodge Owning Company also has a tripartite ownership between Isivuno (43.5%), Ithala Bank (42%), and the local community (14.5%). This relationship and its context is shown in Figure 4.1.



The tourism and hospitality operations of the lodge are undertaken by Wilderness Safaris (WS) staff at the lodge, with support from head office to deal with administrative issues such as accounts, marketing, sales and reservations. The biodiversity conservation and environmental management of the Coastal Forest Reserve in which it lies are implemented by KZNNCS.

Tourism developments within the reserve must pass through an Integrated Environmental Management procedure. This process allows the environmental impacts of potential developments to be assessed in order that informed decisions can be made regarding their implementation (Natal Parks Board, 1992). A failure to address this process adequately recently resulted in the demolition of an unapproved building on the edge of Rocktail Bay Lodge’s concession; an indication of how seriously planning processes are considered by KZNNCS.

4.6.4 Description of main objectives, achievements and constraints

Wilderness Safaris operate Rocktail Bay as a small, luxury coastal lodge with opportunity for fishing, diving, snorkelling, sea turtle tours and beach activities. The presence of Rocktail Bay contributes towards biodiversity conservation in the provincial nature reserves financially through its lease payments to the commercial arm of KZNNCS. WS also finance loggerhead and leatherback turtle monitoring along the coastline; an activity which has been undertaken by the conservation authority for many years, but due to financial constraints would have been restricted without WS’s donations. Guests at Rocktail Bay are also encouraged to ‘adopt a turtle’, and assist funding the conservation authority’s satellite tracking of adult turtles. Energy and water consumption by guests is kept to a minimum by utilising a generator to charge batteries in each guest unit in conjunction with notices encouraging water and energy conservation. All solid waste is removed from the site by road, and sewage waste is disposed of through a septic tank system.

In terms of community development, the lodge operates a policy of only training and employing people from the immediate local area for all but management positions. This has led to twenty-six permanent jobs for people from the local villages of Mqobela and Ngwanase. This employment has allowed staff to encourage further economic development in their villages through secondary spending of their wages, and the financial support of extended families. Benefits have also been

to finance developments at two village schools, to purchase materials to improve the roads, and to fund a number of educational bursaries. The lodge has stimulated local economic development of a taxi business (for the transportation of its staff) and also a community policing forum; which improved the safety of the area for both guests and the community. Cultural displays by a local Sangoma (traditional healer) Performing Arts Group have allowed a Sangoma Training School to subsidise promising students, and also speed up the training process by financing the purchase of vital ceremonial materials.

Rocktail Bay has been constrained in the significance of the benefits it would like to see accruing to local people in that there has been little entrepreneurial activity. Local community members could benefit further by producing fresh produce and crafts that could be utilised at the lodge. There is a need for an intermediary body to facilitate communication between the lodge and local community, and also to build capacity within the rural people to furnish the lodge's demands.

Constraints in terms of tourism development were discussed previously in section 3.2.7.

Rocktail Bay Lodge was a winner in the British Airways 'Tourism for Tomorrow' Awards in 1999, and was the subject of a recent study by the Overseas Development Institute investigating best practice in pro-poor tourism initiatives on behalf of the UK government's Department of International Development (DFID).

4.6.5 Name of project or development

Ngala Game Reserve (Spenceley, 2000)

4.6.6 Exact location

Ngala Game Reserve is situated in the south of the Timbavati Private Nature Reserve, which lies along part of the western boundary of Kruger National Park.

4.6.7 Management and co-ordination

An annual lease is paid by the operators of Ngala Lodge (ConsCorp) to the landowners of Ngala Game Reserve (Kempiana); a branch of the World Wide Fund for Nature called the South Africa National Parks Trust (SANPT). There is a management agreement between SANPT and Kruger National Park which allows South African National Parks (SANP) to manage the land as part of Kruger, in relation to its master plan. The rest of the Timbavati Private Nature Reserve is also managed in accordance with Kruger's master plan, albeit with a number of caveats which reflect the different objectives of the private landowners (e.g. controlled hunting; artificial water provision; management burns; and bush clearing).

