

Environment, Forestry and Fisheries

The Department of Environment, Forestry and Fisheries (DEFF) is mandated to give effect to the right of citizens to an environment that is not harmful to their health or wellbeing, and to have the environment protected for the benefit of present and future generations. To this end, the department provides leadership towards sustainability in environmental management, conservation and protection for the benefit of South Africans and the global community.

The National Development Plan (NDP) sets out a vision for promoting environmental sustainability in South Africa by making an equitable transition to a low-carbon economy and transforming human settlements for improved local governance and spatial integration. Broadly, the NDP envisions environmental sustainability and transformation within the context of an integrated and inclusive economy that is supported by a capable and developmental state. This vision is given expression by Priority 1 (economic transformation and job creation), Priority 4 (spatial integration, human settlements and local government) and Priority 6 (a capable, ethical and developmental state) of government's 2019 – 2024 Medium Term Strategic Framework (MTSF), with which the work of the DEFF is closely aligned.

Accordingly, the department's ongoing objective is to develop strategies and policies aimed at regulating and promoting the sustainable use of inland and coastal natural resources; and reducing carbon emissions, atmospheric pollutants and the effect of climate change. As part of the national macro organisation of government, the Forestry and Fisheries functions of the former Department of Agriculture, Forestry and Fisheries have been shifted to the DEFF, with effect from 1 April 2020. Over the medium term, the DEFF will focus on creating jobs and work opportunities through the Expanded Public Works Programme (EPWP). Other focus areas over the period include enforcing and monitoring compliance with environmental legislation, conserving marine ecosystems, investing in biodiversity, monitoring climate change and air quality, and managing waste activities.

Creating jobs and work opportunities through the EPWP

The DEFF's commitment to job creation is reflected in its targets to provide 115 880 full-time equivalent jobs (including 22 650 forestry full-time equivalent jobs) and 184 618 work opportunities through the EPWP over the medium term. These jobs and work opportunities will be made available through projects and initiatives that focus on:

- restoring and rehabilitating degraded ecosystems (environmental protection and infrastructure programme);
- expanding the conservation estate (Working for Ecosystems);
- protecting, restoring and rehabilitating wetlands (Working for Wetlands);
- protecting water resources (Working for Water);
- managing land use sustainably (Working for Land);
- sustaining production, growth and transformation in the forestry sector (Working for Forests); and
- addressing the challenges faced by the fisheries sector (Working for Fisheries).

Through the Working for Forests project, the department aims to sustain production, growth and transformation in the forestry sector. The programme is expected to achieve this through the replantation of temporary unplanted areas, handing plantations over to communities, placing hectares (ha) of land under silvicultural practice (which includes weeding, pruning, coppice reduction and thinning), and restoring and rehabilitating ha of state indigenous forests and woodlands.

To address the challenge faced by the fisheries sector, R894.8 million is expected to be transferred to the Marine Living Resources Fund as part of the Working for Fisheries project over the medium term. The broader aim of the programme is to alleviate poverty while empowering beneficiaries to participate in the mainstream fishing economy. Projects include conserving fish stocks, constructing and maintaining aquaculture production systems and cleaning coastal areas. This investment is expected to result in the creation of 1 638 full-time equivalent jobs over the medium term.

The Working for Ecosystems project aims to reverse environmental degradation through ecological restoration and maintenance programmes. It also aims to regain natural habitat

composition, structure and function and thereby enhancing ecosystem services, such as: carbon sequestration, water regulation and purification, reducing the risk of natural disasters by improving landscape/catchment stability and resilience.

The Working for Water project considers the development of people as an essential element of environmental conservation. Short-term contracts jobs created through the clearing activities are undertaken, with the emphasis on endeavouring to recruit women (the target is 60%), youth (20%) and people living with disabilities (5%).

The Working for Land project is an essential programme of the Natural Resource Management programmes. Its key objective is to ensure that degraded ecosystems are restored to their formal or original state wherein they are able to maintain or support the natural species of that system.

The Working for Wetlands project pursues its mandate of wetland rehabilitation and wise use in a manner that maximises employment creation, supports small emerging businesses, and transfers skills to its beneficiaries. In line with the EPWP norms, the programme targets those groups most excluded from the mainstream economy, with particular emphasis on women, youth and people with disabilities.

The Working on Fire project employs more than 5 000 young people who have been fully trained as veld and forest fire fighters and are stationed in more than 200 teams throughout South Africa. It addresses the prevention and control of wildland fires to enhance the sustainability and protection of life, poverty and the environment through the implementation of integrated fire management practices.

The Working on Waste project is a proactive and preventative measure which recognises that inadequate waste services may lead to litter which is not only visual pollution but may lead to health hazards and environmental degradation.

Spending on initiatives in the EPWP collectively accounts for 44.1% (R12 billion) of the DEFF's total budget over the Medium Term Expenditure Framework (MTEF) period.

Enforcing and monitoring compliance with environmental legislation

Effective compliance and enforcement underpins environmental

justice and the integrity of South Africa's regulatory system. As such, the DEFF will continue to enforce legislation and regulations governing international trade in wild animals and plants at ports of entry and exit. Deploying Environmental Management Inspectors (EMIs) and compliance and enforcement officials at all ports will require the procurement of office space, equipment to handle animals, safes and microchip scanners.

This will enable officials to inspect an estimated 495 environmental permits over the MTEF period to ensure that protected species and alien plants are not smuggled into and out of the country. An estimated R661 million is provided over the medium term for these activities.

Conserving marine ecosystems

The DEFF plans to continue supporting research voyages to Antarctica, Marion Island and Gough Island. These expeditions support long-term biological, environmental and meteorological research. To carry out this work, the operation and manning of two research vessels accounts for an estimated 23.6% (R380.5 million) of total expenditure in the Oceans and Coasts programme over the medium term.

A further R330.6 million is allocated to implementing the Oceans Economy Strategy, which includes manufacturing for marine transport, offshore oil and gas exploration, aquaculture, marine protection services, and ocean governance.

Investing in biodiversity

In its efforts to ensure that a representative sample of the country's biodiversity is placed under formal protection, the DEFF plans to increase the area of land under conservation from 13.5% in 2018/19 to a projected 14.7% in 2021/22. This entails facilitating the identification of 2 000 ha for the cultivation of indigenous species across the country and providing training to 800 biodiversity entrepreneurs as part of the department's efforts to ensure that biodiversity contributes substantially to the economy. This is expected to result in expenditure of R156 million over the medium term, representing 6.1% of the programme's total budget of R2.6 billion over the same period. The bulk of this expenditure is for operational transfers to the South African National Parks (SANParks), the United Nations

Framework Convention on Climate Change (UNFCCC), the South African National Biodiversity Institute (SANBI), and the iSimangaliso Wetland Park Authority.

Monitoring climate change and air quality

To contribute towards the reduction in air pollution, the DEFF plans to increase the number of government-owned air quality monitoring stations reporting to the South African Air Quality Information System (SAAQIS) from 117 in 2018/19 to 125 in 2021/22. This will be made possible by an allocation of R148 million over the medium term. This allocation will also enable the department to roll out the Let's Respond Toolkit to a projected 40 municipalities to integrate their climate change responses into its planning documents.

This entails reviewing the development plans of municipalities and guiding them to be responsive to climate change, with particular focus on the effects of climate change on vulnerable communities and sustainable economic development.

Legislation and policies

The DEFF's mandate is derived from the following legislation:

- the National Environmental Management Act (NEMA), 1998 (Act 108 of 1998), which provides for specific legislation on biodiversity and heritage resources, oceans and coasts, climate change and air quality management, and waste and chemicals management;
- the National Environmental Management Amendment Act, 2004 (Act 8 of 2004), which streamlines the process of regulating and administering the Environmental Impact Assessment (EIA) process;
- the National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004), which reforms the law regulating air quality in order to protect the environment by providing reasonable measures for preventing pollution and ecological degradation, and securing ecologically sustainable development; and provides for national norms and standards that regulate the monitoring of air quality;
- the National Environmental Management: Biodiversity Act (NEMBA), 2004 (Act 10 of 2004), which significantly reforms South Africa's laws regulating biodiversity;

- the National Environmental Management: Integrated Coastal Management Act, 2008 (Act 24 of 2008), which promotes the conservation of the coastal environment, and ensures sustainable development practices and the use of natural resources:
- the National Environmental Management: Waste Act, 2008 (Act 59 of 2008), which reforms the law regulating waste management in order to protect health and the environment by providing reasonable measures for the prevention of pollution;
- the National Environmental Management: Protected Areas Amendment Act, 2009 (Act 15 of 2009), which provides for the assignment of national parks, special parks and heritage sites to South Africa in terms of the World Heritage Convention Act, 1999 (Act 49 of 1999);
- the National Forests Act, 1998 (Act 84 of 1998), which promotes
 the sustainable management and development of forests
 for the benefit of all and creates the conditions necessary to
 restructure forestry in state forests in relation to protection and
 sustainable use:
- the National Veld and Forest Fire Act, 1998 (Act 101 of 1998), which provides for the prevention and combating of veld, forest and mountain fires across South Africa; and
- the Marine Living Resources Act, 1998 (Act 8 of 1998), which deals with the long-term sustainable utilisation of marine living resources.

Budget and funding

The DEFF was allocated R7.5 billion for the 2019/20 financial year. Expenditure is expected to increase at an average annual rate of 3.5%, from R8.7 billion in 2019/20 to R9.6 billion in 2022/23, mainly due to the department's added functions. Spending on goods and services accounts for 54.6% (R15.1 billion) of the department's total expenditure, while spending on compensation of employees' accounts for 23.2% (R6.5 billion). In spite of its added functions, the department's funded establishment is expected to decrease from 4 226 posts in 2019/20 to 3 980 posts by 2022/23, due to the department implementing headcount reduction strategies. As such, the DEFF will terminate 459 positions (40 permanent and 419 fixed contracts) over the period.

Cabinet has approved reductions on the DEFF's baseline budget amounting to R1.5 billion over the medium term. These reductions will mainly be effected on goods and services, primarily for allocations to the EPWP. However, the DEFF will receive additional allocations amounting to R200 million over the MTEF period to strengthen the capacity of the Waste Bureau. An amount of R404.5 million has been reprioritised in the Environmental programmes over the medium term for implementing initiatives as part of Operation Phakisa (R117 million for the Chemicals and Waste Economy programme and R107.5 million for the Biodiversity Economy programme); and to support the full-scale rollout of the Youth Environmental programme in municipalities to coordinate and implement awareness and education initiatives on waste management (R180 million).

International environment days

South Africa has adopted the entire month of June to heighten awareness of environmental issues through various pertinent activities. It is during the month of June that the country celebrates World Environment Day, World Oceans Day and the World Day to Combat Desertification.

World Environment Day

World Environment Day is the biggest, most globally celebrated day for positive environmental action. Every year, participants organise clean-up campaigns, art exhibits, tree-planting drives, and concerts, dance recitals, recycling drives, social media campaigns and different contests themed around caring for the planet.

World Environment Day is the UN's principal vehicle for encouraging worldwide awareness and action for the environment. Over the years, it has grown to be a broad, global platform for public outreach that is widely celebrated by stakeholders in over 100 countries. It also serves as the 'people's day' for doing something positive for the environment, galvanising individual actions into a collective power that generates an exponentially positive impact on the planet.

The day is marked annually on 5 June as per the declaration of the UN in 1972. Each World Environment Day is organised

around a theme that focuses attention on a particularly pressing environmental concern. The theme for 2019, "Beat Air Pollution," was a call to action to combat this global crisis.

World Oceans Day

World Oceans Day is aimed at appreciating, protecting, restoring and honouring ecosystem services and resources provided by oceans.

The international theme for the 2019 World Oceans Day was "Gender and the Ocean." This theme served as an opportunity to explore the gender dimensions of mankind's relationship with the ocean space. The theme opened a platform to address the importance of gender equality towards achieving effective and sustainable use of ocean resources and realising their full socioeconomic potential. Gender equality refers to the equal valuing, by society, of both the similarities and differences among men and women, and the different roles they play in society. The theme aimed to build greater ocean and gender literacy as well as to encourage ways of promoting gender equality in marine-related activities. South Africa celebrated the day under the theme, "Women and the Ocean."

Historically, women's work and contributions in labour at sea, fisheries, policy making and resource management, marine scientific research, and marine and coastal conservation have been completely undermined and undocumented, however, there has been a gradual increase in documentation in the past two decades. Globally, women have made important contributions to inshore aquaculture and fisheries, processing and trading of fish and marine products, in coastal and marine solid waste management, and marine disaster risk reduction initiatives, however, gender challenges and injustices still persist.

World Day to Combat Desertification and Drought

World Day to Combat Desertification and Drought is commemorated on 17 June. It aims to promote community and ecosystem resilience while improving the human condition particularly in dry lands. The period 2010 – 2020 has been declared the UN Decade for Deserts and the Fight against Desertification.

World Day to Combat Desertification and Drought 2019 was held under the theme "Let's Grow the Future Together".

World Wildlife Day

World Wildlife Day is celebrated annually on 3 March. The theme of World Wildlife Day 2020, "Sustaining all life on Earth", encompassed all wild animal and plant species as a component of biodiversity, as well as the livelihoods of people, especially those who live closest to the nature.

Celebrations came at a time when South Africa is making progress in the fight against rhino poaching, with figures showing a steady decline for the fourth consecutive year. Plans to combat wildlife crime are constantly being updated and adapted to meet the incessant and ever-present threat. Entities such as the SANParks, the SANBI, Council for Scientific and Industrial Research, iSimanagaliso, and provincial conservation agencies work together to ensure that

Important dates on the world's environmental calendar	
2 February	World Wetlands Day
20 March	Earth Day
22 March	World Water Day
23 March	World Meteorological Day
27 March	Earth Hour
22 April	Earth Day
22 May	International Day for Marine Biological Diversity
5 June	World Environment Day
8 June	World Oceans Day
17 June	World Day to Combat Desertification
5 – 11 September	World Water Week
16 September	International Day for the Protection of the Ozone Layer
18 September	International Coastal Clean-up Day
22 September	World Car-Free Day
5 October	World Habitat Day
11 December	International Mountain Day

plant and animal life is preserved and conserved for current and future generations.

Marine Week

Each year, the DEFF observes the National Marine Week to highlight the importance of oceans and the role they play in the life of all citizens. Commemoration of National Marine Week takes place during the second week of October annually.

The 2019 National Marine Week was celebrated under the theme: "My Ocean Future". The aim was to educate and encourage the general public, particularly the youth, about curbing the pollution problem. Emphasis was placed on countering pollution at the individual level and at the source. Most pollution originates from land before it gets transported to the coastal areas and the oceans through rivers.

The far-reaching impacts of marine litter pollution is recognised by the UN and several other key international organisations.

Projects, programmes and initiatives

Low carbon and climate resilient economy

South Africa is a board member of three significant funding bodies: namely the Green Climate Fund (GCF); the World Bank's Climate Investment Fund and the Global Environment Facility. The memberships enable the country to shape the policies, programming and governance of these respective institutions. The country is also a member of the Partnership for Action on Green Economy.

The SANBI and the Development Bank of Southern Africa (DBSA) are accredited as South African Direct Access Entities of the GCF. The increasing frequency and intensity of extreme weather events around South Africa – from flash flooding in some parts of the country to devastating drought in other parts, has prompted the government to sign the Paris Agreement to Combat Climate Change as an acknowledgement that the problem requires a global effort.

The country continues to play an active role on the international stage through participation in a number of key multilateral environmental agreements and their associated negotiations.

In addition to finalising the National Climate Change

Adaptation Strategy, the country has developed a draft Climate Change Bill to provide effective national response for both mitigation and adaptation action.

South Africa is also in the process of implementing phase one of the greenhouse gas (GHG) emission reduction system, with carbon budgets already allocated to most of the significant emitters.

South Africa's Green Economy Strategy

There is increasing global recognition that today's economic growth and development trajectory is driven by the worldwide shift towards sustainable green economies.

South Africa views green economy as a sustainable development path based on addressing the interdependence between economic growth, social protection and natural ecosystem. The South African approach is to ensure that green economy programmes are to be supported by practical and implementable action plans, emphasising the importance of building on existing best processes, programmes, initiatives and indigenous knowledge in key sectors towards a resource efficient, low carbon and pro-employment growth path and that government alone cannot manage and fund a just transition to a green economy, that the private sector and civil society must play a fundamental role.

Through the DEFF's Green Economy Strategy, the department continues to work towards promoting equitable, inclusive, sustained and environmentally sound economic growth and social development to the benefit of all.

The Green Economy Strategy has eight key pillars, namely:

- · green buildings and the built environment;
- sustainable transport and infrastructure;
- · clean energy and energy efficiency;
- natural resource conservation and management;
- sustainable waste management;
- · water management;
- · sustainable consumption and production; and
- · agriculture food production and forestry.

As outlined in the Integrated Resource Plan, by 2030 the DEFF aims to have sliced the country's energy demand significantly through technological innovation, good behavioural

practice and public commitment to more efficient, sustainable and equitable energy use.

National Green Fund

The National Green Fund focuses on innovative projects that require financing to cover funding gaps. The fund has a portfolio of 20 active and two completed investment projects, representing investment of R679.8 million since the its inception.

Established in 2011, the fund provides catalytic finance for investment in green initiatives that will support South Africa's transition towards a green economy.

