



Environment

In terms of its biological heritage, South Africa is recognised as one of the richest nations in the world. The overarching vision of the Department of Environmental Affairs and Tourism is a prosperous and equitable society living in harmony with its natural resources. The department manages the development and implementation of policies governing three interrelated components of South Africa's socio-economic development: tourism, the fishing industry and environmental management.

Government leads protection of the environment by example. At regional level, the provincial conservation agencies are major role-players, and independent statutory organisations such as South African National Parks (SANParks) and the South African National Biodiversity Institute (Sanbi) are valuable partners in the country's total conservation effort.

South Africa has taken several concrete steps to implement the United Nations' (UN) Agenda 21 on sustainable development. These include reforming environmental policies, ratifying international agreements, and participating in many global and regional sustainable-development initiatives.

Environmental heritage

South Africa enjoys the third-highest level of biodiversity in the world. It has between 250 000 and a million species of organisms, much of which occur nowhere else in the world.

While South Africa occupies about 2% of the world's land area, it is estimated that the country is home to 10% of the world's plants and 7% of the reptiles, birds and mammals. The southern African coast is home to almost 15% of known coastal marine species, providing a rich source of nutrition and supporting livelihoods of coastal communities.

Fact:

The Kirstenbosch-South Africa exhibit at the 2006 Chelsea Flower Show in the United Kingdom won a gold medal – the 28th medal out of 31 annual entries by South Africa to the show.

The country's three globally recognised biodiversity hotspots include the Cape Floral Region, which falls entirely within South African boundaries; the Succulent Karoo, which South Africa shares with Namibia; and Maputaland-Pondoland, which South Africa shares with Mozambique and Swaziland. The coastline meets the Atlantic, Indian and Southern oceans that provide exceptional habitats ranging from cool water kelp forests to tropical coral reefs.

The Cape Floral Kingdom has the highest recorded species diversity for any similar-sized temperate or tropical region in the world. It is a world heritage site.

Biomes

There are eight major terrestrial biomes, or habitat types, in South Africa. These biomes can, in turn, be divided into 70 veld types. The biomes are savanna, Nama-Karoo, succulent Karoo, grassland, fynbos, forest, thicket and desert. The fynbos biome is one of only six floral kingdoms worldwide.

By June 2006, the Department of Environmental Affairs and Tourism had created over 16 800 job opportunities, 254 permanent jobs and almost 103 000 training days in the preceding year with its social-responsibility projects and programmes.

It planned to launch a social impact study in 2006 to evaluate these programmes, and also aimed to create 12 500 more job opportunities, 300 more permanent jobs and over 130 000 training days.

The Thubaleth' Elihle (our good opportunity) community craft group, involving 80 rural women, is one of the initiatives launched to help local communities who are under increasing social and economic pressure to make sustainable use of environmental resources available to them. The women of Thubaleth' Elihle produce goods made from fabric woven from an indigenous water-loving sedge called 'ikhwane', which is the most abundant plant in the 400-hectare Mbongolwane wetland.

Co-ordinated by the South African National Biodiversity Institute, the exhibit featured 2 500 kg of semi-precious stones and flowers and had a waterwise theme.

The show has been an annual event since 1826 in Chelsea, London.

Conservation areas

South Africa is committed to meeting the World Conservation Union (IUCN) target of 10% of land area being under protection. There are a number of management categories of protected areas in South Africa, which conform to the accepted categories of the IUCN.

Scientific reserves

These are sensitive, undisturbed areas managed for research, monitoring and the maintenance of genetic sources. Access is limited. Examples are Marion Island and the Prince Edward islands near Antarctica.

Wilderness areas

These areas are extensive in size, uninhabited, underdeveloped, and access is strictly controlled. Examples are the Cedarberg Wilderness Area and Dassen Island in the Western Cape.

Because of the geographic spread and diversity of South Africa's plant and animal species – up to 80% of significant biodiversity lies outside existing protected areas – a traditional approach to conservation is inadequate. Biodiversity priorities have to be integrated with all citizens' policies, plans and programmes.