Ngala Game Reserve is currently managed by a Management Committee (MC) which advises the Standing Committee for Nature Conservation of SANP in Kruger. The 1999 draft management plan for the reserve cites that members of the MC should include two members of Kruger National Park, a member from Ngala or ConsCorp, an observer from the Southern African Wildlife College (a college located within Ngala Game Reserve that was set up by WWF-SA to run courses for conservation managers), and two observers from the local community of Welverdiend. The plan is awaiting approval by SANP, and currently the community members are not included in the committee. All changes in management activities and development proposals proposed by the MC must pass through Kruger National Park for assessment and approval before they can be approved.

Management actions on Ngala Game Reserve are weighed up against principles of (Pieterse, 1999):

1. *Conservation of biodiversity.*
2. *Sustainable utilisation* - e.g. bush clearing, harvesting of renewable natural resources, creation of limited job opportunities, and hunting. Manual bush clearing by members of the local community is managed by employing the maximum number of people for the longest potential time. Material is left *in situ* to protect the area from excessive herbivory, and to serve as a seed bank.
3. *Moisture conservation* - maximising rainfall infiltration and minimising runoff by improving groundcover.
4. *Integrated management* – to integrate herbivore populations, veld management, water provision, tourism, training and local communities
5. *Maximisation of opportunities to local communities* – to include the local communities in the management of Ngala Game Reserve and to afford them the maximum benefit in terms of job opportunities or management actions. Therefore, a small number of people utilised over a long time are employed preferentially to a large number of people in the short term. Their benefits are a result of their active involvement in land management, rather than receiving handouts.
6. *Environmental management* with respect to zoning, fire policy, habitat manipulation, herbivore manipulation, and road management.

Ngala Lodge staff deal with the day-to-day logistics of running a luxury safari lodge. A number of lodge activities are supported by ConsCorp's head office, which operates marketing, sales and reservations, accounts, web design, human resources and administrative support.

4.6.8 *Description of main objectives, achievements and constraints*

Ngala was the first privately operated lodge to exist within land managed by Kruger National Park. It operates luxury safari tourism with exclusive traversing rights to the reserve, which has the same wildlife attractions as the adjacent Kruger National Park.

Achievements in terms of biodiversity conservation at Ngala relate to increasing the geographical area available for Kruger's wildlife to traverse; environmental education for neighbouring communities; monitoring and reporting on the status of wildlife; and close co-operation with management authorities of Kruger and the Timbavati with regard to aspects concerning wildlife and tourism management. In addition, money paid by ConsCorp to SANPT for the lease is used to purchase areas of land adjacent to other national parks in order that the conservation areas can be extended. Environmentally friendly cleaning products are used throughout the lodge for cleaning and washing. A glass and tin waste-recycling scheme was initiated by staff members, while food waste is transported to a pig farmer in neighbouring Welverdiend. However, a recent constraint of the recycling scheme has been that local recycling sites have decreased the range of materials that they will receive. Therefore Ngala is left to transport all of its sorted waste off-site to the local municipal dump.

With respect to community development, Ngala Lodge employs people from rural communities in the region around Kruger National Park who make up the bulk of its staff. There is provision for training on an apprenticeship basis for staff who show interest and effort in advancement. For example, a Mozambican refugee rose from her initial role assisting with bush clearing, to become a junior chef at Ngala. In another case, a chambermaid progressed to become head of the housekeeping department.

Ngala has a policy of supporting rural development in communities neighbouring its reserve through the CCA Rural Investment Fund (RIF). Financing for the RIF does not come from tourism revenue; rather it is obtained through donations from guests and NGOs. Projects ideas must be generated by the community, and are assessed by a community development officer from CCA who assists in the generation of a sustainable business proposal for each scheme. The proposals are submitted to a central RIF panel for review before approval, modification or rejection.