The fund is additional and complementary to existing fiscal allocations, focusing on innovative projects that need to cover a funding or financing gap. It is managed by the DBSA on behalf of the DEFF.

Over the medium term, the National Green Fund is expected to receive additional allocations from the economic competitiveness and support package of R95 million in 2018/19, R111 million in 2019/20 and R117.1 million in 2020/21. Direct investment into projects, including co-investments and additional support realised thus far, amount to R285 million, with contributions from the private sector amounting to R91 million.

Drawing investment from the private sector is one of the key mandates of the fund. As investments begin to show favourable returns, it is expected that private sector investors will invest without any state involvement. As a result, direct investment is expected to exceed R500 million over the medium term.

Over 1 600 direct job opportunities and at least 11 300 indirect job opportunities have been created. The majority of these job opportunities are created under the investment projects portfolio. More than 7 400 individuals have been directly trained and capacitated in the area of green skills.

Sustainable development and the green economy

South Africa continues to play an instrumental role within other global coordination mechanisms.

The final adoption of the Paris Agreement to Combat Climate Change in December 2015 represented a major step forward in international cooperation towards sustainable green, low-carbon and climate-resilient economies globally. During the Paris

negotiating process, South Africa played a key role as Chair of the Group of 77 plus China, representing 134 developing countries, and as lead negotiator for the Africa group.

In April 2016, South Africa joined 174 other countries in New York as a signatory to the Paris Agreement. The DEFF has started domestic ratification processes to enable the entry into force of the agreement in 2020.

This new legal framework will guide international efforts to limit GHG emissions and enable the transition to climate resilient societies and economies, particularly through the commitment by developed countries to provide financial, technology and capacity building support to developing countries in their effort to address the climate change challenge.

In the lead-up to the Paris climate change negotiations, South Africa submitted its Intended Nationally Determined Contribution (INDC) to the UNFCCC. South Africa's INDC is guided by the National Climate Change Response Policy and outlines the national goals for the country's adaptation effort; and it clearly outlines that South Africa will peak and plateau its GHG emissions by 2030.

Good Green Deeds

In 2019, the government launched the Good Green Deeds programme to mobilise citizens and social partners to act now to be a Good Samaritan for Green Deeds.

The programme is led by the DEFF and aims to promote environmental actions that take into consideration sustainable living practices. At the centre of this campaign are principles of environmental justice, an understanding that becoming environmentally conscious starts with one small action, and one small action can go on to inspire a global change. South African citizens have to work together to restore and maintain mother nature's majesty.

Climate Change Response Policy

The National Climate Change Response Policy is guided by the vision of the NDP of a transition to an inclusive, equitable, low-carbon and climate-resilient economy and society by 2030.

By 2030, South Africa plans to have an efficient, lower-carbon

public transport system that makes everyday use of private vehicles an unnecessary extravagance.

The development of the first phase of desired emission reduction objectives and carbon budgets are well underway. The Carbon Budget system will be introduced in five-year phases – an initial phase from 2016 to 2020, and the subsequent phases from 2021 onwards.

Priority focus areas are communities most vulnerable to the impacts of climate change, namely the indigent, rural dwellers and women.

Given its demonstrated capacity, the SANBI has been appointed the national implementing entity of the Global Adaptation Fund.

Pilot projects include the Greater uMngeni Catchment area in KwaZulu-Natal, the Mopani District in Limpopo and the Namaqua District in Northern Cape.

These projects, to the value of US\$10 million, include the enhancement of early warning systems, protecting local communities from extreme weather events, and promoting climate smart agriculture practices.

The South African Weather Service (SAWS) continues to host the Global Atmospheric Watch Station at the Cape Point, which is one of only three in Africa. This network arose from the need to understand and control the increasing influence of human activity on the global atmosphere and provide climate change information and services.

People and parks

South Africa is home to more than nine million ha of protected areas network, which includes national parks, nature reserves and world heritage sites, equating to about 8% of the country's land.

These protected areas, among other things, serve as sites for conserving South Africa's ecosystems, protecting high biodiversity value and providing ecosystem services. Most of these protected areas are geographically located in rural areas, forming an integral system with rural communities whose livelihoods and cultures are closely dependent on by these communities.

Wildlife Economy

South Africa is the third most biologically diverse country in the world, and therefore has one of the largest natural capital assets. This biodiversity is not only viable to the economic wellbeing of the country but can be used as a vehicle for social upliftment.

The country's biodiversity comes with a number of challenges, ranging from poaching to overexploitation. The Wildlife Economy in South Africa is centred on the sustainable use of indigenous biological resources, including biodiversity-derived products for trade and bio-prospecting, the hunting industry, agriculture and agro-processing of indigenous crops and vegetables and livestock breeds and indigenous marine resources and fisheries.

The focus of the Wildlife Economy is centred on the socioeconomic benefits of eco-tourism, co-managed conservation areas and ancillary services to protected areas.

Harvesting indigenous biological resources is a significant source of income for communities. In many cases, one harvester supports an entire household, but the overdependence on these have led to the depletion and, at the extreme, the extinction of some of the biodiversity.

For example, the existing commercial market for trade in South African Bitter Aloe, or Aloe Ferox is well established, as is the trade in Pelargonium Sidoides, Buchu, Rooibos, Honey Bush, Devil's Claw and crocodile fat/oil. These indigenous biological resources are predominantly used in the manufacturing of herbal medicines, cosmetics, food flavours and fragrances.

Additional products with commercial potential for industrial or pharmaceutical application are micro-organisms, marine organisms, gums and resins, and venoms. Other significant drivers of the biodiversity economy include trophy hunting and the associated industry of taxidermy, sale of live game and sale of game meat. Further opportunities exist in the sale of game meat and skins for leather, bones and horns.

Another example of biodiversity-based industry is in silk production. Other biodiversity-based products include beekeeping products (honey, wax, propollis and royal jelly), mopane worms, and ostrich eggshells and feathers.

Managing oceans and coastal conservation

The DEFF continues to support annual research voyages to Antarctica, Marion Island and Gough Island.

Servicing the contract with African Marine Solutions for the manning and operation of two research vessels, SA Agulhas II and SA Algoa, is one of the major cost drivers in the Oceans and Coasts programme, amounting to a projected R557 million over the medium term.

Implementing the Oceans Economy Strategy forms part of Operation Phakisa, a fast results delivery programme launched by the government in 2014. An estimated R311.1 million is provided over the MTEF period in the Oceans and Coasts programme for implementing the Oceans Economy Strategy, which includes activities in marine transport and manufacturing, offshore oil and gas exploration, aquaculture, marine protection services, ocean governance, small harbours, and coastal and marine tourism.

Entities

South African National Parks

The SANParks was established in terms of the National Environmental Management: Protected Areas Act of 2003. Its mandate is to conserve, protect, control and manage national parks and other defined protected areas and their biodiversity. The entity plays a significant role in the economy, as the presence of an efficiently managed system of national parks is a key component of the national tourism economy, and acts as a catalyst for local development. Through the implementation of the EPWP, the entity has provided significant support to small, medium and micro-enterprises, particularly in rural areas. Other initiatives that are intended to stimulate the development of rural enterprises include Wildlife Economy programmes, which involve the donation and loaning of wildlife, and the provision of technical expertise to communities and emerging game farmers to participate in the wildlife industry value chain. The entity also forms part of the National Wildlife Crime Reaction Unit, a multi-stakeholder operation established to combat poaching crimes in South Africa. Over the medium term, the entity aims to: fight poaching, particularly rhino poaching in the Kruger National Park and abalone poaching in Western Cape; roll out its infrastructure plan; and acquire land as part of its land inclusion plan.

Strategies to combat wildlife crime such as poaching involve the technological improvement of early warning systems and risk assessments, better coordination with law enforcement agencies, and the deployment of additional rangers. Accordingly, R788.6 million is allocated over the medium term for combating wildlife trafficking, and R77.8 million is allocated to combat poaching in marine protected areas (MPAs).

The entity's infrastructure plan, which was adopted in 2019, entails the construction of new roads and the development of new tourism infrastructure. This includes undertaking critical upgrades and refurbishing existing infrastructure, mainly in the Kruger National Park, for which R338 million is allocated over the MTEF period. In partnership with the DEFF, the park will finalise the construction of the Golden Gate Highlands National Park Dinosaur Interpretation Centre, valued at R120 million.

The entity manages almost four million ha of state-owned terrestrial protected areas. As per its land inclusion plan, over the medium term, the entity aims to acquire an additional 6 900 ha of land that represents South Africa's biodiversity, landscapes and associated heritage at a price to be established by the market.

The SANParks is responsible for 21 national parks in seven of the nine provinces of South Africa, with a total area of just over four million ha and comprising 67% of the protected areas under state management.

The national parks include:

- Addo Elephant National Park
- Agulhas National Park
- Ai-Ais/Richtersveld Transfrontier Park
- Augrabies Falls National Park
- Bontebok National Park
- Camdeboo National Park
- Garden Route (Tsitsikamma, Knysna and Wilderness)
 National Park
- Golden Gate Highlands National Park
- · Karoo National Park
- Kgalagadi Transfrontier Park
- · Kruger National Park

- Mapungubwe National Park
- Marakele National Park
- Mokala National Park
- Mountain Zebra National Park
- Namagua National Park
- Table Mountain National Park (which incorporates the Cape of Good Hope, Table Mountain and Silvermine nature reserves)
- Tankwa Karoo National Park
- · West Coast National Park.

Tourism activities within the parks include self-drive safaris, game-viewing, accommodation tariffs, adventure activities such as guided walks and hiking, birdwatching, 4x4 trails, sightseeing, cultural and historical experiences, mountain biking, golf, canoeing and swimming.

The organisation is working to increase commercial activities revenue to R1.6 billion in 2019/20.

Expenditure is expected to increase at an average annual rate of 4.8%, from R3.2 billion in 2019/20 to R3.7 billion in 2022/23. Spending on goods and services accounts for 47.5% (R5 billion) of the entity's total expenditure over the MTEF period, while spending on compensation of employees accounts for 41.3% (R4.3 billion). Revenue is expected to increase at an average annual rate of 4.1%, from R3.2 billion in 2019/20 to R3.6 billion in 2022/23. The entity derives 24.6% (R2.5 billion) of its revenue from transfers from the DEFF over the MTEF period, while 71.7% (R7.5 billion) of revenue is expected to be generated from visitor fees to national parks.

National Parks Week

Due to COVID-19 regulations, the 15th annual SANParks Week was moved from September to November 2020.

The free access week was postponed due to the COVID-19 regulations, which restricted the number of people allowed in public spaces.

The SANParks has implemented extra visitor management procedures in the parks to manage visitor volumes, in line with regulations to further mitigate the risk of the spread of the COVID-19 pandemic.

The SANParks Week is an annual campaign that gives all South African citizens the opportunity to enter most of the

parks, managed by the SANParks, for free, with the exclusion of Namaqua National Park and Boulders section at Table Mountain National Park.

The free access to parks does not include free access to accommodation facilities and other tourist activities.

Every year, the SANParks aims to increase the number of citizens that are granted free access to national parks during this time. Since the programme started in 2006, around 551 393 South Africans have been afforded the opportunity to enter national parks.

iSimangaliso Wetland Park Authority

The iSimangaliso Wetland Park Authority was established in 2000 in terms of the World Heritage Convention Act of 1999. It's mandate is to ensure that effective and active measures are taken in the park for the protection and conservation of the World Heritage Convention values; promote the empowerment of historically disadvantaged communities living adjacent to the park; promote, manage, oversee, market and facilitate optimal tourism and related development in the park; and encourage sustained investment and job creation. Its total budget for 2019/20 was R174.2 million.

The Marine Living Resources Fund

The fund was established in terms of the Marine Living Resources Act of 1998. Its mandate and core business is to manage the development and sustainable use of South Africa's marine resources and protect the integrity and quality of the marine ecosystem. The fund also ensures fair and equitable access to South Africa's marine resources for the benefit of all citizens. The fund's total budget for 2019/20 was R490.2 million.

South African Weather Service

The SAWS was established in terms of the SAWS Act, 2001 (Act 8 of 2001). Its core mandate is to provide two distinct services: the public good service, funded by government; and commercial services, where the user-pay principle applies. Key activities include:

 maintaining, extending and improving the quality of meteorological services;

- · providing risk management information;
- collecting meteorological data over South Africa and the surrounding southern oceans; and
- fulfilling government's international obligations under the conventions of the World Meteorological Organisation and the International Civil Aviation Organisation.

In an effort to combat climate change, the SAWS has adopted the approach of building a WeatherSMART nation. This is expected to enhance the early warning system to ensure that climate and weather data, products and applications are available to all South Africans. A WeatherSMART nation is Safe, More informed, Alert, Resilient, and has Timeous access to relevant information and services.

The entity's total budget for 2019/20 was R463.8 million.

Role players

United Nations Framework Convention on Climate Change

In support of the NDP, the government is working through the SANBI to spearhead an innovative programme of work on analysing ecological infrastructure and costing natural capital. This body of knowledge will empower the DEFF to make informed development-related decisions.

Its research management covers systematics and collections expansion, conservation and applied biodiversity science, and climate change. The SANBI is also responsible for ensuring that biodiversity knowledge influences policy, management and decision making.

Its biome programmes, which focus on South Africa's biodiversity hotspots, ensure that the country's most important biodiversity regions such as the grasslands, wetlands and succulent Karoo are protected in a sustainable and beneficial way.

The SANBI is increasingly embracing biodiversity in its broadest sense through the inclusion of the country's fauna as part of its taxonomic research mandate. It is coordinating a catalogue of all South Africa's species (at least 100 000), including animals, through the South African Tree of Life Project.

The institute operates environmental education programmes within its national botanical gardens, while outreach greening

programmes focus on promoting indigenous gardening at disadvantaged schools in surrounding areas.

The SANBI is South Africa's official body for facilitating access to the Adaptation Fund, set up to help developing countries cope with climate change. It was established by the parties to the Kyoto Protocol of the UNFCCC to finance concrete adaptation projects and programmes in developing countries that are parties to the protocol.

The Department of Science and Innovation, the DEFF, the National Research Foundation (NRF) and the SANBI signed a business transfer agreement to enable the transfer of the national zoological gardens in Pretoria from the NRF to SANBI with effect from 1 April 2018.

For this purpose, amounts of R73.6 million in the 2019/20 financial year and R77.6 million in the 2020/21 financial year are being shifted from the foundation to the institute.

Environmental resources

National botanical gardens

The SANBI manages the 10 national botanical gardens, classified as conservation gardens, in seven of South Africa's nine provinces. Together, they conserve more than 7 500 ha of natural vegetation and associated biodiversity within their boundaries.

The national botanical gardens are natural escapes close to some of the country's urban centres, offering visitors a taste of the country's uniquely rich and colourful biodiversity. They feature facilities such as restaurants, function rooms and conference venues and include activities such as hikes, picnics and shopping.

The botanical gardens are:

- · Kirstenbosh, Cape Town
- · Pretoria, Tshwane
- Harold Porter, Betty's Bay
- · Walter Sisulu, Roodepoort
- · Hantam, Nieuwoudtville
- · Free State, Bloemfontein
- · Karoo Desert, Worcester
- KwaZulu-Natal, Pietermaritzburg
- · Lowveld, Nelspruit

· Kwelera, East London.

The SANBI is also managing what is scheduled to become South Africa's 11th national botanical garden – the Thohoyandou Botanical Garden, in the far north-eastern corner of Limpopo.

National Herbarium

The National Herbarium, situated within the Pretoria National Botanical Garden, houses over one million scientific plant specimens in southern Africa.

The Crompton Herbarium in Cape Town focuses mainly on the flora of the winter rainfall region of southern Africa, while the KwaZulu-Natal Herbarium in Durban primarily focuses on the flora of the subtropical eastern region of South Africa, in particular the flora of the province.

Protected areas

The Convention on Biological Diversity (CBD), founded in 1992 at the Rio Summit, is a legally binding agreement on the use and conservation of biological diversity.

The CBD provides the framework for 196 parties to guide efforts to conserve and sustainably use biological diversity and equitably share the benefits from the use of genetic resources. In October 2010, the parties approved the Strategic Plan for Biodiversity for 2011 – 2020, including 20 Aichi Targets. There are a number of management categories of protected areas in South Africa, which conform to the accepted categories of the International Union for Conservation of Nature (IUCN).

South Africa has 528 protected areas, of which 20 are marine, totalling 7.5 million ha or 6.2% of the country's land area.

South Africa plans to expand the conservation areas under formal protection to the international standard of 10% of the total area of the country. The DEFF works closely with landowners to ensure their participation in the Stewardship programme, which allows land owners to use their land for biodiversity and conservation purposes. This is aimed at expanding the country's conservation estate.

Scientific reserves

Scientific reserves are sensitive and undisturbed areas managed for research, monitoring and the maintenance of

genetic sources. Access is limited to researchers and staff. Examples of such areas are Marion Island and the Prince Edward Islands near Antarctica.

Wilderness areas

These areas are extensive, uninhabited and underdeveloped. Access is strictly controlled, with no vehicles allowed. The highest management priority is the maintenance of the intrinsic wilderness character.

Wilderness areas include the Cederberg Wilderness Area and Dassen Island in the Western Cape, and the Baviaanskloof Wilderness Area in the Eastern Cape.