The Minister of Environmental Affairs and Tourism, Mr Marthinus van Schalkwyk, launched South Africa's National Biodiversity Strategy and Action Plan (NBSAP) in June 2006. The NBSAP aims to guide conservation and the management of biodiversity to ensure sustainable and equitable benefits for all communities.

It highlights five strategic objectives, such as the need for a network of protected areas that conserve a sample of all South Africa's biodiversity, and specifies how these are to be realised and sets five- and 15-year targets for each. It also provides for the entrenchment of biodiversity concerns in production sectors such as mining and forestry, by focusing on the inclusion of biodiversity priorities in guidelines and codes of best practice and on measures to encourage sustainable production practices.

Fact:

South Africa is home to seven world heritage sites, as determined by the World Heritage Committee. In 2006, there were 812 world heritage sites in 137 countries. Africa had 65 sites and South Africa had three cultural, three natural and one mixed site.

National parks and equivalent reserves

SANParks manages several national parks throughout South Africa's provinces. The system of national parks is representative of the country's important ecosystems and unique natural features.

Commercial and tourism-conservation development and the involvement of local communities are regarded as performance indicators. These areas include national parks proclaimed in terms of the National Parks Act, 1976, provincial parks, nature reserves and indigenous state forests.

Some of these natural and scenic areas are extensive in size and include large representative areas of at least one of the country's biomes. Since 1994, parks under SANParks have expanded by 166 071 ha.

In June 2006, the Minister of Environmental Affairs and Tourism, Mr Marthinus van Schalkwyk, announced that in terms of priorities identified in the National Biodiversity Strategy and Action Plan, another 230 000 ha would be added to the national parks to ensure the inclusion of underrepresented biomes, such as grasslands. Among others, the Knysna forests and Soetkraal would become part of the Tsitsikamma, and the QwaQwa Nature Reserve would be added to Golden Gate Highlands.

During 2006/07, portions of the new Wild Coast National Park, located in a globally recognised biodiversity hotspot with more than 1 500 plant species alone, were expected to be declared. It is expected to draw more than 245 000 tourists by 2008 and 270 000 by 2013, thus creating some 3 260 direct and indirect new jobs.

The new Blyde River National Park was declared on Heritage Day, 24 September 2006. It lies in an area with over 2 000 plant species (of which 163 are Red Data plants), which is more than in the entire Kruger National Park. The park is in the Blyde River Canyon, which has one of the richest troves of plants and animals in southern Africa. Some R18 million has been allocated for infrastructure for the park



South Africa's National Parks

Ais-Ais/Richtersveld

Addo Elephant

Agulhas

Augrabies Falls

Blyde River

Bontebok

Camdeboo

Golden Gate Highlands

Kgalagadi

Karoo

Kgalagadi

Knysna National Lakes Area

Kruger

Marakele

Mapungubwe

Mountain Zebra

Namaqua

Table Mountain

Tankwa-Karoo

Tsitsikamma

Vaalbos

West Coast

Wild Coast

Wilderness

Source: SANParks

over the next three years, starting with a R10-million luxury hiking trail. The park was expected to boost the local economy by R500 million over the next decade.

A transfrontier conservation area (TFCA) is a cross-border region. The conservation status of the areas within it varies from national parks, private game reserves, and communal natural-resource management areas to hunting concession areas. Though fences,



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| 1. Addo Elephant National Park | 12. Mountain Zebra National Park |
| 2. Agulhas National Park | 13. Namaqua National Park |
| 3. Augrabies Falls National Park | 14. Ais-Ais/Richtersveld National Park |
| 4. Bontebok National Park | 15. Table Mountain National Park |
| 5. Golden Gate Highlands National Park | 16. Tankwa Karoo National Park |
| 6. Karoo National Park | 17. Tsitsikamma National Park |
| 7. Kgalagadi Transfrontier Park | 18. Vaalbos National Park |
| 8. Knysna National Park | 19. West Coast National Park |
| 9. Kruger National Park | 20. Wilderness National Park |
| 10. Mapungubwe National Park | 21. Camdeboo National Park |
| 11. Marakele National Park | |

highways, railway lines or other barriers separate the constituent areas, they are managed jointly for long-term sustainable use of natural resources. Unlike transfrontier parks, free movement of animals between the components of a TFCAs is not always possible.