Initiatives from Ngala that have facilitated education within the local community include the following:

- *Bursaries for courses*, in return for students contributing towards their home communities for a year after studying, or to deliver motivational talks. Bursaries are also available for tourism and hospitality training, where a ConsCorp lodge provides part of the training at one of its lodges.
- *School equipment and infrastructure*, such as funding for a local High School Computer Centre for painting, shelving, electrification, burglar proofing and donation of two-second hand computers. An old church was renovated to provide a Junior School with a media centre.
- *Environmental education*: Bush Schools allow local pupils and teachers to attend a 3 day, 2 night programme to fit in their natural science school curriculum. Conservation lessons are given on a weekly basis to local school children by an Ngala tracker. All junior schools in the area are targeted for inclusion on a rotational basis, and once again lessons are designed to fit in with the school's existing education programme. In partnership with an NGO called Edu-Peg, the RIF provides junior schools with a self-corrective maths programme and training for teachers.
- *Health education*: Local youths were funded to write and perform a play that reflected pertinent AIDS/HIV issues in their community. The play was performed in English and Shangaan at a local festival to highlight the issues and educate local people.

There are also plans to facilitate training of local crafts men and women to create goods for sale to tourists within Ngala's shop, and proposals to implement a tracker training programme in conjunction with BirdLife International.

Constraints regarding the financing of mitigating environmental management activities were discussed in section 3.2.7. Other constraints include the bureaucratic processes which must be undertaken in order to implement management activities on the reserve in terms of the SANP panel review process.

The case of Ngala Lodge illustrates the operation of a privately run luxury safari lodge within the management framework of a national conservation body to safeguard biodiversity. It also illustrates successful instances of community capacity building and development financed by donations to a private tour operator.

4.6.9 Name of project or development

The Greater Addo National Park (Anon, Undated b; Visser, 2000)

4.6.10 Exact location

Addo National Park is located in the Eastern Cape, 72 km inland from Port Elizabeth (which lies on the south coast of South Africa).

4.6.11 Management and co-ordination

Addo's conservation and tourism management is undertaken and co-ordinated by South African National Parks (SANP). A tender has recently been granted for a commercial tour operator to run tourism services at one of the camps in order to generate more funding for conservation, and to improve facilities for visitors.

4.6.12 Description of main objectives, achievements and constraints

Main objectives of Addo National Park include:

- For the conservation area to expand to incorporate six of the seven terrestrial biomes represented in South Africa. Habitats will range from arid and semi arid Karoo to coastal forest, and will even include an area of marine reserve. The Park will then become the *Greater Addo National Park* and will create a unique conservation area within this ecological transition zone. The expansion will engulf the Zuurberg National Park and the coastal Woody Cape Reserve (Visser, 2000).
- To incorporate contractual parks with neighbouring land owners, where the inclusion of their land makes a significant ecological contribution.
- To reap the benefits from increasing tourism in this expanded protected area through partnerships between SANP, local communities, provincial conservation authorities, regional tour operators and investors. The range of visitor facilities will include SANP camps and campsites and 'upmarket' camps, only accessible to 4x4 vehicles.

Conservation achievements of Addo include the growth of its elephant population from eleven in 1931 to over 300 today, and an associated population increase at an average rate of 6% per year.

There have been collaborative efforts with neighbouring communities, such as the Nomathamsanqa community of Mayibuye Ndlouvu, where a Trust was established to encourage community based conservation development projects.

Constraints include the threat of a potentially damaging deepwater port development around the Coega River estuary in an Industrial Development Zone which comes within 5 km of the park. There are concerns that this will have negative social impacts on the park; produce toxic gas emissions that may adversely affect flora and fauna; that light pollution may detract from the visitor experience (it is proposed to be floodlit 24 hours a day, 360 days a year); that there will be increased incidences of oil spills; and the disturbance of estuarine bird habitat.