Transfrontier conservation areas (TFCAs)

A TFCA is a cross-border region. The conservation status of the areas within a TFCA ranges from national parks, private game reserves and communal natural resource management areas to hunting-concession areas. Although fences, highways, railway lines or other barriers separate the constituent areas, they are managed jointly for long-term sustainable use of natural resources.

Unlike in transfrontier parks, free movement of animals between the components of a TFCA is not always possible. TFCAs facilitate and promote regional peace, cooperation and

socio-economic development.

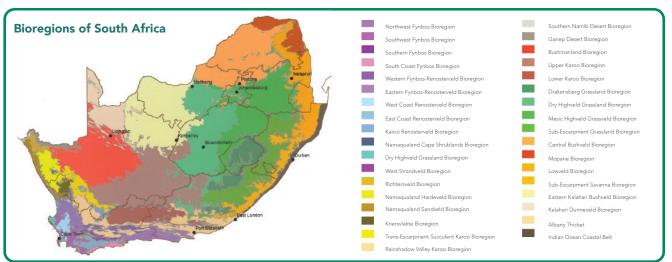
The success of TFCAs depends on community involvement. In turn, TFCAs provide local communities with opportunities to generate revenue.

The seven TFCAs are:

- · Ai-Ais/Richtersveld (Namibia, South Africa)
- Great Limpopo Transfrontier Park (Botswana, South Africa, Zimbabwe)
- Greater Mapungubwe
- Kavango-Zambezi (Angola, Botswana, Namibia, Zambia, Zimbabwe)
- Kgalagadi Transfrontier Park (Botswana, South Africa)
- Lubombo Transfrontier Conservation and Resource Area (Mozambique, South Africa, Eswatini)
- Maloti-Drakensberg Transfrontier Conservation and Development Area (Lesotho, South Africa).

Biosphere reserves

A biosphere designation is given by the UN Educational, Scientific and Cultural Organisation (UNESCO) to special landscapes where people are collaborating to ensure their environmental integrity as the basis for their economic development. Biosphere reserves are nominated by their governments for inclusion in the Man and the Biosphere programme.



Whether they are terrestrial, freshwater, coastal or marine in nature, all are experimental areas where different approaches to integrated environmental management are tested. This helps to deepen knowledge of what works in conservation and sustainable development.

South Africa's biosphere reserves include:

- The 100 000-ha Kogelberg Reserve on the country's southern coast is in the middle of the Cape Floral Region and home to 1 880 different plant species, 77 of which are found only in this region.
- The Cape West Coast Biosphere Reserve starts in Cape Town in the southern suburb of Diep River and stretches up the west coast as far as the Berg River, encompassing parts of the Cape Floral Region. The reserve includes the Ramsarprotected Langebaan Lagoon as well as Dassen Island, which is home to a penguin colony.
- The Cape Winelands Biosphere Reserve includes a part of the Cape Floral Region, as well as the wine-growing region.
- In the north there is the Waterberg Biosphere Reserve, an area of some 400 000 ha in Limpopo. It is an important catchment area for the Limpopo Basin, with four large rivers originating within its borders – the Lephalale, Mokolo, Matlabas and Magalakwena rivers.
- The Kruger-to-Canyons Biosphere Reserve stretches from the Kruger National Park to the Blyde River Canyon. It is an important conservation area as it covers three biomes.
- The Gouritz Cluster Biosphere Reserve is recognised by the UNESCO in terms of the Man and Biosphere programme.

World heritage sites

A UNESCO world heritage site is listed by the organisation as being of special cultural or physical significance.

It catalogues, names and conserves sites of outstanding cultural or natural importance to the common heritage of humanity.

While each world heritage site remains part of the legal territory of the province wherein the site is located, the UNESCO considers it in the interest of the international community to preserve each site.

For a site to be awarded a world heritage status, it has to

be recognised as having global historical or environmental significance, signify a phenomenal achievement of humanity, or reveal ancient civilisations. The recognition allows the country to access funds for conservation from the World Heritage Fund.

To be accepted onto the list, a country must meet stringent criteria and show how the site will be conserved.

South Africa has 10 world heritage sites proclaimed by the UNESCO:

- Robben Island is situated 11 kilometres (km) offshore from Cape Town – the island is most famous as the place where Nelson Mandela was imprisoned. It is now home to the worldrenowned Robben Island Museum and has become a popular tourist attraction.
- The iSimangaliso Wetland Park was listed as South Africa's first world heritage site in December 1999 in recognition of its natural beauty and unique global values. The 332 000-ha park contains three major lake systems, eight interlinking ecosystems, 700-year-old fishing traditions, most of South Africa's remaining swamp forests, Africa's largest estuarine system, 526 bird species and 25 000-year-old coastal dunes among the highest in the world. The name iSimangaliso means "miracle" and "wonder". The park also has four Ramsar sites.
- The Cradle of Humankind consisting of the hominid fossil sites at Swartkrans, Sterkfontein and Kromdraai. The world heritage status of Sterkfontein's fossil hominid sites was extended in July 2005 to include the Taung skull fossil site in North West province and the Mokopane Valley in Limpopo. The Cradle of Humankind has one of the world's richest concentrations of hominid fossils that provide evidence of human evolution over the past 3.5 million years. Found in Gauteng and North West, the fossil sites cover an area of 47 000 ha. The remains of ancient forms of animals, plants and hominids are encased in a bed of dolomite deposited around 2.5 billion years ago. In April 2010, a new species of hominid, Australopithecus sediba, estimated to be two million years old, was discovered in the Cradle of Humankind.
- The Ukhahlamba-Drakensberg Park (a mixed natural and cultural site) is a world heritage site covering 242 813 ha (2 428 square km (km²). The park spans parts of South Africa

- and Lesotho. The park includes the Royal Natal National Park, a provincial park, and the Drakensberg National Park, which covers part of the Drakensberg, the highest mountain in southern Africa. Under the Ramsar Convention, the park is in the List of Wetlands of International Importance.
- Mapungubwe Heritage Site: In September 2011, the DEFF, SANParks and Coal of Africa Limited signed a historical Memorandum of Agreement (MoA) as part of the environmental authorisation issued in accordance with the NEMA of 1998, to ensure the integrity of the Mapungubwe Cultural Landscape World Heritage Site. According to the MoA, the integrity of the world heritage site will be maintained through comprehensive biodiversity offset programmes, thereby optimising benefits to local communities.
- Cape Floral Region: The smallest of the six recognised floral kingdoms of the world, is an area of extraordinarily high diversity and home to more than 9 000 vascular plant species, of which 69% are endemic. Much of this diversity is associated with the fynbos biome. The economical worth of fynbos biodiversity, based on harvests of fynbos products (e.g. wildflowers) and ecotourism, is estimated to be in the region of R77 million a year. In July 2015, the UNESCO approved the extension of the Cape Floral Region Protected Areas World Heritage Site. At the time of inscription, the site was made up of eight protected areas comprising about 553 000 ha. The eight protected areas are located in the Eastern Cape and the Western Cape. The extension brings the size of the world heritage site to 1 094 742 ha and increases the number of protected area clusters making up the Cape Floral Region from eight to 13.
- The Richtersveld Cultural and Botanical Landscape covers 160 000 ha of dramatic mountainous desert in the North West province. It is the only area where the Nama still construct portable rush-covered domed houses, or Iharu oms.
- Vredefort Dome: About 120 km south-west of Johannesburg, is a representative part of a larger meteorite impact structure, or astrobleme. Dating back more than two million years, it is the oldest astrobleme yet found on Earth. With a radius of 190 km, it is also the largest and the most deeply eroded.

The Vredefort Dome bears witness to the world's greatest known single energy release event, which had devastating global effects including, according to some scientists, major evolutionary changes. It provides evidence of the Earth's geological history and is crucial to understanding of the evolution of the planet. Despite the importance of impact sites to the planet's history, geological activity on the Earth's surface has led to the disappearance of evidence from most of them, and Vredefort is the only example to provide a full geological profile of an astrobleme below the crater floor.

 The Khomani Cultural Landscape covers 959 100 ha, forming part of the Kgalagadi Transfrontier Park and including the whole Kalahari Gemsbok National Park, associated with the former San hunter-gatherers. It is a vast desert area associated with Khomani San culture since the Stone Age.

In South Africa, numerous private bodies are involved in conservation activities. More than 400 organisations concentrate on conservation, wildlife and the general environment, while more than 30 botanical and horticultural organisations concentrate on the conservation of the country's fauna and flora. These include the:

- · BirdLife South Africa
- · Botanical Society of South Africa
- · Centre for Rehabilitation of Wildlife
- · Conservation International
- · Delta Environmental Centre
- Dolphin Action Protection Group
- EcoLink
- Endangered Wildlife Trust (EWT)
- Ezemvelo KZN Wildlife
- Green Trust
- Keep South Africa Beautiful
- · KwaZulu-Natal Sharks Board
- · National Conservancy Association of South Africa
- Peace Parks Foundation
- · Southern African Foundation for the Conservation of Coastal Birds
- · Trees and Food for Africa
- · Wildlife and Environment Society of South Africa
- · World Wildlife Fund of South Africa.

• The Barberton Makhonjwa Mountains: Situated in Mpumalanga, the site comprises 40% of the Barberton Greenstone Belt, one of the world's oldest geological structures. These represent the best-preserved succession of volcanic and sedimentary rock dating back 3.25 to 3.6 billion years. It features meteor-impact fallback breccias resulting from the impact of meteorites formed just after the Great Bombardment (4.6 to 3.8 billion years ago). It has attracted researchers from all over the world because of its most exposed layers of rock formations. Scientists found fossilised bacteria under thin layers of rock thought to be 3.2 billion years old.

Habitat and wildlife management areas

These areas are subject to human intervention, based on research into the requirements of specific species for survival. They include conservancies; provincial, regional or private reserves created for the conservation of species habitats or biotic communities; marshes; lakes; and nesting and feeding areas.

Protected land and seascapes

These areas are products of the harmonious interaction of people and nature, and include natural environments protected in terms of the Environment Conservation Act, 1989 (Act 73 of 1989), scenic landscapes and historical urban landscapes.

Sustainable-use areas

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

Nature areas in private ownership are proclaimed and managed to curtail undesirable development in areas with high aesthetic or conservation potential.

Conservancies are formed to involve the ordinary landowner in conservation. Landowners can establish a conservancy where conservation principles are integrated with normal farming activities.

Wetlands

The IUCN identifies wetlands as the third most important support system on Earth.

Wetlands make up only 2.4% of South Africa's surface area but they are responsible for a disproportionately high value of ecological infrastructure that provides critical ecosystem services such as water purification and flood regulation, among others.

Wetlands support a range of specialised plant, insect and mammal life and also supply food, grazing, building and craft material. They are able to improve water quality, reduce flood impacts, control erosion and sustain river flows. Of special importance is the role wetlands play in ensuring a steady supply of clean water for communities and helping the government save hundreds of millions of rands that would be required to set up purification plants/facilities.

South Africa was one of the first six countries to become a signatory to the Convention on Wetlands of International Importance, called the Ramsar Convention, when it came into force in 1975. It is an intergovernmental treaty that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.

The DEFF is responsible for the South African Wetlands Conservation programme, which ensures that the country's obligations in terms of the Ramsar Convention are met.

South Africa has 22 Ramsar sites, including:

- Barberspan
- · Blesbokspruit Nature Reserve
- De Hoop Vlei
- De Mond (Heuningnes Estuary)
- Kosi Bay
- Langebaan
- · Makuleke Wetlands
- Ndumo Game Reserve
- · Ntsikeni Nature Reserve
- · Nylsvley Nature Reserve
- · Orange River Mouth Wetland
- Prince Edward Islands in Antarctica
- Seekoeivlei
- St Lucia
- the turtle beaches and coral reefs of Tongaland Ukhahlamba-Drakensberg Park
- · Verlorenvlei Nature Reserve

· Wilderness Lakes.

South Africa is seen as a leader in the rehabilitation of wetlands. The damage done to wetlands can be reversed, as is seen at the Rietvlei Dam in Gauteng.

The government has pledged more than R75 million to rehabilitating wetlands. Rehabilitation is ongoing, with attention given to poverty-stricken areas.

World Wetlands Day is celebrated annually on 2 February. World Wetlands Day 2020 was held under the theme, "Wetlands and Biodiversity". Wetlands are rich with biodiversity and are a habitat for a dense variety of plant and animal species. Latest estimates show a global decline of biodiversity, while wetlands are disappearing three times faster than forests. The theme is a unique opportunity to highlight wetland biodiversity, its status, why it matters and promote actions to reverse its loss.

South Africa is one of the contracting parties to the Ramsar Convention. One of the obligations of the contracting parties to the convention is to commemorate World Wetlands Day.

South Africa is a water scarce country, and the water in many streams is polluted. Both droughts and floods are common. In this regard, wetlands play a vital role by removing toxic substances and sediment from water, while also improving downstream water quality and the overall health of communities.

Wetlands are able to reduce the severity of droughts and floods by regulating stream flow. They also help to purify water and provide habitat for many different plants and animals. Besides these indirect benefits to society, wetlands provide many direct benefits in the form of resources such as fibre for making crafts as well as recreational opportunities. However, lack of community awareness on the value and benefits of wetlands often leads to their transformation by humans.

Marine protected areas

MPAs conserve natural environments and assist in the management of fisheries by protecting and rebuilding economically important stocks. They are also used to develop and regulate coastal ecotourism opportunities.

The government shares joint responsibility for South Africa's MPAs with the SANParks and Ezemvelo KwaZulu-Natal Wildlife.

South Africa's MPAs include:

- · Aliwal Shoal, KwaZulu-Natal
- · Betty's Bay, Western Cape
- · Bird Island, Eastern Cape
- · De Hoop, Western Cape
- · Dwesa-Cwebe, Eastern Cape
- · False Bay, Western Cape
- · Goukamma, Western Cape
- · Hluleka, Eastern Cape
- · iSimangaliso, KwaZulu-Natal
- Langebaan Lagoon, Sixteen Mile Beach, Malgas Island, Marcus Island, Jutten Island, Western Cape
- · Pondoland, Eastern Cape.
- · Robberg, Western Cape
- · Sardinia Bay, Eastern Cape
- · Stilbaai, Western Cape
- · Table Mountain, Western Cape
- · Trafalgar, KwaZulu-Natal
- · Tsitsikamma, Western Cape.

Zoological gardens

Established in 1899 in Pretoria, and given national status in 1916, the National Zoological Gardens (NZG) of South Africa is the largest zoo in the country and the only one with national status. Over 600 000 people visit it every year.

The 85-ha NZG and houses 3 117 specimens of 209 mammal species, 1 358 specimens of 202 bird species, 3 871 specimens of 190 fish species, 388 specimens of four invertebrate species, 309 specimens of 93 reptile species, and 44 specimens of seven amphibian species.

It plays a major role in the conservation of wildlife, maintaining one of the largest animal collections in Africa.

The species are managed across two facilities stretching into Gauteng (Pretoria) and Limpopo (Mokopane). About 70% of the species are of African origin and 30% of global representation.

As a member of the World Association of Zoos and Aquariums and the African Association of Zoos and Aquaria, the NZG participates in several endangered species management programmes and successfully breeds several endangered species of both continental and global significance.

Among the endangered species the NZG contributes to conserving are the cheetah, rhino, ground hornbill, red-billed oxpecker and several endangered antelope species.

The animal collections of the NZG are the direct responsibility of the Animal Collection and Conservation Department which operates in two facilities: the main facility in Tshwane and the Mokopane Biodiversity Conservation Centre 200 km north of Tshwane.

The Johannesburg Zoological Gardens' core business is the accommodation, enrichment, husbandry and medical care of wild animals.

It also plays an important role in conservation projects of both indigenous and internationally endangered animals. The zoo joins other conservation organisations in programmes involving:

- wattled crane recovery;
- · amphibian conservation;
- · ground hornbill breeding and off-site surveys;
- · vulture conservation; and
- · chimpanzee conservation with the Jane Goodall Institute.

The EWT is a major partner. Mitchell Park in Durban is the country's second-oldest zoo after the NZG. There are about 30 projects on the cards for the zoo, including cheetah and chimpanzee enclosures.

Breeding centres

There are a number of game-breeding centres in South Africa. The NZG of South Africa is responsible for the management of the Mokopane Biodiversity Conservation Centre, covering 1 333 ha.

The centre supplements the NZG's breeding programme for various endangered animals, and its own animal collection. It is home to an abundance of exotic and indigenous fauna such as the lemur, the rare tsessebe, roan antelope and black rhino.

The De Wildt Cheetah and Wildlife Centre near Pretoria is best known for its captive breeding programme that contributed to the cheetah being removed from the endangered list in the South African Red Data Book – Terrestrial Mammals in 1986. De Wildt also breeds a number of rare and endangered African species.

The most spectacular of these is the magnificent king cheetah, which is a true cheetah, but with a variation in coat pattern and colouring. De Wildt also plays a major role in breeding and releasing wild dogs.

It has donated breeding nuclei of the highly endangered riverine rabbit and suni antelope to the Kruger National Park.

The De Wildt Vulture Unit is a rehabilitation and holding facility for injured, poisoned and disabled vultures.

The Hoedspruit Endangered Species Centre in Limpopo was established as a breeding programme for the then endangered cheetah.