TFCAs aim to facilitate and promote regional peace, co-operation and socio-economic development. The success of TFCAs depends on community involvement. In turn, TFCAs are likely to provide local communities with opportunities to generate revenue.

TFCAs are expected to allow tourists easy movement across international boundaries into adjoining conservation areas.

The six identified TFCAs are the:

- Ais-Ais/Richtersveld Transfrontier Conservation Park
- Kgalagadi Transfrontier Park
- Limpopo-Shashe TFCA
- Great Limpopo Transfrontier Park
- Lubombo Transfrontier Conservation and Resource Area
- Maloti-Drakensberg Transfrontier Conservation and Development Area.

The National Environmental Management: Protected Areas Amendment Act, 2004 protects South Africa's biosphere reserves, which are generally formed around existing core conservation areas.

Biosphere reserves include outstanding natural beauty and biological diversity, exist in partnership with a range of interested land owners and can incorporate development, as long as it is sustainable, while still protecting terrestrial or coastal ecosystems.

National and cultural monuments

These are natural or cultural features, or both, and may include botanical gardens, zoological gardens, natural heritage sites and sites of conservation significance.

In December 1999, Robben Island, the Greater St Lucia Wetlands Park and the Cradle of Humankind were proclaimed world heritage sites by the United Nations Educational, Science and Cultural Organisation (Unesco).

The Ukhahlamba-Drakensberg Park was nominated as a mixed site. In July 2003, the site of the Mapungubwe civilisation became

More than a million people visit the Kruger National Park every year. Comprising almost two million hectares, the park has over 500 bird, 336 tree and 147 mammal species. It also has 49 species of fish.

Climate of provincial capitals

Province	Capital	Average temperature (°C)	
		January	July
Eastern Cape	Bhisho	22,1	13,8
Free State	Bloemfontein	23,0	7,7
Gauteng	Johannesburg	20,1	10,4
KwaZulu-Natal	Pietermaritzburg	22,9	12,9
Mpumalanga	Nelspruit	24,0	14,8
Northern Cape	Kimberley	25,3	10,8
Limpopo	Polokwane	22,6	12,2
North West	Mafikeng	24,1	12,0
Western Cape	Cape Town	20,9	12,2

Source: Department of Environmental Affairs and Tourism, South African Weather Service

the fifth heritage site. The Cape Floral Region also became a world heritage site at the end of June 2004.

The Vredefort Dome in the Free State was declared South Africa's seventh world heritage site at the 29th session of the Unesco World Heritage Conference held in Durban in July 2005, when the body met in sub-Saharan Africa for the first time.

Makapan Valley in Limpopo and the Taung Cave in North West were declared extensions of the Cradle of Humankind.

Habitat and wildlife management areas

These areas include conservancies; provincial, regional or private reserves created for the conservation of species, habitats or biotic communities; marshes; lakes; and nesting and feeding areas.

Sustainable-use areas

These areas emphasise the sustainable use of products in protected areas such as the Kosi Bay Lake system in KwaZulu-Natal.

Wetlands

Wetlands include a wide range of inland and coastal habitats – from mountain bogs, fens and midland marshes to swamp forests and estuaries, linked by green corridors of streambank wetlands.

The Working for Wetlands Programme focuses on wetland restoration, while maximising employment creation, support for small, medium and micro enterprises and skills transfer.

Botanical gardens

There are eight botanical gardens in five provinces. The largest is Kirstenbosch in Cape Town. It houses 5 300 indigenous plant species, and was voted one of the top seven botanical gardens in the world in 1999. It receives more than 750 000 visitors a year.