Another potential threat has been speculative purchases of land in the area that is proposed for inclusion within the Greater Addo National Park (GANP). This may lead to fragmentation within the Park if new landowners are not conducive to becoming contractual parks linked to Addo's management policies. It may also make the creation of the GANP more expensive to establish as landowners understand that the demand for their land has increased and therefore they can increase their sales prices (Visser, 2000).

The case of the GANP illustrates a system of designing the expansion of a protected area to incorporate a vast wealth of biological diversity in order to conserve it. The conservation is fundamentally linked to local and provincial tourism planning in order to generate the most sustainable tourism revenue while creating employment for local people.

4.6.13 Name of project or development

The Greater St Lucia Wetland Park, World Heritage Site

4.6.14 Exact location

The Greater St Lucia Wetland Park (GSLWP) is situated on the north-eastern coast of KwaZulu-Natal and extends around 280 km from the Mozambican border in the north, to Mapelane south of the St Lucia estuary. In the east the Park is bordered by the Indian Ocean; in the west it includes the Kosi and St Lucia lake systems, in addition to the Mkuze Game Reserve. The GSLWP is South Africa's first World Heritage Site (Taylor & Castis, 2000)

4.6.15 Management and co-ordination

The DEA&T have set up a business-oriented authority under the World Heritage Convention Act of 1999. Its purpose is to balance conservation of the Park, in partnership with the conservation manager KZNNCS, and optimal commercial development. Other partners such as the Lubombo Spatial Development Initiative (SDI) and Tourism KwaZulu-Natal are currently working with the Authority, DEA&T and KZNNCS to invite tourism developers to tender for concessions within the GSLWP (Taylor & Castis, 2000).

4.6.16 Description of main objectives, achievements and constraints

The area's primary objective is optimal commercialisation underpinned by sound conservation management. The area has a great diversity of factors that are conducive to commercial development through tourism. These include unique and unspoiled natural assets such as rivers, lakes, bushveld, beaches, estuaries, mountains and plains; abundant rare and threatened species of wildlife, marine life and flora; existing and planned world-class Big-Five game viewing; year-round sunny and hot climate with a warm-water coast. From a tourism development perspective, the region is conducive to growth through the financial and political support of national and provincial government as a major tourism destination, especially given the absence of malaria (DEA&T, 2000h). In terms of tourism, the area is considered to have been under-utilised in the past, and the fragmented land and management practices have not been compatible with either conservation or strategic tourism development (Zuma, 2000). A core objective of the GSLWP is the alleviation of poverty and the empowerment of historically disadvantaged communities (DEA&T, 2000i). Poverty and underdevelopment are prevalent within this very rural area, and co-ordinated tourism development is seen as a mechanism to unleash the economic potential of the region.

In the late 1980's and early 1990's there was a battle between conservationists and a mining company, Richard's Bay Minerals, which applied for rights to mine the titanium-rich dunes along the coast in 1989. Following a public outcry, and the largest petition ever compiled in South Africa, the government undertook an environmental impact assessment (EIA) of the mine. The EIA was the most extensive ever undertaken in the country, and took four years to complete. The assessment concluded that mining development would have caused '*unacceptable damage*' to the unique St Lucia wetland system, which was considered a '*very special asset for the nation*' (Barker, 1997). As an alternative to mining, it was suggested that the area could make more sustainable economic gains from tourism development. This was a major achievement in terms of securing the future of biodiversity conservation in the area.

The GSLWP has been preceded by its planning context within the Lubombo SDI. The SDI aims to unlock investment opportunities in infrastructural development and tourism in a relatively

SDI protocol was first signed in 1998 a number of accomplishments have been made. These include (DEA&T, 2000j):

- The upgrade of the main tarred road from Richards Bay to the Swaziland border;
- The construction of the Hluhluwe to Maputo road; of which 68 percent was done by SMMEs and is predicted to provide 70 000 people with all weather access;
- The provision of 11 key access roads serving 160,000 people;
- The building of a new border post with Mozambique;
- A R40 million malaria control programme;
- A R2.8 million crafts programme to build capacity and give marketing support to 2,000 crafters;
- The St Lucia Millennium festival and four other satellite festivals in which 18 countries participated;
- The development of a R1.2 million heritage route and marketing programme with regional tourism stakeholders;
- The Greater St Lucia Wetland Park was declared a World Heritage Site in 1999;
- A R42 million tourism infrastructure programme, which will include the re-introduction of game, is taking place in the southern section of the park;
- The removal of 5,000 hectares of commercial forests on St Lucia Lake's western shores and its inclusion into the park, has been negotiated, and
- Land claim settlements on the eastern shores have been settled.