The centre caters for, among other animals, five species of vulture: Cape griffins as well as white-backed, hooded, whiteheaded and lappet-faced vultures. The centre is also known for its wild dog breeding programme.

The Hoedspruit Research and Breeding programme includes the rare black-footed cat, vulnerable African wild cat, ground hornbills (in cooperation with the NZG), the bald ibis and the endangered blue crane. Elephant, white rhino, buffalo, caracal, sable antelope, bushbuck and tsessebe have also been cared for and rehabilitated there.

Aquariums and oceanariums

There are aquariums in Pretoria, Port Elizabeth, Cape Town, Durban and East London.

The Aquarium and Reptile Park of the NZG in Pretoria is the largest inland aquarium in Africa, with the largest collection of freshwater fish.

It is also the only aquarium in South Africa that exhibits a large variety of marine fish in artificial sea water and the only inland aquarium housing ragged-tooth sharks.

The Port Elizabeth Oceanarium is one of the city's major attractions. Exhibits include an underwater observation area, a dolphin research centre and various smaller tanks containing 40 different species of bony fish and two larger tanks that display sharks and stingrays.

The Two Oceans Aquarium at the Victoria and Alfred Waterfront, Cape Town, has more than 3 000 specimens representing some 300 species of fish, invertebrates, mammals, birds and plants supported by the waters along the Cape Coast.

The aquarium at uShaka Marine World in Durban incorporates both fresh and sea water species, and is the fifth-largest aquarium in the world by water volume. It comprises of Sea World, Dolphin World, Beach World, and Wet and Wild World.

Sea World has a unique shipwreck-themed aquarium, a penguin rookery and a 1 200-seater dolphin stadium, the largest dolphinarium in Africa.

Snake and reptile parks

The Port Elizabeth Snake Park at Bayworld has a wide variety of South African and foreign reptiles, including tortoises, boa constrictors, pythons, crocodiles, lizards and venomous snakes such as cobras, mambas and rattlers. Rare and threatened species, including the Madagascar ground boa, are housed in realistically landscaped glass enclosures.

The Aquarium and Reptile Park at the NZG houses 80 reptile species from all over the world.

The Hartbeespoort Dam Snake and Animal Park near Pretoria features one of the finest reptile collections in southern Africa. It offers seal shows and snake-handling demonstrations.

The Pure Venom Reptile Farm is one of the largest of South Africa's reptile parks. It is inland from Shelly Beach, on KwaZulu-Natal's South Coast.

The CrocRiver Enviro Park in Nelspruit is the largest facility of its type in Africa. The park offers, among other things, turtle, crocodile and fish ponds; the water monitor lizard pond; and the Desert House, in which a desert-like atmosphere has been created – this is home to the reptile gallery where indigenous and exotic reptiles from all over the world are displayed.

Khamai Reptile Centre's primary aims are conservation, breeding of endangered reptiles and education. Located outside Hoedspruit in Mpumalanga, it offers a close-up look at many local as well as exotic snakes, crocodiles and lizards.

Managing environmental resources

Wildlife protection

The Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES) states that big cats, which are among the most widely recognised and admired

animals, are facing many and varied threats caused mostly by human activities worldwide.

South Africa adheres to the principle of sustainable utilisation of natural resources, as well as principles set out in the NDP aimed at creating a climate-resilient society while growing the economy and increasing jobs. As such, a range of measures have been introduced to ensure that lion, leopard and cheetah populations are conserved and properly managed. This includes the implementation of a Biodiversity Management Plan for the African Lion. The Scientific Authority of South Africa conducted a Non-Detriment Finding (NDF) as required by the CITES. The NDF for lions state that there are currently no major threats to the wild and managed lion populations in South Africa, although the management of re-introduced wild lion needs some improvement. Minor, but non-detrimental threats include over-utilisation, disease, poaching and conflict with communities around protected areas.

Wildlife crime not only threatens natural resources, but also the economy through financial burdens and the loss of economic and development opportunities. As a country richly endowed with natural resources, South Africa is not immune to these challenges with criminal syndicates targeting iconic species, such as the cycad, rhino, elephant and lion, as well as species not often considered as being under threat – birds, tortoises, lizards and snakes.

The declaration of wildlife crime as a priority crime in South Africa has resulted in a multidisciplinary, multi-sectoral approach focused on collaboration through the national security structure. This involves border and customs officials, the National Prosecuting Authority (NPA), the South African Police Service (SAPS) and institutions such as the Airports Company of South Africa which manages international airports.

The country has also introduced the development of critical skills aimed at increasing its capacity to detect and investigate these crimes. The DEFF is currently working with World Wide Fund for Nature on a project to increase the country's ability to tackle wildlife trafficking. This project, funded by the United States Department of State's Bureau of International & Law Enforcement Affairs, focuses on the development of further training materials to bolster the country's national compliance

and enforcement programme, including an e-learning platform for officials, audio visual materials, specific curriculum and manuals.

Traveller awareness material has also been developed to highlight the threat that wildlife crime poses to the rich biodiversity and encouraging people not to support the illegal trade in wildlife.

EMIs in the DEFF check consignments of wildlife for exports from South Africa to ensure that that they meet all legal requirements. About 300 legal wildlife-related consignments are exported/imported on a monthly basis at the OR Tambo International Airport.

The South African Revenue Service (SARS) K9 unit at OR Tambo International Airport use specialist sniffer dogs to detect attempts to smuggle wildlife into South Africa.

Rhino poaching

Rhino poaching has been declared a National Priority Crime, and government continues to work as a team in the implementation of the Integrated Strategic Management of Rhinoceros.

This is a multi-sectoral, interdisciplinary approach which involves other stakeholders such as the SANParks, the Department of Home Affairs (DHA), the Department of Defence, the SAPS and the Hawks, the State Security Agency, the SARS, the Department of Justice and Constitutional Development (DOJ&CD), and provincial conservation authorities.

South Africa's largest game reserve, the Kruger National Park, houses a court which will combat rhino poaching. The Skukuza Regional Court periodically sits once a week.

For the fourth consecutive year, there has been a decline in rhino poaching, particularly in national parks. During 2019, 594 rhinos were poached in South Africa, down from 769 rhinos killed during the previous year. A total of 327 rhinos were poached in the Kruger National Park during 2019, compared to 421 in the previous year. During 2019, a number of successes were recorded through the number of arrests and convictions linked to rhino poaching and the illicit trade in rhino horns, which reflects the joint and integrated work of law enforcement entities. This includes: the Stock Theft and Endangered Species Unit of the SAPS, the Hawks, the

SANParks, provincial park authorities and EMIs (Green Scorpions) and Customs as well as the NPA.

From January to December 2019, 178 alleged poachers were arrested within the Kruger National Park. At a national level, 332 arrests were effected in respect of both rhino poaching and rhino horn trafficking, and in excess of 57 major investigations were undertaken across the country. A total of 85 firearms were recovered during the year. The arrests resulted in a number of convictions as well as various high-profile cases presently before the courts. The lifting of the moratorium on the domestic trade in rhino horn does not mean that rhino horn in private possession can be sold without a permit. Nobody is allowed to trade rhino horn (including selling, donating, or in any way acquiring or disposing of a rhino horn) without a permit issued by the DEFF as well as relevant possession or transport permits issued by the provincial conservation departments. Commercial international trade in rhino horn is, and remains, prohibited in terms of the CITES provisions.

Rhino poaching decreased by almost 53% in the first six months of 2020, with 166 animals being killed for their horns across the country since the beginning of the year. During the first six months of 2019, 316 rhino were poached in South Africa.

Between 27 March 2020 and the end of June 2020, 46 rhinos were poached across the country. Of these, 14 rhinos were poached during April, 13 in May and 19 in June. In the Kruger National Park, 88 rhinos were poached in the first six months of 2020. The decrease in rhino poaching can also be attributed to the disruption of the supply chain resulting from the national travel restrictions, including limitations placed on movement across the country.

Managing rhino populations

The biological management initiative focuses on continued movement of rhinos to expand ranges and support rhino strongholds. In small parks and provincial reserves, the translocation of rhinos seeks to mimic how young animals disperse naturally. Within Kruger National Park, the translocation of rhinos from Kruger as part of South Africa's biological management innovations of expanding ranges and establishing additional rhino strongholds are challenged by the emergence

of bovine tuberculosis in both black and white rhino, albeit at low incidence.

South Africa's veterinary regulations require several procedures to ensure that translocated rhinos do not serve as a source of spreading the disease into commercial stock production areas of South Africa. The development of efficient systems to overcome this challenge is in progress.

Even so, innovative biological management have used translocations within Kruger National Park as a mechanism to direct poaching to focus less on cows. This goes hand in hand with initiatives to dehorn rhinos embedded in strategic approaches that target individuals that frequent poaching hotspots, but more importantly, approaches that minimize the losses of cows. Complimenting these interventions are guarding initiatives that focus on regular individual monitoring of individual rhinos. These combinations of interventions seek to maximise the breeding potential of both black and white rhinos.

The integrated initiatives of the SANParks to manage its rhino population have had varied successes. Within Kruger National Park, the continued onslaught of poaching resulted in a continued decline of rhinos.

World Ranger Day

The DEFF celebrated World Ranger Day on 31 July 2020. The department paid tribute to the men and women committed to protecting the country's natural heritage, sometimes at the expense of their own safety. Rangers have remained at the forefront of the battle against poaching.

World Ranger Day, which is supported by the International Rangers Federation, is held annually to commemorate rangers who lose their lives in the line of duty, and to celebrate the commitment of rangers who battle poaching in protected areas.

To support the efforts of rangers, the DEFF, in collaboration with the provincial conservation and parks authorities, the private sector and non-governmental organisations (NGOs) continues to implement the decisions of the Rhino Lab (a discussion platform with outcomes aligned with key areas of rhino conservation, including management of rhino populations and law enforcement), with the latest initiative focusing on demarcating specific wildlife zones to ensure that additional

resources are directed to high risk areas. The DEFF is also in the process of establishing the Environmental Enforcement Fusion Centre, which is aimed at coordinating and improving the reactive and proactive response to rhino poaching and other wildlife crime. It has begun to consolidate rhino protection efforts across the country, standardising and boosting tactical level anti-poaching and introducing integrated information-led enforcement.

This is expected to strengthen the essential collaboration with the SAPS, the Directorate for Priority Crime Investigation, the DOJ&CD, and other sectors of the security forces to gather, analyse and share intelligence on wildlife trafficking to ensure that the international syndicate-related crimes can be effectively dealt with

International cooperation

International cooperation remains a critical component of the overall response strategy to halt rhino poaching, and related wildlife crime. South Africa continues to engage countries where rhino horn seizures take place in order to request that samples of the rhino horn DNA be sent to the country for analysis in line with the CITES resolutions. This enables the country to link the seized horns to poaching cases and live rhino or rhino horn stockpiles, thus providing key information to further support investigations and understand transit routes.

Since the last report on the rhino poaching situation and efforts being made to address the crime, rhino horn samples have been received for analysis from Vietnam to determine if the horns confiscated are linked to crimes in South Africa. The Hawks have also received very good co-operation from China, Hong Kong, Malaysia, Singapore, Vietnam and Japan in their efforts to combat wildlife trafficking.

Marine pollution and sustainability

South Africa has one of the world's busiest shipping routes and has experienced many oil spills over the years. It is estimated that 80% of the world's tanker traffic passes South Africa's coast.

The DEFF developed the National Contingency Plan for the Prevention and Combating of Pollution from Ships, in

consultation with the South African Maritime Safety Authority and the Department of Transport (DoT). This includes disposing of, recovering or stabilising spilt oil and rehabilitating the environment.

With 80% of marine pollution emanating from land-based activities, the DEFF will be implementing the National Programme of Action for Land-based Sources of Pollution, while refining strategies for combating marine pollution from oil spills.

The DEFF has embarked on a process to adopt a new protocol on land-based sources of marine pollution under the amended Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean.

The department has also developed the Cape Zone Oil Spill Plan.

Protecting the coastline

To counter illegal activities along the coastline, as well as the country's 1 155 000-km² Exclusive Economic Zone (EEZ), the DEFF boosted its compliance unit with the appointment of more than 80 fishery-control officers and 100 honorary fishery-control officers, after the implementation of the Honorary Fishery-Control Officers Policy.

The department took delivery of four environmental protection vessels, as part of measures to protect marine and coastal resources, namely the Lillian Ngoyi, Ruth First, Victoria Mxenge and Sarah Baartman. They patrol up to the 200 nautical mile limit from the shore and the most remote reaches of the EEZ as well as around the Prince Edward Islands.

The vessels also conduct multilateral patrols in the Southern African Development Community coastal states.

The Phakisa approach

Operation Phakisa enables the government to implement its policies and programmes better, faster and more effectively.

The initiative was designed to fast-track the implementation of solutions on critical development issues. This is a unique initiative to address issues highlighted in the NDP Vision 2030 such as poverty, unemployment and inequality.

The DEFF has registered notable progress with regards to

Operation Phakisa: Oceans Economy; Chemicals and Waste Phakisa, and Operation Phakisa: Biodiversity Economies.

Operation Phakisa: Oceans Economy

The DEFF continues to unlock the economic potential of South Africa's oceans, growing the gross domestic product (GDP) and creating more sustainable jobs – while ensuring that the country's oceans and coastal ecosystems are sustainably managed.

Highlights include the development of the National Guideline Towards the Establishment of Coastal Management Lines. This is intended to minimise risks posed by short- and long-term coastal processes such as storm surges, erosion and sea level rise. A national coastal access strategy is also being development to provide guidance around the public's access to closed off beaches.

Marine pollution is another challenge that threatens fragile ecosystems. South Africa has a number of measures in place to tackle this problem, including the National Pollution Laboratory operated by the Walter Sisulu University which is expected to start working in the near future. The lab will allow for in depth analysis of the samples that could not be done through mobile laboratories.

In addition, South Africa is amongst the countries that have endorsed the UN Environmental Programme's Clean Seas Campaign. The campaign is aimed at stepping up international, regional and national efforts to combat marine litter. As part of the campaign, the DEFF has announced the piloting of its Source-to-Sea Initiative – a strategy to investigate and combat pollution, in particular plastic pollution which threatens both freshwater and marine ecosystems.

The oceans have the potential to contribute up to R177 billion to the GDP and create just over one million jobs by 2033.

Operation Phakisa: Oceans Economy MPAs

The gazetting of a network of 20 new representative Operation Phakisa: Oceans Economy MPAs, has increased South Africa's marine ecosystem area under protection in the country's EEZ, from 0.4% to 5.4%, to provide protection to 90% of habitat types, as well as contribute to global protection in line with South Africa's international commitments.

New Operation Phakisa MPAs:

- Orange Shelf Edge
- · Namaqua Fossil Forest
- · Namaqua National Park
- · Childs Bank
- · Benguela Muds
- · Cape Canyon
- · Robben Island
- · Southeast Atlantic Seamounts
- · Brown Bank Corals
- · Agulhas Bank Complex
- · Agulhas Muds
- · Southwest Indian Seamounts
- · Agulhas Front
- · Port Elizabeth Corals
- · Addo Elephant National Park
- Amathole Offshore
- Protea Banks
- Aliwal Shoal
- uThukela
- iSimangaliso

The new network strives to support multiple objectives for biodiversity in alignment with Oceans Economy goals. The new MPAs represent seamounts, submarine canyons, volcanic pinnacles, and a variety of ecosystem types on the shelf, continental margin, and abyss in both the Indian and Atlantic oceans. The new network also provides the first protection for several threatened and fragile ecosystem types, including threatened mud, gravel, and shelf edge habitats and sensitive deep water scleractianian, stylasterine, and soft coral-dominated ecosystem types.

This new network of 20 MPAs will, among other things, contribute to fisheries sustainability, advance marine ecotourism, and help maintain resilience in ecosystems that are under stress from climate change.

Work on the new approved network of MPAs dates back to 2014, when the South African government endorsed a plan to achieve, as part of Operation Phakisa: Ocean Economy, a viable network of MPAs. South Africa's ocean space, which is

one of the most varied in the world, is highly productive with rich biodiversity providing for living and non-living resources that contribute significantly to the country's economy and to job creation.

MPAs provide safe spaces in which fish can breed undisturbed. They are essential to maintain eco-certification of the South African deep-sea trawl fishery. This certification process assesses whether habitat and nursery areas for the hake fishery, are adequately protected. MPAs also contribute to growing South Africa's marine eco-tourism sector by providing undisturbed natural habitat for whales, sharks, seals, dolphins, turtles and seabirds for international and domestic tourists to experience.

An adequate network of MPAs will also provide the basis for ongoing resilience to the impact of climate change. Oceans are an essential component of the climate system, absorbing and transferring heat, and regulating the exchange of carbon dioxide with the atmosphere. With increasing carbon dioxide levels, and rising ocean temperatures, this regulatory capacity is at risk. The network of MPAs will assist in building ecological resilience, and therefore social and economic resilience in the growing ocean economy.

The new MPA network is a product of extensive consultation and negotiation with all stakeholders, which sought to ensure that the network is aligned with relevant policies and priorities for fisheries, aquaculture, tourism, as well as marine mining and oil exploration, while also protecting ecologically important areas.

Operation Phakisa: Biodiversity Economy

South Africa has a multi-faceted approach to the management of its rich natural heritage. The approach focuses on an inclusive, value-chain approach to the development of the biodiversity economy, taking into consideration the fact that communities are the primary custodians of the country's biodiversity.