The Pretoria National Botanical Garden houses the National Herbarium of South Africa, the largest in the southern hemisphere.

All the gardens are signatories to the International Agenda for Botanic Gardens in Conservation and are founding members of the African Botanic Gardens Network.

Zoos

The 80-ha National Zoological Gardens (NZG) of South Africa in Pretoria is one of the world's 10 best. It attracted more than 600 000 visitors in 2005. The national zoo is responsible for the breeding centres in Lichtenburg and Mokopane, and the satellite zoo and animal park at the Emerald Animal World complex in Vanderbijlpark.

The NZG was declared a national research facility, subject to the provisions of the National Research Foundation, in March 2004. The declaration of the zoo as a national research facility presents a remarkable opportunity for the zoo to reposition itself as one of the world leaders in breeding and researching endangered species.

On 1 April 2006, the zoo's collection included 2 889 specimens of 213 mammal species, 1 418 specimens of 221 bird species,

Fact:

The Maropeng (Setswana for 'the place where we once lived') visitors' facility at the Cradle of Humankind World Heritage Site helps tourists, schoolchildren and others explore the rich fossil heritage of the area by bringing to life the history of humankind in an entertaining and educative manner.

4 639 specimens of 217 fish species, 118 specimens of 12 invertebrate species, 529 specimens of 113 reptile species, and 90 specimens of seven amphibian species.

There are a number of zoological gardens in South Africa.

Marine protected areas (MPAs)

The MPAs are modelled on the success of the Greater St Lucia Wetlands Park – with strict zoning of both marine and coastal protected areas. The four MPAs are Aliwal Shoal on the south coast of KwaZulu-Natal, the coastal and marine environment next to Pondoland in the Eastern Cape, Bird Island at Algoa Bay, and the Cape Peninsula in the Western Cape.

Some of the protection measures to be implemented in the MPAs are restrictions for people who want to fish, as well as restrictions for stowing fishing gear when fishing from a vessel.

Marine resources

The sustainable exploitation of marine resources on the one hand and the demand for fish products from local and foreign consumers on the other, pose a growing challenge globally, and South Africa, with her 3 000 km-long coastline, is no exception. The Marine Living Resources Act, 1998 sets out the broad objectives of fishery management and access rights. It also sets empowerment and broad transformation objectives for the fishing industry.

South Africa's fisheries are among the best-managed in the world.

In September 2005, South Africa took delivery of the last of four environmental-protection vessels, the *Victoria Mxenge*.

The other three vessels, *Lilian Ngoyi*, *Sarah Baartman* and *Ruth First*, were received in September 2004, January 2005 and May 2005, respectively.

The patrol vessels – all named after women who showed courage, dedication and commitment to the struggle for freedom – are used in

The fossils are from sites in Gauteng and North West and are the remains of ancient animal forms, plants and hominids that were captured in a bed of dolomite deposited some 2,5 billion years ago. Visitors to Maropeng's interpretation centre can explore the history of the Earth and humankind.

assisting with high-speed disaster relief, search and rescue, evacuations, fire-fighting, pollution control, towing and other emergency operations. The *Florence Mkhize* speed vessel was introduced in June 2006 to assist in combating poaching.

South African beaches participate in the Blue Flag Campaign.

South Africa's coastal management policy is one of the best in the world, with the country being the first outside Europe to gain Blue Flag status for coastal management.

Some of the most popular beaches in South Africa are:

- Camps Bay, Western Cape
- Clifton, Western Cape
- Llandudno, Western Cape
- Muizenberg, Western Cape
- Hobie Beach, Eastern Cape
- Humewood Beach, Eastern Cape
- Margate, KwaZulu-Natal
- Umhlanga Rocks, KwaZulu-Natal
- Grotto Beach, Western Cape
- Marina South Coast, KwaZulu-Natal.

The Working for the Coast Programme was launched in October 2000. It has succeeded in upgrading the environment and improving the lives of many people living along the coast.

More than 55 teams of workers have been formed along South Africa's coast to upgrade the environment, with many of them having started their own small businesses.