At present the area attracts 500,000 tourists and provides 11,200 beds of which most are privately or government owned. Through the intervention of the Lubombo SDI and the establishment of the greater St Lucia Wetland Park Authority the plan is to kick-start the economy of the sub-region over a 10-year period. By 2010 projections are for an increase in tourist numbers to 1.4 million, the bed numbers to 18,700 and foreign currency earnings to R850 million a year. With careful conservation and resource management it is predicted that the Lubombo SDI will create 9,000 jobs during infrastructure construction which, with private sector investment, is estimated to create 4,000 permanent jobs (DEAT, 2000i).

The SDI has more strategic objectives in terms of its transfrontier potential, stretching into Swaziland and Mozambique. A trilateral agreement was signed in June 2000 to form the Maputaland Transfrontier Conservation Area (TFCA), which supports socio-economic upliftment and improvement in regional ecosystem management within these countries (DEA&T, 2000j). The major objectives of this area are (ibid):

- Economic development through appropriate maximum use of opportunities presented by the three countries' natural assets;
- Ecological and financially sustainable development, the sustainable use of the natural resource base and the maintenance of ecosystem function through holistic and integrated environmental planning and management;
- The development of joint strategies for transfrontier ecological planning and resource management.

Infrastructure development and rehabilitation is required to consolidate the sixteen portions of land which comprise the GSLWP. The first phase of reconstruction has been dealing with the southern area of the park where constraints such as land claims, removal of commercial forestry and distance from the tourism market, have largely been overcome (DEA&T, 2000k). The phase, which is nearing completion, includes an internal game-viewing network (Anon, 2000d). The next phase, from April 2001, will focus on the Western Shores and Coastal Forest Reserve and the rehabilitation of 10,000 ha of commercial forestry land. The redevelopment of the Park will add

generate R850 million in foreign exchange annually, with the creation of approximately 3500 new permanent jobs (Zuma, 2000).

Constraints predominate on the human resources side, in that although a core objective of the GSLWP and the SDI is rural socio-economic development, the facilitative policy and planning context is not supported by sufficient training and capacity building to allow the poor rural communities to take advantage of benefits proffered by tourism. There is a great need for investment in this region if the potential for poverty alleviation and rural development is to be realised.

The GSLWP is an example of best-practise in ecotourism in terms of the integration of key stakeholders in a tourism development process which prioritises biodiversity conservation, rural economic development, and sustainable tourism. It is also an example of how wider policy and planning frameworks can be conducive to the creation of such World Heritage Sites with tourism potential.

5. REFERENCES

Anon (1999a) *Zululand Yearbook*, 1998-1999, KwaZulu-Natal Nature Conservation Services

Anon (1999b) *Maputaland Yearbook*, 1998-2000, KwaZulu-Natal Nature Conservation Services

Anon (1999c) *West Division Yearbook*, 1998-1999, KwaZulu-Natal Nature Conservation Services

Anon (2000a) *Who we are: Tourism, Hospitality and Sport Education and Training Authority*, www.theta.org.za/index.htm, 20 December 2000

Anon (2000b) *The Gaza-Kruger-Gonarezhou Transfrontier Park: A new era in ecosystem management and co-operation for Southern Africa*, www.environment.gov.za/projects/gkg_transfrontier/background.htm

Anon (2000c) *Business Trust Reports: Prospectus*, www.btrust.org.za/reports/reports.htm