Operation Phakisa: Chemicals and Waste

Waste economy has the potential to address inequality, poverty alleviation and create jobs. The DEFF continues to support waste pickers through various programmes such as the Recycling Enterprise Support programme.

The primary objective of the programme is to provide developmental funding for projects in the form of start-up grants. These projects are either start-up or pre-existing enterprises establishing buy-back centres, material recovery facilities, construction and demolishing solutions and plastic palletisation plants in line with the Operation Phakisa initiatives.

With regards to chemicals, Cabinet has recommended that South Africa should ratify the Minamata Convention on Mercury and the Kigali Amendment to the Montreal Protocol on the Protection of the Ozone Layer. The Kigali amendment will have co-benefits for mitigating climate change and ozone-depletion.

The South African government is also committed to minimize plastic pollution. The DEFF recently conducted a Plastic Material Study and is in the process of consulting with the cosmetics industry to phase out the use of microbeads in cosmetics. Plans are also underway to review the impact of the implementation of plastic bag policies.

In addition, the DEFF will continue to work with the packaging sector (paper, glass, plastic and metal) to increase over and above 58% the amount of waste diverted from landfill.

The department is expected to launch the Keep South Africa Clean Campaign with the aim of mobilizing citizens to become environmentally conscious and create a South Africa free of litter and illegal dumping.

Chemicals and waste management

South Africa has taken a number of steps to promote environmentally sound management of chemicals and waste throughout the life cycle, including being a party to a range of multilateral environment agreements and an active member in instruments on chemicals and waste. These include the:

- Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade;
- · Stockholm Convention on Persistent Organic Pollutants;
- Montreal Protocol on Substances that Deplete the Ozone Layer;
- Basel Convention on the Control of Trans-boundary Movement of Hazardous Wastes; and

 Strategic Approach to International Chemicals Management, which is governed by the International Conference on Chemicals Management.

South Africa had a significant role in negotiations concerning the Intergovernmental Negotiating Committee to prepare a global legally binding instrument on mercury, including research into coal-dependent power or electric stations and the situational analysis of mercury in the country.

To align fragmented legislation, the DEFF established a National Multi-Stakeholder Committee for Chemicals Management to facilitate coordination.

In September 2020, Cabinet approved the 2020 National Waste Management Strategy (NWMS) to replace the 2011 NWMS. The strategy gives into effect the terms of the National Environmental Management: Waste Act of 2008. It directs the environmental protection programmes. It also drives a sustainable and environmentally friendly, inclusive economic growth, with three focus pillars – waste minimisation, effective and sustainable services, and waste awareness and compliance.

Waste Management Bureau

The Waste Management Bureau aims to reduce waste through recycling. The bureau monitors recycling plans and provides specialist services to government and recycling companies.

Over the medium term, the bureau plans to introduce tyre recycling initiatives, which were set to receive operational funding of R245 million in 2019/20.

The bureau also plans to introduce the recycling enterprise support programme, which will provide support services, training and advice to transporters, storage depot operators and tyre recyclers.

An amount of R155 million over the medium term has been allocated to the plastics programme, which will promote waste minimisation, create awareness in the plastics industry, expand collector networks and support rural collection through building the capacity of small, medium and micro-enterprises.

The National Regulator for Compulsory Specifications also receives transfers of R22.5 million over the medium term to implement compulsory specifications for plastic bags.

Youth Jobs in Waste and Township Greening

These projects are funded by the DEFF through its Environmental Protection and Infrastructure programme and aims to contribute towards poverty alleviation while empowering beneficiaries to participate in the mainstream economy.

Youth will benefit from this project, through the formation of self-help groups, which will positively impact on their knowledge of financial literacy and self-empowerment.

The Youth Jobs in Waste initiative is focused on landfill operation and management, planning administration relating to waste collection and planning and undertaking waste awareness campaigns. The people who will be assisting with the activities will be located in the municipalities for a year.

The DEFF aims to create eco-friendly greener open spaces that are safe, attractively designed, well managed for the benefit of all the country's communities as well as promoting maximum use of alternative energy sources and promote an environment that is clean, green and healthy for all.

The department has funded numerous projects within the Randfontein Municipality, which are being implemented using labour-intensive methods in line with the EPWP, with an aim of 58% women employment, 65% youths and 2% being people with disabilities.

The waste sector has been identified as a key role player in achieving the goal of economic upliftment through job creation as the DEFF works towards reaching the NDP's goal of creating an environmentally sustainable, climate change resilient, low-carbon economy and just society by 2030.

The Youth Jobs in Waste programme was designed to address some of the critical areas of assistance, including capacity-building, where youths are placed in municipalities for a period of a year to assist with administration relating to waste collection and planning.

Recycling

The National Recycling Forum is a non-profit organisation created to promote the recovery and recycling of recyclable materials in South Africa.

Members of the forum include representatives of:

· the formal recycling industry in South Africa

- government departments;
- · regional recycling forums;
- · local government-based organisations; and
- local government utilities and co-opted advisory members.

To promote the interests of its members and the formal recycling industry in South Africa, the National Recycling Forum:

- provides a national communication forum for key players in the field of recycling;
- interacts with central and provincial government to encourage the recycling of glass, paper, plastics, tin plate steel, used oil and electrical and electronic waste;
- facilitates the formation of regional forums that draw their memberships from enthusiastic and interested volunteers as well as small recyclers, in the major centres of South Africa; and
- encourages the establishment of buy-back centres and dropoff points through the activities of its members in the various centres.

Collect-a-Can, one of the oldest recycling initiatives in South Africa, has been instrumental in creating a culture of recycling in the country. It has obtained local and international acclaim for its contribution towards protecting the environment, as well as its significant contribution to job creation and poverty alleviation.

The founders of Collect-a-Can, ArcelorMittal South Africa and Nampak, started the company 23 years ago to proactively address the steel beverage can industry's responsibility to the environment. Their Cash for Cans initiative encourages cans to be collected and sold to Collect-a-Can for cash, because recovery and recycling aids job creation in many communities and creates an additional source of income for schools, NGOs, and other community groups.

Collect-a-Can has introduced millions of schoolchildren to the caring for the environment through its schools' competition.

Recycling has been valued at a contribution of as much as R50 billion to the South African economy. In effect, waste is now a renewable resource and not something to throw away.

Climate change and air-quality management

South Africa is making steady progress in implementing the National Climate Change Response Policy, despite having to balance its economic aspirations and environmental protection.

The government continues to engage actively and meaningfully in international climate change negotiations, specifically with the UNFCCC.

The policy implementation actions and activities flowing from this include the analysis of mitigation potential in key economic sectors as the basis for the establishment of desired emission reduction outcomes and defining the optimal mix of measures for achieving those outcomes, with the greatest benefit and least cost to the economy.

Air quality remains an important and challenging environmental issue in South Africa.

Technical and legislative tools have been developed to rollout and monitor the implementation of national environmental management including the:

- · National Framework for Air Quality Management;
- · air quality model by-laws;
- · Air-Quality Management Planning Manual; and
- National Ambient Air Quality Standards and Listed Activities and the Minimum Emission Standards.

Several of these tools were under review to accelerate the ongoing implementation of the Air Quality Act of 2004.

The SAAQIS contains the latest updated data on locations and can give the status of air quality or pollution for a specific day and time on its website: www.saaqis.org.za. The DEFF and the SAWS have upgraded the SAAQIS. South Africans can now view the state of air live from the government monitoring network on their smart phones and other gadgets.

A number of air-quality monitoring stations, mostly in Mpumalanga, eThekwini Municipality, the City of Johannesburg and the City of Tshwane, report to the SAAQIS.

South Africa reached the legally binding climate change agreement at the 21st Conference of the Parties (COP 21) to the UNFCC in Paris, France in December 2015.

The agreement was the culmination of a four-year negotiation process that was initiated in Durban in 2011 at the 17th Conference (COP17) of the Parties to the UNFCCC.

South Africa is among the countries that have signed the Paris Agreement – committing to ensuring that the country continued to play a positive role in the building of a low-carbon, job-creating and pro-development green economy.

To manage climate change and air quality effectively, the DEFF aims to increase the number of government-owned air quality monitoring stations reporting to the SAAQIS from 116 in 2017/18 to 125 in 2020/21.

Other activities include rolling out the Let's Respond Toolkit in 40 municipalities to provide a process map for integrating responses to climate change into municipalities' integrated development plans. To achieve this, R924 million is provided over the MTEF period.

Environmental impact management

The EIA is a tool to advance sustainable development. South Africa's EIA regulations are:

- streamlining the EIA process;
- introducing an approach where impact on the environment gets more attention; and
- introducing a listing notice dedicated to activities planned for predefined sensitive areas.

The Environmental Assessment Practitioners Association of South Africa (EAPASA) aims to:

- achieve effective quality assurance in environmental assessment practice in South Africa;
- promote the empowerment of black and female professionals within the environmental assessment field;
- encourage continued professional development for EAPs; and
- promote awareness of the purpose and practice of environmental assessment in South Africa.

The DEFF is already fully integrating impact assessments on waste and FIA

In order to advance and fast-track environmental authorisations for key infrastructure projects, the department continues to undertake Strategic Environmental Assessments.

The vast scientific information from these assessments have aided in the streamlining of decision-making for South Africa's Strategic Infrastructure Projects led by The Presidency.

Aquaculture

Aquaculture incorporates the breeding, trading or rearing of aquatic organisms in a controlled or selected aquatic environment for recreational, commercial or subsistence purposes. It is divided into fresh-water culture and mariculture.

Species farmed in the latter include dusky kob, abalone, Pacific oysters, Mediterranean mussels and black mussels, among others. According to the National Aquaculture Strategic Framework, the sector is relatively small and the government wants to create a climate in which it can grow.

Special attention will be paid to freshwater aquaculture, as it has shown growth potential.

The government would also boost investments in research, development technology, transfer and extension, as well as education and training programmes in aquaculture.

Abalone fishing is severely restricted in South African waters, however, poaching is rife, as it is a lucrative trade.

Poaching has caused the decline in abalone numbers over the years. The species is highly coveted and fetches high prices, especially in the Far East.

The National Aquaculture Policy Framework was developed against the backdrop of a global aquaculture sector that has seen an increased demand for fishery products.

The policy provides a unified framework for the establishment and development of an industry that contributes towards sustainable job creation and increased investment.

In South Africa, marine and freshwater aquaculture presents a good opportunity to diversify fish production to satisfy local demand; contribute to food security, job creation, economic development and rural development; and improve export opportunities.

Aquaculture has been given a boost through its inclusion in the Oceans Economy: Operation Phakisa. While the marine-based mariculture part of aquaculture has been around for some years, focusing on species such as abalone, oysters and mussels, freshwater aquaculture is experiencing a rapid expansion, owing in part to government's multipronged aquaculture promotion campaign.

Globally, wild fish stocks have been dwindling, growing at a modest 1% per annum, while aquaculture has grown by 7%

and accounts for 44% of the global fish production. Therefore, aquaculture is seen as a quick win for growing the Oceans Economy.

Fisheries

The South African coastline covers more than 3 000 km, linking the east and west coasts of Africa. These shores are particularly rich in biodiversity, with some 10 000 species of marine plants and animals recorded. South Africa is among the global fishing nations that have identified the challenges within their fishing industry. With 22 commercial fisheries sectors and new fisheries being explored and experimented with, South Africa has two fisheries sector components:

- Wild capture fisheries include three distinct components, namely commercial, recreational and subsistence fisheries, each of which requires specific research and management interventions.
- The aquaculture (fish farming) sector is considered underdeveloped and as a result, has been prioritised, owing to declining wild stocks.

The productive waters of the West Coast support a variety of commercially exploited marine life, including hake, anchovy, sardine, horse mackerel, tuna, snoek, rock lobster and abalone.

On the east coast, squid, linefish and a wide range of intertidal resources provide an important source of food and livelihood for coastal communities.

Marine life that is not harvested, such as whales, dolphins and seabirds, is increasingly recognised as a valuable resource for nature-based tourism.

The main challenge in fisheries is to create a balance between maximising the social and economic potential of the fisheries industry, protecting the integrity and quality of the country's marine and coastal ecosystems, and addressing transformation in the sector.

In line with international trends, the DEFF recognises fisheries as an economic activity rather than a purely environmental or biodiversity matter.

The government has expanded the mandate for fisheries management by adding fresh-water and inland fisheries, as well as aquaculture, to the department's existing responsibilities.

The fisheries sector contributes roughly 0.1% to the GDP. It is more important for economic development in the Western Cape where 11 of the 13 proclaimed fishing harbours are situated. These contribute more than 5% to provincial GDP.

The total output is estimated at 600 000 tonnes (t) worth about R6 billion, depending on the pelagic catch of pilchards and anchovy, which could be as much as 600 000 t.

It is estimated that the direct employment in the industry constitutes approximately 27 000 jobs (16 000 in the primary sector and 11 000 in the secondary and tertiary sectors), while an additional 81 000 people are indirectly (net building, bait preparing, among others) employed in industries that are at least partially dependent on the fishing sector (figures based on industry estimates and the Total Allowable Catch (TAC) and Total Allowable Effort (TAE), calculated as a function of tonnage).

Fisheries output is determined by catch volumes, which in turn depends on the health and management of fish stocks, varying according to ecological changes and subjected to overexploitation through illegal, unreported and unregulated fishing activities.

The DEFF seeks to prevent overexploitation by means of assigning TAC and TAE per species, which are adjusted regularly depending on the estimated state of the resource. The

As part of the transition to the new small-scale fishing sector, 20 small-scale fishing cooperatives with 1 591 members, in the Eastern Cape were awarded 15-year small-scale fishing rights in November 2019. The government awarded certificates to fishing cooperatives as recognition of their fishing rights, presenting fishing rights to the remainder of 53 cooperatives in the Eastern Cape.

The basket of species granted is made up of, amongst others, squid, hake hand line, traditional line fish, seaweed, East Coast Rock Lobster and abalone ranching. All species allocated for own use will be accessed by all members for food security whereas species requested for commercial purposes will be owned and controlled by the cooperative for the cooperatives' business operations.

During the assessment of fishing rights applications, it was noticed that the majority of species requested were line fish species. It was also noticed that some of the species require use of a vessel. Therefore, TAE will need to be availed through the apportionment of TAE between small-scale and commercial sector when the DEFF allocates commercial rights in 2021. In the meantime, cooperatives will be able to fish from shore using hook and line, and will further share an effort of 38 vessels while fishing rights allocation process 2021 is being concluded.

department has also sought to promote transformation in the sector through inclusion of small-scale fishing communities. The Marine Living Resources Amendment Act, 2014 (Act 5 of 2014), grants small-scale fishing communities better access to fishing rights and resources.

The small-scale fishing sector is designed to address food security needs within the local community and allow fishers to derive maximum benefit through value-adding of products and accessing markets.

The effective management of the existing harbours and proclamation of additional new harbours support resource management.

Although wild catch fisheries appear unlikely to expand beyond their present levels, aquaculture is becoming more important as a substitute for wild capture fisheries.

South Africa has acceded to the Indian Ocean Tuna Commission and the Commission for the Conservation of Southern Bluefin Tuna, thereby allowing the country greater influence in negotiating for increased tuna quota allocations and access.

The associated benefits have resulted in the immediate increase in the allocation of Southern Bluefin Tuna from 150 t to 450 t until 2020.

Small-scale fisheries sector

The Small-Scale Fisheries Policy seeks to address imbalances of the past and ensure that small-scale fishers are accommodated and properly managed. For the first time, fishing rights can be allocated on a group, rather than an individual. The policy further aims to support investment in community entities to take joint responsibility for sustainably managing the fisheries resources and to address the depletion of critical fisheries stocks.

The sector is aimed at redressing the inequality suffered by coastal fishing communities which, as a result of unintended consequences, have remained marginalised through previous rights allocation systems. Furthermore, the establishment of the small-scale sector seeks to empower small-scale fishers to contribute meaningfully to the national GDP and to play a meaningful role in food security and job creation.

This process is informed by the Marine Living Resources Act of 1998, and the regulations thereof which was amended to legally recognise small-scale fishers who have been living in coastal communities and depending on fishing and its related activities as a source of livelihood.

The small-scale fisheries regulations, along with the Marine Living Resources Amendment Act of 2014 provide the legal mechanism for the implementation of the small-scale fisheries policy. These reforms give legal recognition to small-scale fishers and will promote the transformation of the subsector to assist fishing communities living along the coastal areas in creating sustainable livelihoods, generating income and creating jobs.

Recreational fishing

While the illegal harvesting of abalone poses the greatest threat to management objectives, the DEFF will continue to work with all stakeholders in the abalone sector and continue to strengthen partnerships with other law-enforcement agencies and communities to ensure that the country grows and protects its resources.

South Africa's extensive coastline spanning two oceans and its numerous dams, lakes, rivers and streams, make the country a recreational fisher's paradise. However, recreational fishing may only be undertaken with a valid permit and is limited to certain times of the fishing season.

To reduce user conflicts between commercial and recreational fishing, and to, protect stocks during breeding periods, certain areas have been declared closed areas.

Recreational fishers are also subject to bag limits of fish on a per-day basis.

Annual recreational fishing licences in all industries total about 300 000, with income generated from these licences amounting to R18 million.

The actual annual catch is about 17 000 t of high-value species.