Anon (2000d) *Three governments launch investment opportunities in the Lubombo region, Lubombo Spatial Development Initiative*, www.environment.gov.za/docs/2000/lubombo_sdi_initiative.htm

Anon (Undated a) *Cape Peninsula National Park*, www.cpnnp.co.za

Anon (Undated b) *Addo Elephant National Park*, www.parks-sa.co.za/addo/

Barker, N. (1997) *Return to the battle-front at St Lucia*, Electronic Mail & Guardian, Johannesburg, South Africa, 20 November 1997, www.mg.co.za/mg/news/97nov2/20nov-conservation.html

Berlin Declaration (1997) *Biological Diversity and Sustainable Tourism*, agreement at the International Conference of Environmental Ministers on Biodiversity and Tourism, 8 March 1997, Berlin, www.insula.org/tourism/pagina_n4.htm

Ceballos-Lascurain, H. (1996) *Tourism, ecotourism and protected areas*, IUCN

Cowan, G. I. and Van Riet, W. (1998) *A directory of South African Wetlands*, Department of Environmental Affairs and Tourism, Pretoria, Cited in DEA&T (1999b) *op. cit.*

DEA&T (1996) *The development and promotion of tourism in South Africa*, White Paper, Government of South Africa, Department of Environmental Affairs and Tourism (H973)

DEA&T (1997a) *White Paper on the Conservation and Sustainable use of South Africa's Biological Diversity*, Department of Environmental Affairs and Tourism, Government Gazette, Vol 385, No. 18163, July 28th 1997, Government Printer, Pretoria, www.environment.gov.za/white_paper/diversity.htm

DEA&T (1997b) *Draft White Paper on Environmental Management Policy*, Government of South Africa, Department of Environmental Affairs and Tourism, Government Gazette, Vol 385, No. 18164, July 28th 1997, Government Printer, Pretoria, www.environment.gov.za/soer/nsoer/resource/emwhite/emwhite.htm

DEA&T (1997c) *Environmental Policy Development Projects that are currently being undertaken*

Environmental Affairs and Tourism, April 1997,
www.environment.gov.za/soer/nsoer/resource/envproj/envproj.htm

DEA&T (1999a) *Tourism Factsheet August 1999*, Department of Environmental Affairs and Tourism, www.environment.gov.za/tourism/factsheet99/index.html

DEA&T (1999b) *The National State of the Environment Report*, Department of Environmental Affairs and Tourism, www.ngo.grida.no/soesa/nsoer, Updated February 2000

DEA&T (1999c) *Tourism Amendment Bill*, Minister of Environmental Affairs and Tourism, Republic of South Africa, B50F – 99

DEA&T (1999d) *Review of infrastructure in support of international and domestic tourism development, Final report: Tourist Infrastructure Investment Framework*, May 1999, KPMG report, Department of Environmental Affairs and Tourism in association with the Development Bank of South Africa,

DEA&T (2000a) *Tourism Factsheet August 2000, South African Tourism Statistics, Foreign Tourist Arrivals 1999*, Department of Environmental Affairs and Tourism, www.environment.gov.za/tourism/factsheet2000/index.html

DEA&T (2000b) *Launch of the South African Tourism Institute*, Media Statement, Ministry of Environmental Affairs and Tourism 26 October 2000, www.environment.gov.za, 27 November 2000

DEA&T (2000c) *South Africa National Report to the Fourth Conference of the Parties, Convention on Biological Diversity*, Department of Environmental Affairs and Tourism, www.environment.gov.za/chm-final/cbdrep2.htm

DEA&T (2000d) *Government and business, partnering to transform tourism*, Media Statement, Ministry of Environmental Affairs and Tourism, 21 November 2000, www.environment.gov.za/speeches/2000/21nov2000.htm

DEA&T (2000e) *South African National Report on the Convention on Biological Diversity*, Department of Environmental Affairs and Tourism, www.environment.gov.za

DEA&T (2000f) *National Biodiversity Strategy and Action Plan*, Concept Document/DEAT Vision Document

DEA&T (2000g) *Earth Summit 2002: UN Conference on Environment and Development*, Media Statement, Ministry of Environmental Affairs and Tourism, 12 December 2000, www.environment.gov.za/earthsummit2002/index.html

DEA&T (2000h) *World Heritage Conservation Act – Publication of Draft Regulations for Greater St Lucia Wetlands Park*, 12 July 2000, www.polity.org.za/govdocs/pr/2000/pr0712a.html

DEA&T (2000i) *Greater St Lucia Wetland Park: Integrated Development Management Plan*, Lubombo Spatial Development Initiative, KwaZulu-Natal Nature Conservation Services Interdepartmental Discussion Draft, August 2000

DEA&T (2000j) *Transfrontier protocol paves the way for cross-border conservation and tourism*

DEA&T (2000k) *Lubombo Infrastructure Steering Committee*, 12 July 2000, www.polity.org.za/govdocs/pr/2000/pr0712.html

DSI (Decision Surveys International) (1999a) *A Survey of South Africa's Foreign Visitor Market*, August 1999, SATOUR

DSI (Decision Surveys International) (1999b) *A Survey of South Africa's Foreign Visitor Market*, January 1999, SATOUR

DTI (Department of Trade and Industry) (1997) *Participative Cluster workshops from 10 to 13 November 1997*, Internet document on DTI website, wwwdti.pwv.government.za/dtiwww/cluster_workshop.htm, cited in Urquhart, P. (1999) *op. cit.*

Duthie, D. (2000) *Invitation: Biodiversity Planning Support Programme (BPSP): Integrating Biodiversity into the Tourism Sector: Best Practice and Country Case Studies*; September 27, 2000, Sent by e-mail.

Eagles, P. F. L., McCool, S. F., and Haynes, C. (2000) *Sustainable Tourism in National Parks and Protected Areas: Guidelines for Planning and Management*, United Nations Environment Programme, World Tourism Organization, and the World Conservation Union, Draft 1: September 2000

Futter, M., and Wood, L. (1997) *The Tourism = Employment equation: Does it add up?* Indicator South Africa, Vol 14 (2), 48-53, Winter 1997, cited in Urquhart, P. (1999) *op. cit.*

Honey, M. (1999) *Ecotourism and sustainable development: Who owns paradise?* Island Press

Koch, E. (1994) *Reality or Rhetoric? Ecotourism and Rural Reconstruction in South Africa*, United Nations Research Institute for Social Development, Geneva, p21, cited in Honey, M. (1999) *op. cit.*

Koch, E. (Ed) (Undated) *Job creation and economic development through the use of natural resources*, Training manual: Partnerships for growth and development (Draft), CPP/GTZ

KZNNCS (KwaZulu-Natal Nature Conservation Service) (2000) *Budgets and Expenditure*, Finance Division, KZNNCS, Unpublished Data

Hospitality Industries Training Board (HITB) (2000) *Business Trust Tourism Learnership Project*, Presentation by the HITB, 1st February 2000, www.environment.gov.za/projects/leadership/tsld008.htm

International Conference on Biodiversity and Tourism (1997) *The Berlin Declaration*, Drafted at the International Conference of Environment Ministers on Biodiversity and Tourism, 6-8 March, 1997 in Berlin

Mabudafhasi, R. T. (2000) *Debate on the Tourist Guide Amendment Bill in the National Assembly*, 19 May 2000, Department of Environmental Affairs and Tourism

Mittermeier *et al* (1997) *Megadiversity*, Conservation International/Cemex

Moosa, V. (1999) *A welcome start to South Africa's Tourism Campaign*, Press Release, Department of Environmental Affairs and Tourism, 8 December 1999,

Münster, D. O. & Sandwith, T. S. (1998) *Conceptual development plan for the Hluhluwe-Umfolozzi Park*, Planning Division, KwaZulu-Natal Nature Conservation Service

Murray, J., Williams, J., and Everist, R. (1998) *South Africa, Lesotho and Swaziland*, 3rd Edition, Lonely Planet