World Fisheries Day

South Africa celebrates World Fisheries Day every year on 21 November with fishing communities throughout the world.

World Fisheries Day helps in highlighting the critical importance to human lives, of water and the lives it sustains, both in and out of water.

Facts on fisheries:

- Small-scale fisheries (marine and inland) employ about 90% of those involved in fisheries.
- 65% of the reported catch from inland fisheries is from lowincome food-deficit countries.
- Estimates vary, but from around 30 million to over 60 million people in the developing world are involved in inland fisheries; it is thought that about 50% are women.
- More than 25% of the world's dietary protein is provided by fish.
- The human population consumes over 100 million t of fish annually.
- Over 200 million, of Africa's one billion, people regularly consume fish and nearly half of this comes from inland fisheries.

National Environmental Impact Assessment and Management Strategy (EIAMS)

The EIAMS consists of voluntary and regulated instruments where:

- regulated EIAs are used only when it is the most appropriate tool:
- EIAM occurs within the strategic context of environmentally informed spatial instruments, sector strategies and policies;
- authorities have enough capacity with skilled and experienced officials:
- other stakeholders have the capacity and skills to ensure maximum impact on the effectiveness and efficiency of the strategy:
- government regulatory processes have been integrated and aligned; and
- government, EAPs, developers and the community are equally committed to making it work.

4x4 regulations

The Strategy Towards Co-Regulation of the Off-Road Sector in South Africa is aimed at minimising the impact of off-road

driving on the environment by giving direction to off-road users and owners to develop and use inland routes in sensitive areas responsibly. The strategy applies to the inland recreational use of off-road vehicles, including two-wheel, three-wheel and four-wheel vehicles, which include 2x4 and 4x4 motor vehicles, quad bikes and motorbikes.

A key outcome of the strategy was the development, drafting and implementation of national norms and/or standards, with a supportive enabling legislative framework, to facilitate environmental compliance, responsible tourism and the long-term sustainability of the off-road industry.

The banning of off-road vehicles in coastal zones has enabled several shore-breeding birds, especially the Damara tern and the African black oystercatcher, to breed successfully on beaches again. The number of loggerhead and leatherback turtles hatching successfully on KwaZulu-Natal's northern beaches has also increased since the ban was enforced.

Coastal management

The ocean covers three quarters of the Earth, hence the importance of its protection. The DEFF recognises the challenges regarding the management of ocean spaces in South Africa's adjacent ocean areas.

Of the 200 estuaries found along the South African coast, 25% are in a degraded state. This is due to inappropriate developments along the banks of estuaries and in their catchment areas. The department is focusing its attention proactively on these degraded systems and prioritising developing management plans to improve the functioning of estuaries in associated hinterlands.

The Buoy Oceans Monitoring System, which provides information on the state of the oceans at Storms River in the Tsitsikamma National Park, is the first in a series of observation and monitoring platforms, which will form the basis of the South African National Oceans and Coastal Monitoring System. The DEFF reviewed the Recreational Water Quality Guidelines for Coastal Waters intending to develop effective early warning systems to pre-empt the catastrophic impacts of possible hazards.

Erosion and desertification

According to the UN Environment programme, desertification affects 900 million people in 99 countries with 24 million megatonnes (Mt) of topsoil being lost to erosion annually. The resultant land degradation costs Africa about US\$9 billion every year.

Most South African soil is unstable. The country loses an estimated 500 Mt of topsoil annually through erosion caused by water and wind.

About 81% of South Africa's total land area is farmed. However, only 70% of this area is suitable for grazing. Overgrazing and erosion diminish the carrying capacity of the veld and lead to land degradation. This process has already claimed more than 250 000 ha of land in South Africa.

South Africa is a signatory to the UN Convention to Combat Desertification (UNCCD). Its main objectives include cooperation between governments, organisations and communities to accomplish sustainable development, especially where water resources are scarce.

South Africa also acts as the coordinator for the Valdivia Group for Desertification.

The group consists of Argentina, Australia, Brazil, Chile, New Zealand, South Africa and Uruguay. The aim is, among other things, to foster scientific and technological cooperation.

South Africa has introduced legislation such as the NEMBA of 2004 to promotes the conservation of biodiversity, and fight desertification and land degradation.

Biodiversity

South Africa is home to some 24 000 species, around 7% of the world's vertebrate species, and 5.5% of the world's known insect species (only about half of the latter have been described).

In terms of the number of endemic species of mammals, birds, reptiles and amphibians found in South Africa, the country ranks as the fifth richest in Africa and the 24th richest in the world.

Marine biodiversity is also high, with more than 11 000 species found in South African waters, which is about 15% of global species. More than 25% of these species (or 3 496 species) are endemic to South Africa, many of which are threatened, especially in river ecosystems (82%) and estuaries (77%).

South Africa ratified the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation to the Convention on Biological Diversity, popularly referred to as the Nagoya Protocol on Access and Benefit Sharing. The protocol is a legally binding agreement outlining a set of terms prescribing how one country will gain access to another country's genetic resources and how the benefits derived will be shared.

The aim of the National Biodiversity and Business Network is to assist businesses from various sectors to integrate and mainstream biodiversity issues into their strategies and operations.

The government and businesses are realising that the economic and social development of the country depends on healthy ecosystems and biodiversity. The NDP: Vision 2030 confirms that national economic growth depends on the environmental sustainability of the country's proposed development path.

South Africa is the third most biodiverse country in the world, after Indonesia and Brazil. These countries harbour most of the Earth's species and collectively accommodate more than two thirds of global biodiversity.

South Africa is a signatory to several biodiversity-related multilateral agreements such as the:

- Convention on Biological Diversity Cartagena Protocol on Biosafety;
- Ramsar Convention:
- · CITES:
- UNCCD: and
- · Convention on Migratory Species.

The National Biodiversity Strategy and Action Plan 2015 – 2025 is aimed at establishing a framework and plan of action for the conservation and sustainable use of South Africa's biodiversity and the equitable sharing of benefits derived from this use.

The National Biodiversity Framework (NBF) provides a framework to coordinate and align the efforts of the many organisations and individuals involved in conserving and managing South Africa's biodiversity, in support of sustainable development. The NBF is a requirement of the NEMBA of 2004.

Three internationally recognised biodiversity hotspots are found in South Africa. They are the:

- Cape Floral Kingdom (equivalent to the fynbos biome);
- · Succulent Karoo (shared with Namibia); and
- Maputaland-Pondoland-Albany Centre of Plant Endemism, which stretches from the Albany Centre in the Eastern Cape, through the Pondoland Centre of Plant Endemism and KwaZulu-Natal, and the eastern side of Eswatini, into southern Mozambique and Mpumalanga.

The Succulent Karoo Biome is one of only two arid biodiversity hotspots in the world, the other being the Horn of Africa.

There are eight major terrestrial biomes, or habitat types, in South Africa, which are divided into 70 veld types.

National biodiversity biomes

Savanna Biome

The Savanna Biome is the largest biome in southern Africa, occupying 46% of its area, and over a third of South Africa. It is an area of mixed grassland and trees, generally known as bushveld.

In the Northern Cape and Kalahari sections of this biome, the most distinctive trees are the camel thorn (*acacia erioloba*) and the camphor bush (*tarchonanthus camphoratus*).

In Limpopo, the portly baobab (adansonia digitata) and the candelabra tree (euphorbia ingens) dominate. The central bushveld is home to species such as the knob thorn (acacia nigrescens), bushwillow (combretum spp.), monkey thorn (acacia galpinii), mopani (colophospermum mopane) and wild fig (ficus spp.). In the valley bushveld of the south, euphorbias and spekboom trees (portulacaria afra) dominate.

Abundant wild fruit trees provide food for many birds and animals in the Savanna Biome. Grey loeries, hornbills, shrikes, flycatchers and rollers are birds typical of the northern regions.

The subtropical and coastal areas are home to Knysna loeries, purple-crested loeries and green pigeons. Raptors occur throughout the biome. The larger mammals include lion, leopard, cheetah, elephant, buffalo, zebra, rhino, giraffe, kudu, oryx, waterbuck and hippopotamus.

About 8.5% of the biome is protected. The Kruger National Park, Kgalagadi Transfrontier Park, Hluhluwe-Umfolozi Park,

iSimangaliso Wetlands Park and other reserves lie in the Savanna Biome.

Nama-Karoo Biome

The Nama-Karoo is the third-largest biome in South Africa, covering about 20.5% of the country or more than 260 000 km². It stretches across the vast central plateau of the western half of the country. This semi-desert receives little rain in summer.

Rainfall varies from about 200 millimetres (mm) a year in the west to 400 mm a year in the north-east. Summer is very hot and winter is very cold with frequent frost.

Most of the plants are low shrubs and grass. Many plants are deciduous. Trees such as the sweet thorn (*acacia karoo*) are usually only found along rivers or on rocky hillsides.

Common animals include the bat-eared fox, ostrich, spring hare, tortoises and brown locust. The riverine rabbit is a threatened species found in the Nama-Karoo Biome.

This biome includes the Namaland area of Namibia, and the central Karoo area of South Africa.

Because of low rainfall, rivers are non-perennial. Cold and frost in winter and high temperatures in summer demand special adaptation by plants.

Only 1% of the Nama-Karoo Biome falls within officially protected areas, of which the Karoo and Augrabies national parks are the largest.

Overgrazing and easily eroded soil surfaces are causing this semi-desert to advance slowly on the neighbouring savanna and grassland biomes.

Grassland Biome

The Grassland Biome is the second-largest biome in South Africa, covering an area of 339 237 km² and occurring in eight of South Africa's nine provinces. It is one of the most threatened biomes in South Africa, with 30% irreversibly transformed and only 1.9% of the biodiversity target for the biome formally conserved.

The Grassland Biome provides essential ecosystem services, such as water production and soil retention necessary for economic development. It holds important biodiversity of global and domestic significance and value.

Trees are scarce and found mainly on hills and along riverbeds. Karee (*rhus lancea*), wild currant (*rhus pyroides*), white stinkwood (*celtis africana*) and several acacia species are the commonest.

The Grassland Biome has the third-largest number of indigenous plant species in the country.

Eight mammal species endemic to South Africa occur in the wild in this biome.

The area is internationally recognised as having high species endemicity for birds. The black korhaan, blue crane and guinea fowl are among the birds found in the area.

Succulent Karoo Biome

The Succulent Karoo Biome covers a flat to gently undulating plain, with some hilly and "broken" veld, mostly situated to the west and south of the escarpment, and north of the Cape Fold Belt.

One of the natural wonders of South Africa is the annual blossoming of the Namaqualand wild flowers (mainly of the family asteraceae), which transforms the semi-desert of the Northern Cape into a fairyland. After rain, the drab landscape is suddenly covered with a multicoloured carpet of flowers (from August to October, depending on the rainfall). This is a winter rainfall area with extremely dry and hot summers. Succulents with thick, fleshy leaves are plentiful. Most trees have white trunks to reflect the heat.

The quiver tree (*aloe dichotoma*) and the human-like elephant's trunk (*pachypodium namaquanum*) are prominent in the Richtersveld. Grass is scarce.

The animal life is similar to that of the neighbouring Fynbos and Nama-Karoo biomes.

The biome includes 2 800 plant species at increased risk of extinction

Fynbos Biome

The Fynbos Biome is one of the six accepted floral kingdoms of the world. This region covers only 0.04% of the Earth's land surface.

Fynbos, which is found mainly in the Western Cape, is the name given to a group of ever-green plants with small, hard

leaves (such as those in the Erica family). It is made up mainly of the protea, heathers and restio.

The Fynbos Biome is famous for the protea, which is South Africa's national flower. The biome also contains flowering plants now regarded as garden plants, such as freesia, tritonia, sparaxis and many others.

Protected areas cover 13.6% of the Fynbos Biome and include the Table Mountain and Agulhas national parks.

This biome is not very rich in bird and mammal life, but does include the endemic Cape grysbok, the geometric tortoise, the Cape sugarbird and the protea seed-eater. Baboon, honey badgers, caracal, the buck and several types of eagle and dassies are found in the mountains.

Forest Biome

South Africa's only significant natural forests are those of Knysna and Tsitsikamma in the Western and Eastern Cape respectively. Other reasonably large forest patches that are officially protected are in the high-rainfall areas of the eastern escarpment (Drakensberg mountains), and on the eastern seaboard. Forest giants such as yellowwood (podocarpus spp.), ironwood (plea capensis) and lemonwood (xymalos monospora) dominate.

The indigenous forests are a magical world of ferns, lichens and colourful forest birds such as the Knysna loerie, the endangered Cape parrot and the rameron pigeon. Mammals include the endangered samango monkey, bushpig, bushbuck and the delicate blue duiker.

Thicket Biome

The Thicket Biome is the second-smallest biome in South Africa and is known for its high biodiversity. Subtropical thicket ranges from closed shrubland to low forest, dominated by evergreen succulent trees, shrubs and vines.

It is often impenetrable and has little herbaceous cover. Roughly 20% of the species found there are endemic to the Thicket Biome.

The Thicket Biome, which is predominantly in the Eastern Cape, supports four species of tortoise: the leopard tortoise (*geochelone pardalis*), angulate tortoise (*chersina angulata*),

tent tortoise (psammobates tentorius) and parrot-beaked tortoise (homopus areolatus).

Desert Biome

True desert is found under very harsh environmental conditions, which are even more extreme than those found in the Succulent Karoo and the Nama-Karoo biomes. The climate is characterised by summer rainfall, but also by high levels of summer aridity. Rainfall is highly variable from year to year. Desert is found mostly in Namibia, although it does occur in South Africa in the lower Orange River Valley.

The vegetation of the Desert Biome is characterised by the dominance of annual plants (often annual grasses). This means that after a rare season of abundant rain, the desert plains can be covered with a sea of short annual grass, whereas in drier years, the plains appear bare with annual plants persisting in the form of seeds.

Perennial plants are usually encountered in specialised habitats associated with local concentrations of water from broad drainage lines or washes. Nearer the coast, coastal fog also governs the distribution of certain species commonly associated with the desert.

The Desert Biome incorporates abundant insect fauna, which includes many tenebrionid beetles, some of which can use fog water. There are also various vertebrates, including reptiles, springbok, ostrich, gemsbok, snakes and geckos.

Some areas in this biome are formally protected in the Richtersveld National Park

Forestry

The forestry sector employs around 157 500 workers with the forest sub-sector providing about 59 800 direct jobs and 27 500 indirect jobs. Forestry provides livelihood support to 688 000 people of the country's rural population. The pulp and paper industry provides about 13 200 direct and 10 800 indirect employment opportunities.

Some 20 000 direct workers are employed and 8 000 indirect in sawmilling, and 6 000 in the timber-board and 2 200 in the mining timber industries, while a further 10 000 workers are employed in miscellaneous jobs in forestry.

In terms of land use, the afforested area is about 1.21 million ha or about 1.0% of the total South African land area of 122.3 million ha. The forest sector (forestry and forest products) contributes about 0.90% to the GDP. In terms of regional GDP, forestry in KwaZulu-Natal contributes 3.3%; Mpumalanga 3.2%; the Eastern Cape 0.8%; Limpopo 0.7% and Western Cape about 0.2%.

Although forestry contributes a modest 0.6% to the GDP, it supports manufacturing subsectors such as pulp, paper and cellulose manufacture, sawmilling, pole treating, panel and fibre board manufacturing, as well as mining timber, tannin extract (used in leather tanning) and charcoal manufacture.

Of the total land area of 122.3 million ha in South Africa, only 1% or 1.221 million ha is used for commercial forestry.

Mpumalanga has the highest investment in plantations at R19.6 billion (41.9%) followed by KwaZulu-Natal with R16.6 billion (35.6%), the Eastern Cape at R6.4 billion (13.7%), Limpopo R2.1 billion (4.75%) and the Western Cape at R2.0 billion (4.4%).

The forest products industry ranks among the top exporting industries in the country. The sector continues to generate substantial net trade surpluses. Production from plantations has been declining in recent years.

While it is clear that the private sector does have good management capacity and has also ushered in efficiencies across the value chain, the State must still play a role to ensure adequate levels of investment in long-rotation sawlog plantations as the State produces sawlogs for the private sector to process. The State's role to forestry has, however, declined substantially since the partial privatisaon of the South African Forestry Company Limited (SAFCOL) through the leasing out of most of its plantation assets to the private sector. The SAFCOL, through Komatiland Forests, is nevertheless an important player in the industry and continues to play a role in providing the private sector sawmilling sector with sawlogs.

The government manages approximately 64 000 ha of plantations categorised into category B and C. These plantations have vast areas suitable for planting but are currently unplanted. Plans are underway to revitalise the plantations, which will create jobs for people in surrounding communities.

South Africa is currently experiencing a shortage of timber and is constrained to meet the national demand for saw log timber. Approximately 30 000 ha of currently fallow areas could be a strategic contribution to timber supply in order to meet needs along the value chain.

National Arbor Month

South Africa celebrates Arbor Month in September every year. Arbor Week is commemorated in the first week of September annually.

Arbor Month 2020 took place under the theme, "Forests and Biodiversity", signifying the importance of protecting and conserving the country's biodiversity as the backbone of South Africa's economy and livelihoods. With September also being Heritage Month, the DEFF focussed on the country's champion trees, which include some of the oldest, largest and culturally significant trees — Sophia Town Oak Tree and the Sagole Baobab Tree in Limpopo.

Tree planting activities for the 2020 National Arbor Month campaign also focussed on remembrance, commemorative tree planting and greening of settlements. The government opened a memorial garden to honour all South Africans who succumbed to the COVID-19 panemic and frontline professionals who worked tirelessly to treat patients with the virus.

National Arbor Month is an opportune for South Africans to plant indigenous trees as a practical and symbolic gesture of sustainable environmental management.

To promote greening, especially the planting of indigenous trees that are becoming scarce, the concept of the trees of the year was born some years ago. Two trees are selected – a rare and a common species. The common tree of the year for 2020 is *Ekebergia capensis* (Cape ash) and the rare tree of the year is *Adansonia digitata* (Baobab).

Arbor City Awards

The National Arbor City Awards are greening competitions that take place in line with the national greening strategy.

The purpose of the competition is to encourage municipalities to green their areas of jurisdiction and promote environmental conservation and development, thereby securing a healthy living environment for residents in all settlement areas. It provides incentives and rewards to municipalities that are doing their best in terms of greening and landscape management, especially in townships and new settlement areas.

The competition further encourages the municipalities to create awareness around the importance of green landscapes and provide a platform for the diagnosis of challenges facing municipalities in the area of greening.

There are three categories – metropolitan municipalities, local municipalities and rural-based municipalities. For each category the winner receives prize money to promote greening in their area.

Champion Tree Project

The purpose of the Champion Tree Project is to identify and protect trees that are of national importance and worthy of special protection, due to their remarkable size, age, aesthetic, cultural, historic or tourism value.

Since the start of the project in 2003, 86 trees or groups of trees have been declared as champion trees, based on criteria such as size, age and historical value. These trees are all protected under the National Forests Act of 1998. They include the Tsitsikamma Big Tree along the Garden Route, the Post Office Milkwood Tree of Mossel Bay, the Sagole Baobab in Limpopo and camphor trees planted at Vergelegen Estate in the Western Cape three centuries ago. The Sagole Baobab has the second-biggest trunk in the world, while a stand of saligna gum trees planted in 1906 near Tzaneen in Limpopo are the tallest trees in Africa.

A few champion trees have died since the launch of the project, including the Platland Baobab in Limpopo, which collapsed in 2017. In Cape Town, the Tokai Arboretum was damaged by fire, and extensive work had to be undertaken by arborists to fell trees and prune or treat others.

The oldest planted tree in South Africa is a saffron pear, brought from the Netherlands and planted in the Dutch East India Company's gardens in Cape Town more than three centuries ago, supposedly by Jan van Riebeeck. Historic trees include a poplar tree, which served as a landmark for refugees during the apartheid regime who found a safe haven in the Johannesburg

house of Ruth Fischer, the daughter of Bram Fischer, who was a founding member of the South African Communist Party.

In 2015 a new record-breaking tree was discovered in an old tree lane in the Boschendal wine estate. This karri gum tree of 50.4 metres (m) tall has a massive crown and a trunk circumference of over 8 m and is now officially the largest tree in South Africa.

Million Trees Programme

The Million Trees programme was launched in 2007 as part of a UN greening initiative to encourage countries worldwide to plant more trees. Its purpose is to ensure that at least one million trees, including fruit trees and indigenous ornamental shade trees, are planted every year in various member states of the UN.

In South Africa, the Million Trees programme is a partnership between the three spheres of government, non-governmental and community-based organisations, schools and the corporate sector.

It is part of the South African contribution to the UN Environment programme "Plant for the Planet: Billion Tree Campaign", where communities, industry, civil society organisations and governments are encouraged to plant at least one billion trees worldwide.

Indigenous forests

Only about 0.5% of South Africa's total land area is covered by natural forests. About half of the more than 1 700 indigenous tree and shrub species, representing some 530 000 ha of dense growth, grow along the south and east coasts and on the southern and south-eastern slopes of inland mountains. The other half is spread over the interior plateaux in isolated valleys and ravines.

A number of these natural forest regions, such as the Tsitsikamma National Park, are important tourist attractions.

The large Afro-temperate forests of the southern Cape, although distributed close to the coast, are aligned with the inland forest types of the Eastern Cape, KwaZulu-Natal, Mpumalanga and Limpopo. This is because the southerly temperate latitudes compensate for the altitude of inland forests.

Almost half of all-natural forests in South Africa are found on private property or land under communal tenure. A detailed inventory of natural forests helps government to monitor changes in forest areas.

Although the country's low natural forest coverage has led to the development of the commercial forestry sector over the last 100 years, natural forests have continued playing a major role in the livelihoods and well-being of many rural communities. The use of natural forests as sources of building material, fuel wood, food and medicine is increasing, with an estimated 80% of South Africa's population still using medicinal plants, most of which are sourced from natural forests.

The forest-type classification for natural forests represents 24 broad forest types. The Natural Forests Protected Areas System guides the setting aside and demarcation of natural forests as protected areas.

Systematic timber harvesting occurs in certain areas of southern Cape forests and on a smaller scale, in the Amathole forests in the Eastern Cape.

This sustainable harvesting system concentrates on the removal of small quantities of senile trees dying off within the forest. On average, 3 750 cubic metres (m³) of round logs are harvested annually (150 m³ of stinkwood, 750 m³ of yellowwood, 2 500 m³ of Australian blackwood and 350 m³ of other species).

The seven-week fern (*Rumohra adiantiformis*), harvested in the Knysna and Tsitsikamma forests, is another valuable product of indigenous forests. The South African market for this fern is considerable and reaches its peak in September, when sales have been known to exceed 420 000 bunches.

Woodlands

The woodlands, also known as savannahs, constitute a forest resource of major importance in South Africa. It is the most accessible forest resource for poor communities and contributes in the region of R2 000 to R5 000 to poor households annually. Natural forests cover less than one million ha of land in total, plantation forestry covers less than 1.3 million ha and the woodlands collectively cover between 29 million and 46 million ha.

The cover includes extensive areas in the low-lying, drier areas of Limpopo, KwaZulu-Natal and Mpumalanga. Rich biodiversity is found in savannah woodland comprising 5 900 plants, 540 bird species and 175 mammals.

These include iconic species such as the Big Five group of mammals that are important to the tourism industry. Several protected tree species of the savannah, such as camel thorn and leadwood, contribute substantially to the lucrative braai wood market, and guidelines have been set for licensing processes to assist with the control of their use.

Kathu Forest in the Northern Cape is the first woodland area to be declared protected woodland under the National Forests Act of 1998.

In the past, this resource was not really recognised as a forestry responsibility, except where woodland occurred on state-forest land in conservation areas. However, the National Forestry Action programme of 1997 identified woodland management as a key area of operation for forestry.

The National Forests Act of 1998 also includes woodland in its definition of forests and mandates monitoring and reporting on the state of the woodlands. This legislation protects woodlands on private and communal land, as well as in state forests, while promoting sustainable use.

Savannah woodlands are the most extensive vegetation type in southern Africa and dominate Africa as a whole. Globally, woodlands cover between an eighth and a sixth of the Earth's land surface.

The woodlands are a valuable source of fuel, building material, craft timber and a variety of non-timber products. These include fruit, fodder, medicinal compounds, honey, meat and mushrooms. They form the backbone of the livelihoods of millions of people. The annual marula fruit (*Sclerocarya birrea*) harvest, for example, is worth some R1.1 billion a year to rural communities.

There are 87 savannah woodland types, and although the biome as a whole is fairly well protected in formal and private reserves, many underprotected savannah types have been identified.

Another woodland type is the Albany Thicket Biome, characterised by dense growth of woody and succulent plant

species. There are 13 thicket types, which together cover about three million ha. Extensive spekboom plantings are underway in the Eastern Cape to restore the carrying capacity of degraded thicket areas, and to capitalise on the high carbon sequestration rates of this species as a climate change offset.

Commercial forests

Commercial forest plantations predominantly meet South Africa's demand for wood. During the 1930s, government started extensive commercial plantations to make South Africa self-sufficient in its timber requirements, and to provide more job opportunities.

Commercial plantations of exotic species proved to be a sound investment and the private sector established large plantations of pine, eucalyptus and wattle. South Africa's plantation forests cover about 1% of the combined cultivated (arable) and grazing land.

The commercial forestry industry in South Africa is committed to practising sustainable forest management and is a world leader in forest certification. Stringent environmental codes of practice are implemented in all plantation and processing activities.

The Institute for Commercial Forestry Research completed its role in developing the National Forest Protection Strategy for the department, a project funded by the Food and Agriculture Organisation of the UN.

Another development which will assist in enhancing forest protection is the memorandum of understanding (MoU), formalising Forestry South Africa's support and funding for these activities at the Forestry and Agriculture Biotechnical Institute, which has been entered into with the University of Pretoria.

Plantation yields

South Africa's intensively managed commercial forestry plantations are recognised as some of the most productive in the world. Consequently, from a limited geographic footprint of 1.2 million ha, the industry can produce, on a sustainable and annual basis, between 15 and 18 million t of timber a year.

Sappi Forests supplies over 70% of the wood requirements of Sappi Southern Africa from both its own and committed

commercial timber plantations covering 492 000 ha. This equates to approximately 30 Mt of standing timber.

The Lomati Sawmill produces 102 000 m³ per year of sawn timber for the construction and furniture manufacturing industry.

All wood grown on Sappi-owned land and a large proportion grown on plantations managed by the company, is Forest Stewardship Council certified.

Approximately 150 000 ha of land is set aside and maintained by Sappi Forests to conserve the natural habitat and biodiversity found there, including indigenous forests and wetlands.

The timber is used in wood products such as roof trusses. It is also pulped, with the wood fibre used for newspapers, boxes, paper bags and paper.

Socio-economic reform and growth

The forestry vision states that forests are managed for people and that there is a need to create an enabling environment for economic and social development through sustainable forestry, especially at local level.

Strategies to achieve this vision include forestry enterprise development, aimed at creating opportunities for people to use forests, including indigenous forests, woodlands and plantations, and forest-based resources for economic growth, income-generation and job creation.

The forestry enterprise development concept is central to government's pro-poor agenda and also a key component of Broad-Based Black Economic Empowerment (BBBEE) in the forestry sector.

Community forestry

Community forestry is designed and applied to meet local social, household and environmental needs and to benefit local economic development.

Community forestry is implemented by communities or with the participation of communities and includes tree-centred projects in urban and rural areas, woodlots, and woodland being managed by communities and individuals.

Community forestry has gained impetus through more focused core functions, particularly in urban greening and forest enterprise development.

Participatory forest management of the DEFF is an integrated approach that contributes to achieving the sustainable management of South African forests.

Elements of participatory forest management were initially developed for indigenous state forests.

However, the aim is to use participatory forest management as an approach to managing all forest types, where feasible (indigenous forests, plantations, woodlots and woodlands) and where different types of ownership and management (state, provincial, communal, private and community) exist.

World Soil Day

World Soil Day is observed and celebrated every year on 5 December by all UN member states, organisations of the UN system and other international and regional organisations, civil society, NGOs and individuals to emphasise the importance of soil.

The 2019 theme for World Soil Day was "Stop soil erosion, Save our future". It was aimed at raising awareness on the importance of sustaining healthy ecosystems and human wellbeing.

International cooperation

Benguela Current Large Marine Ecosystem (BCLME)

The BCLME is regarded as one of the richest ecosystems on Earth, with ecosystem goods and services estimated to be worth at least US\$54.3 billion a year. Offshore oil and gas production, marine diamond mining, coastal tourism, commercial fishing and shipping are some of the most important industrial activities that take place in the region.

The accord, signed in Angola, is a formal agreement between Angola, Namibia and South Africa that seeks to provide economic, environmental and social benefits for the three countries.

The Benguela Current Commission is a permanent intergovernmental organisation, with a mandate to promote the long-term conservation, protection, rehabilitation, enhancement and sustainable use of the BCLME.

South Africa has signed several international conventions, treaties, protocols and other agreements supporting the

principles of sustainable development including the:

- CBD (ratified in 1995);
- Cartagena Protocol on Biosafety (South Africa became a party in 2003);
- Kyoto Protocol (signed in 2003);
- · UNCCD;
- · World Heritage Convention (ratified in 1997);
- Convention on Wetlands of International Importance (Ramsar Convention) (ratified in 1975); and
- Convention on the Conservation of Migratory Species (acceded in 1991).

United Nations Framework Convention on Climate Change

South Africa ratified the UNFCCC in 1997. The UNFCCC is aimed at:

- implementing urgent action, from 2013 to 2020, including the adoption of a second commitment period under the Kyoto Protocol and a number of institutional mechanisms such as the GCF:
- acknowledging the inadequate commitments to reduce emissions made thus far; a work programme was agreed upon to increase pre-2020 levels of ambition; and
- action for the future with the negotiation of a legal agreement for the period beyond 2020.

The UNFCCC entered into force in 1994. The COP to the UNFCCC meets annually to assess progress in grappling with climate change. The COP is the supreme body of the convention and is its highest decision-making authority.

With 195 parties, the UNFCCC has near universal membership and is the parent treaty of the 1997 Kyoto Protocol. The Kyoto Protocol has been ratified by 193 of the UNFCCC parties.

Under the protocol, 37 states, consisting of highly industrialised countries and those making the transition to a market economy, have legally binding emission limitation and reduction commitments.

The ultimate objective of both treaties is to stabilise GHG concentrations in the atmosphere at a level that will prevent dangerous human interference with the climate system.

The launch of negotiations to shape the new global climate

change agreement and first discussions on how to raise ambition took place at the UNFCCC in Bonn, Germany, in May 2012, which prepared decisions for adoption at the UNFCCC in Qatar later in 2012.

UN Commission on Sustainable Development (CSD)

The UN CSD was established by the UN General Assembly in December 1992 to ensure effective follow-up of the UN Conference on Environment and Development, also known as the Earth Summit.

From its inception, the CSD was highly participatory in structure and outlook by engaging in its formal proceedings a wide range of official stakeholders and partners through innovative formulae.

Convention on International Trade in Endangered Species of Wild Fauna and Flora

South Africa was a founding member of the CITES Treaty, which was adopted on 3 March 1973, but only came into force on 1 July 1975.

Signed by 149 countries, the CITES is an international agreement between governments to protect endangered species against over-exploitation through regulations regarding imports and exports and in some cases prohibiting trade.

The CITES was drafted as a result of a resolution adopted in 1963 at a meeting of members of the IUCN. The CITES accords varying degrees of protection to more than 30 000 animals and plant species, whether they are traded as live specimens, fur coats or dried herbs.

The DEFF, SANBI, the Scientific Authority and provincial authorities are working together to ensure full compliance with decisions taken at the 17th Conference of Parties to the CITES.

These include identifying and implementing protocols for the registration of over 1 000 facilities for breeding captive bred parrots; strengthening the monitoring of leopard populations to improve science-based decision making; and initiating a research project to understand how trade in lion bone may impact wild lion populations.

Montreal Protocol on Substances that Deplete the Ozone Layer

The International Ozone Day is an annual event that commemorates the date of the signing the Montreal Protocol in 1987. South Africa, which became a signatory to the Montreal Protocol in 1990, has phased out chlorofluorocarbons, halons, methyl chloroform and carbon tetrachloride.

International Day for the Preservation of the Ozone Layer

The International Day for the Preservation of the Ozone Layer is commemorated annually on 16 September. Due to COVID-19 regulations, the 2020 event was held virtually under the theme, "Ozone for Life"— acknowledging 35 years of ozone layer protection, preserving of the environment and human health.

During the celebrations, the DEFF shared details of its amended regulations aimed at protecting the ozone layer – in an effort to ensure that South Africa closes the potential gaps in illegal trade, hence the amendment of regulations regarding the phasing-out and management of ozone-depleting substances was undertaken.

The government's collaboration with industry birthed the Chemicals Management Phakisa Initiatives. This is aimed at impacting positively on both the environment and economy, such as the training of refrigeration and air conditioning technicians in the informal servicing sector in the country by 2023.

The government is also extending its reach to learning institutions in order to develop and raise a generation of environmentalists.

South Africa also participates and plays an important role in leading Africa in international negotiations, making sure that the needs of the continent in phasing out and managing ozone depleting substances are met.

South Africa is the President of the African Ministerial Conference on the Environment for 2020, and has co-chaired the Open Ended-Working Group Meeting in 2020.

World Summit on Sustainable Development

At the UN World Summit on Sustainable Development Goals (SDGs), 2030, held in September 2015, world leaders adopted

17 SDGs of the 2030 Agenda for Sustainable Development. Over the next 15 years, with these new goals that universally apply to all, countries would mobilise efforts to end all forms of poverty, fight inequalities and tackle climate change, while ensuring that no one is left behind.

The SDGs build on the success of the Millennium Development Goals and aim to go further to end all forms of poverty. The goals are unique in that they call for action by all countries, poor, rich and middle income to promote prosperity while protecting the planet.

The 17 SDGs are:

- · End poverty in all its forms everywhere.
- End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
- Ensure healthy lives and promote well-being for all at all ages.
- Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
- Achieve gender equality and empower all women and girls.
- Ensure availability and sustainable management of water and sanitation for all.
- Ensure access to affordable, reliable, sustainable and modern energy for all.
- Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
- Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.
- · Reduce inequality within and among countries.
- Make cities and human settlements inclusive, safe, resilient and sustainable.
- Ensure sustainable consumption and production patterns.
- Take urgent action to combat climate change and its impacts.
- Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
- Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
- · Promote peaceful and inclusive societies for sustainable

- development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.
- Strengthen the means of implementation and revitalise the Global Partnership for Sustainable Development.