Natal Parks Board (1992) *Integrated Environmental Management*, Natal Parks Board Policy, Board Minute 6 (a) (ii), 28 February 1992

North West Parks and Tourism Board (Undated) *Madikwe Game Reserve*, www.parks-nw.co.za/madikwe/index.html

Pieterse, E. (1999) *Management Plan: Kempiana*, Unpublished Report, Draft

Poultney, C. and Spenceley, A. (2000) *Pro-poor tourism strategies of Wilderness Safaris, Maputaland: Case study for the pro-poor tourism project*, Report to the Overseas Development Institute, Forthcoming on ODI website

RSA (Republic of South Africa) (1998a) *National Environmental Management Act*, No 107 of 1998, available at www.polity.org.za/govdocs/legislation/1998/act98-107.html

RSA (Republic of South Africa) (1998b) *National Forests Act, No 84 of 1998*, Government Gazette, Vol 400, No 19408, 20 October

RSA (Republic of South Africa) (1998c) *Marine Living Resources Act, No 18 of 1998*, available at www.polity.org.za/govdocs/legislation/1998/

Sandwith, T. (2000) *Nature-based tourism: A key strategy for sustaining biodiversity in KwaZulu-Natal, South Africa*, In Gundling, L., Korn, H., and Specht, R. (eds) *International Workshop: Case Studies on Sustainable Tourism and Biological Diversity*, at the International Academy for Nature Conservation, Isle of Vilm, Germany, November 11-14, 1999, Federal Agency for Nature Conservation, BfN-Skripten 16

SANP (1998) *Corporate Plan: A framework for action and transformation*, South African National Parks, June 1998

SAPS (South Africa Police Services Crime Information Management Centre) (1998) *The incidence of serious crime*, January to June 1998, Quarterly Report, 3/98. Pretoria, SAPS, pp 2, cited in DEA&T (1999b) *op. cit.*

SATOUR (1999) *South African Tourism Statistics: Foreign Tourist Arrivals 1999*, Tourism Factsheet 2000, www.environment.gov.za/tourism/factsheet2000/index.html

South African Institute for Race Relations (1998) *South Africa Survey 1997-1998*, Johannesburg, Cited in DEA&T (1999a) *op. cit.*

Spenceley, A. (2000) *Sustainable nature-based tourism assessment: Ngala Private Game Reserve*, Unpublished report to Ngala Private Game Reserve

Spenceley, A. (2001) *Sustainable nature-based tourism assessment: Pretoriuskop Camp, Kruger*

Taylor, I., and Castis, T. (2000) *The Lubombo Spatial Development Initiative*, www.kwazulunatal.org/invest/invest_news.html#2

Terblanche, S. and Howse, J (Eds) (2000) *CCAfrica Foundation - Profile, 2000*, Africa Foundation: Rural Investment Fund

The Cluster Consortium (1999) *South Africa's Tourism Challenge*, cited in Urquhart, P. (1999) *op. cit.*

UNAIDS (Undated), Cited in McGeary, J. (2001) *Death Stalks a Continent*, *Time*, February 12, 2001, pp46-54

Urquhart, P. (1999) *Stimulating Sustainable Trade, Case Study: Tourism in South Africa*, June 1999 (Final Draft), Unpublished report to IIED

Van Zyl, J. and Mahony, K. (2000) *Practical strategies for pro-poor tourism*, Concept Report, Spatial Development Initiative Programme, September 2000

Visser, B. (2000) *Addo expansion will create super-park*, *Mail and Guardian*, March 31 to April 6 2000, pp 44

WTTC (1998) *South Africa's Travel and Tourism: Economic Driver for the 21st Century*, Travel and Tourism, Creating Jobs, World Travel and Tourism Council, September 1998

Zuma (2000) *Address by Deputy President Zuma at the launch of the first and fourth phases of the Lubombo Spatial Development Initiative*, www.polity.org.za/govdocs/speeches/2000/sp1111.html

Personal Communications

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