UN Conference on Sustainable Development (Rio+20)

Rio+20 refers to the UN Conference on Sustainable Development that took place in Rio de Janeiro, Brazil, in June 2012. The meeting took place 20 years after the landmark 1992 Earth Summit in Rio, when more than 108 Heads of State agreed to work together to develop national strategies to reduce carbon emissions, stabilise GHG, protect forests from destruction, and pay for their share of the damage caused to the Earth through pollution.

At the Rio+20 talks, 50 of the 193-member states of the UN launched new energy strategies, and private investors pledged more than US\$50 billion to carry out the goal of doubling the share of global renewable energy and the rate of energy efficiency improvement by 2030.

Tourism

Tourism has the potential to make a significant contribution to the South African economy and it is targeted by government as one of the industries for future economic growth in the country. Tourism therefore is regarded as a potential sector where largescale employment opportunities can be created.

The mandate of the Department of Tourism, as outlined in the Tourism Act, 2014 (Act 3 of 2014), is to promote the growth and development of the tourism sector; promote quality tourism products and services; provide for the effective domestic and international marketing of South Africa as a tourist destination; enhance cooperation and coordination between all spheres of government in developing and managing tourism; and promote responsible tourism for the benefit of South Africa and for the enjoyment of all its residents and foreign visitors.

In recognition of tourism as a national priority with the potential to contribute significantly to economic development, the 1996 White Paper on the Development and Promotion of Tourism in South Africa provides for the promotion of domestic and international tourism. The national tourism sector strategy

provides a blueprint for the sector to meet the growth targets contained in the NPD.

The NDP identifies tourism as a labour-intensive sector with the potential to stimulate economic growth and transformation. This vision is given expression by Priority 1 (economic transformation and job creation) of government's 2019 – 2024 MTSF, with which the work of the Department of Tourism is directly aligned.

In line with government's emphasis on growing the sector over the medium term, the Department of Tourism will focus broadly on accelerating transformation in the sector and creating employment. Specific activities include promoting South Africa as a preferred tourism destination, ensuring that there is investment in tourism infrastructure, upskilling and training tourism professionals, reintroducing tourism safety initiatives, enhancing visitor experience, managing destinations, and improving the regulatory environment.

Accelerating transformation

To accelerate transformation in the sector, the Department of Tourism will incentivise programmes that increase the ownership value, management control and skills, enterprise, supplier and socio-economic development of previously disadvantaged people. In this regard, the department has set aside R856.4 million over the medium term for the implementation of 31 capacity-building programmes and 15 incentives to transform the sector and provide developmental support to rural tourism enterprises. The department also plans to restructure the Tourism Transformation Fund (TTF), a collaboration with the National Empowerment Fund (NEF) to make funding more accessible. Similarly, the department plans to scale up the implementation of its Women in Tourism empowerment programme along with other industry-led initiatives such as Tourism Marketing South Africa.

Creating employment

The Working for Tourism initiative focuses on job creation through the development of tourism infrastructure and skills. It is expected to contribute to the creation of 15 946 work opportunities over the medium term. Spending on the initiative,

which is funded through the EPWP, is expected to increase at an average annual rate of 5.4%, from R371.3 million in 2019/20 to R434.7 million in 2022/23, in the Destination Development programme.

Legislation and policies

The Department of Tourism operates under the following legislation and policies:

 The Tourism Act of 2014 provides for the development and promotion of sustainable tourism for the benefit of South Africa, its residents and its visitors. It also provides for the continued existence of the South African Tourism (SAT) Board, the establishment of the Tourism Grading Council of South Africa (TGCSA), and the regulation of the tourist guide profession.

The Act aims to:

- promote the practising of responsible tourism for the benefit of South Africa and for the enjoyment of all its residents and visitors;
- provide for the effective domestic and international marketing of South Africa as a tourist destination:
- promote quality tourism products and services;
- promote growth in and development of the tourism sector;
- enhance cooperation and coordination between all spheres of government in developing and managing tourism.
 In terms of the Act, responsible tourism:
- seeks to avoid negative economic, environmental and social impacts;
- generates greater economic benefits for local people, enhances the wellbeing of host communities and improves working conditions and access to the tourism sector;
- involves local people in decisions that affect their lives;
- makes positive contributions to the conservation of natural and cultural heritage and to the maintenance of the world's diversity;
- provides enjoyable experiences for tourists through meaningful connections with local people and a greater understanding of local cultural, social and environmental issues;

- · provides access for people with physical challenges; and
- is culturally sensitive, engenders respect between tourists and hosts, and builds local pride and confidence.

Budget and funding

For the 2019/20 financial year, the Department of Tourism was allocated R2.4 billion. Allocations for marketing South Africa as a destination of choice account for an estimated 56.3% (R4.4 billion) of total expenditure, increasing at an average annual rate of 4.6%, from R1.3 billion in 2019/20 to R1.5 billion in 2022/23. Of this amount, 93.8% (R4.1 billion) is earmarked for transfers to the SAT. Cabinet has approved reductions on the department's baseline amounting to R179.9 million over the MTSF period, mainly on goods and services and transfers and subsidies. The department plans to mitigate the effect of these reductions through the realignment of allocations in the Tourism Incentive Programme (TIP) subprogramme.

Tourism and traveller statistics

According to the Statistical Release; Tourism and Migrations, January 2020, routine data collected by the DHA at ports of entry into South Africa shows that a total of 3 930 440 travellers (arrivals, departures and transits) passed through South African ports of entry/exit in January 2020.

These travellers were made up of 1 087 571 South African residents and 2 842 869 foreign travellers. A further breakdown of the figures for South African residents indicates that there were 656 050 arrivals, 430 762 departures and 759 travellers in transit. The corresponding volume for foreign arrivals, departures and travellers in transit was 1 595 388, 1 193 534 and 53 947, respectively.

A comparison between the movements in January 2019 and January 2020 indicates that the volume of arrivals and departures increased for both South African residents and foreign travellers. Travellers in transit decreased for both groups of travellers. For South African residents, the volume of arrivals increased by 4.8% (from 626 128 in January 2019 to 656 050 in January 2020).

Departures increased by 6.3% (from 405 062 in January 2019 to 430 762 in January 2020), and transits decreased by 8.7%

(from 831 in January 2019 to 759 in January 2020). For foreign travellers, arrivals increased by 2.2% (from 1 561 510 in January 2019 to 1 595 388 in January 2020), departures increased by 2.0% (from 1 169 796 in January 2019 to 1 193 534 in January 2020), and transits decreased by 2.2% (from 55 135 in January 2019 to 53 947 in January 2020).

A comparison between the movements in December 2019 and January 2020 indicates that the volume of arrivals increased for both South African residents and foreign travellers. The volume of departures and travellers in transit decreased for both groups of travellers. For South African residents, the volume of arrivals increased by 2.7% (from 638 708 in December 2019 to 656 050 in January 2020), departures decreased by 48.6% (from 838 048 in December 2019 to 430 762 in January 2020), and transits decreased by 8.8% (from 832 in December 2019 to 759 in January 2020).

For foreign travellers, arrivals increased by 2.3% (from 1 559 368 in December 2019 to 1 595 388 in January 2020), departures decreased by 23.5% (from 1 561 121 in December 2019 to 1 193 53 388 in January 2020), departures decreased by 23.5% (from 1 561 121 in December 2019 to 1 193 534 in January 2020), and transits decreased by 9.1% (from 59 373 in December 2019 to 53 947 in January 2020).

Impact of COVID-19 on tourism

Tourism has been one of the worst affected sectors in South Africa. The UN Conference on Trade and Development (UNCTAD) has listed South Africa as one of the top 15 countries that were negatively impacted by the near-closure of the international travel industry during the pandemic. Accordingly, the UNCTAD predicts that tourism in South Africa is going to lose 3% in GDP contribution, and the loss of unskilled jobs in the sector could be as high as 12%. It is estimated that R54.2 billion in output may already have been lost between mid-March and the end of May 2020.

The sector now faces a potential 75% revenue reduction in 2020, putting a further R149.7 billion in output, 438.000 jobs and R80.2 billion in foreign receipts at risk.

According to Statistics South Africa's Tourist Accommodation, May 2020 report, the COVID-19 pandemic and lockdown regulations that started on 27 March 2020 had an extensive impact on economic activity. Measured in nominal terms (current prices), total income for the tourist accommodation industry decreased by 98.0% in May 2020, compared with May 2019. Income from accommodation decreased by 98.5% year-on-year in May 2020, the result of a 98.0% decrease in the number of stay unit nights sold and a 24.2% decrease in the average income per stay unit night sold.

In May 2020, all accommodation types recorded large negative year-on-year growth in income from accommodation. The main contributors to the 98.5% year-on-year decrease in income from accommodation were:

- hotels: -98.2% and contributing -65.9 percentage points; and
- 'other' accommodation: -98.8% and contributing -27.4 percentage points.

Income from accommodation decreased by 77.0% in the three months ended May 2020 compared with the three months ended May 2019. The main contributors to this decrease were:

- · hotels: -77.1% and contributing -51.0 percentage points; and
- 'other' accommodation: -76.4% and contributing -216 percentage points.

Seasonally adjusted income from accommodation decreased by 96.8% month-on-month in April 2020 and decreased by a further 20.7% month-on-month in May.

Role players South African Tourism

The Tourism Act of 2014 mandates the South African tourism industry to market South Africa, internationally and domestically, as a preferred tourism and business events destination; ensure that tourist facilities and services are of the highest standard; and monitor and evaluate the performance

In June 2019, Table Mountain was named Africa's Leading Tourist Attraction at the Africa and Indian Ocean World Travel Awards in Mauritius. The awards recognise excellence in customer service and experience across the travel, tourism and hospitality industries.

It won against Mount Kilimanjaro and the Ngorogoro Crater in Tanzania, the Pyramids of Giza in Egypt, as well as Robben Island and V&A Waterfront in South Africa.

Those who voted include travel and tourism professionals and consumers globally.

of the tourism sector. Over the medium term, the entity will focus on: boosting domestic and international tourism, improving customer relations management and increasing trade partnerships.

With regards to international tourism, the entity plans to focus on country-specific marketing campaigns for the hosting of international trade-related events. Spending on international marketing activities amounts to R1.9 billion over the medium term. As a result, international tourist arrivals are expected to increase from an estimated 11.4 million in 2019/20 to an estimated 13 million in 2022/23. Revenue that is expected to be generated from international tourism is projected to increase from R90.7 billion in 2019/20 to R115.1 billion in 2022/23. In addition to intensifying its marketing efforts internationally, the entity plans to boost domestic tourism through designated marketing campaigns for targeted groups at an estimated cost of R190.3 million over the MTEF period. This is expected to increase the number of domestic holiday trips from 2.7 million in 2019/20 to three million in 2022/23. As a result, revenue generated from domestic tourism is expected to amount to R353.7 million over the period ahead.

Tourism Enterprise Partnership (TEP)

The TEP is a non-profit company that facilitates the growth, development and sustainability of small tourism businesses. This is achieved through a number of products and services that provide hands-on, step-by-step support and guidance, ultimately leading to improved product quality, operational efficiency and market reach.

Funding for the TEP's small tourism business development interventions is provided by the Department of Tourism as well as the Business Trust, the Tourism Micro-Enterprises Support Fund (a sister company that provides funding specifically for the support of micro-enterprises), global financial services company Credit Suisse, and the Eastern Cape Development Corporation.

Africa's Travel Indaba

Africa's Travel Indaba is one of the largest tourism marketing events on the African calendar and one of the top three "must visit" events of its kind on the global calendar.

Sixty-four Blue Flags were awarded at the 2019/20 launch of South Africa's Blue Flag season, including 45 beaches, nine marinas and 10 sustainable tourism boats across South Africa. The season officially opened on 1 November 2019. To achieve Blue Flag status, 33 main criteria covering four aspects of coastal management have to be met. These four aspects are water quality, environmental education and information, environmental management, and safety and services. The Blue Flag programme is a recognised international accreditation initiative that acknowledges excellence in maintaining the highest standards of environmental management, safety, services and amenities. South Africa was the first country, outside of Europe, to introduce the Blue Flag programme, in November 2001 in Cape.

Beaches with Blue Flag status for 2019/20 are:

Western Cape:

- · Bikini Beach, Gordon's Bay
- Brenton-on-Sea Beach, near Knysna
- · Camps Bay Beach, Cape Town
- · Castle Beach, Overstrand
- Clifton 4th Beach, Cape Town
- De Bakke Beach, Mossel Bay
- Fish Hoek Beach, Cape Town
- Glentana Beach, Mossel Bay Gouritzmond Beach, near Mossel Bay
- · Grotto Beach, Hermanus
- · Hartenbos Beach, Mossel Bay
- · Hawston Beach, near Hermanus
- · Jongensfontein Beach, Hessequa
- Singing Kettle beach
- · Keurboomstrand Beach, near Plettenberg Bay
- Kleinbrak River Beach, near Mossel Bay
- · Kleinmond Beach, near Hermanus
- Lappiesbaai Beach

- Stilbaai Wes Beach, Hessequa
- · Struisbaai Beach, Cape Aguslhas
- · Lookout Beach, near Plettenberg Bay
- Melkbosstrand Beach, Cape Town
- Mnandi Beach, Cape Town
- Muizenberg Beach, Cape Town
- Nature's Valley Beach, near Plettenberg Bay
- · Preekstoel Beach, near Still Bay
- · Robberg 5th Beach, Plettenberg Bay
- · Santos Beach, Mossel Bay
- · Silwerstroomstrand Beach, Cape Town
- · Witsand Beach, mouth of the Breede River
- · The Dunes Beach, near Plettenberg Bay

KwaZulu-Natal

- · Hibberdene Beach, Hibberdene
- · Marina/San Lameer Beach, near Southbroom
- · Southport Beach, near Port Shepstone
- Trafalgar Beach, near Southbroom
- · Umzumbe (Pumula) Beach, near Hibberdene
- · Ushaka Beach, Durban Westbrook Beach, Durban

Eastern Cape

- · Dolphin Beach, Jeffrey's Bay
- · Hamburg Beach, near East London
- · Hobie Beach, near Port Elizabeth
- · Humewood Beach, Port Elizabeth
- · Kariega Beach, Kenton-on-Sea
- · Kelly's Beach, Port Alfred
- Kings Beach, Port Elizabeth

It showcases the widest variety of southern Africa's best tourism products and attracts international buyers and media from across the world.

Africa's Travel Indaba is owned by the SAT and organised by Synergy Business Events. It has won various awards for Africa's best travel and tourism show, presented by the Association of World Travel Awards.

Meetings Africa

Meetings Africa is the African continent's largest trade show for the business events industry.

Meetings Africa has been lauded as the premier business event in this industry, showcasing Africa's diverse offering of services and products.

Positioned as "Advancing Africa Together", the sole ambition of the trade show is to contribute to the growth of Africa's

potential as the world's fastest-growing and most sought-after business events destination.

Culture, Art, Tourism, Hospitality, and Sport Sector Education and Training Authority (CATHSSETA)

The CATHSSETA is one of 21 sector education and training authorities established in 2001 under the Skills Development Act, 1998 (Act 97 of 1998). It was formally known as the Tourism and Hospitality Education and Training Authority. Its mandate is to facilitate skills development within its subsectors through the disbursement of grants for learning programmes and monitoring of education and training as outlined in the National Skills Development Strategy.

The CATHSSETA operates in the following subsectors:

- · Arts, culture and heritage
- Conservation

- · Gaming and lotteries
- · Hospitality.

Tourism Grading Council of South Africa

The TGCSA is South Africa's only officially recognised and globally credible quality assurance body for national tourism products. It uses a star grading system for the evaluation of the quality of accommodation establishments.

Of the 11 categories of establishments from which travellers can choose (hotels, lodges, bed and breakfasts, country houses, guest houses, self-catering units, caravan and camping parks, backpackers and hostelling facilities as well as meetings, exhibitions and special events venues), establishments that have been graded by one of the TGCSA's accredited grading assessors will clearly display the TGCSA star insignia. The TGCSA star plaque and certificate guarantees quality and service excellence in line with internationally benchmarked standards.

Tourism BBBEE Charter Council

The Tourism BBBEE Charter Council's roles include:

- providing guidance on sector-specific matters effecting BBBEE in entities within the sector;
- compiling reports on the status of BBBEE within the sector for the Minister of Tourism and the BEE Advisory Council; and
- sharing information with sector members, approved accreditation agencies and the Minister of Tourism pertaining to BBBEE in the sector.

Programmes and projects

Tourism Incentive Programme

The TIP received a budget of R552.9 million over the medium term and will focus on supporting tourism attractions to enhance destination competitiveness. Underused and unused public recreational facilities and resorts will be redeveloped as tourism destination sites.

Besides its job creation and economic growth outcomes, the TIP is aimed at the following:

 enhancing infrastructure facilities to maximise tourism benefits;

- promoting greater participation in tourism and leisure activities, particularly among low-income people and families;
- · attracting private sector investment in those facilities;
- sector transformation; and
- addressing the challenges of uneven geographical spread of tourism products and seasonality.

The programme will further support SMMEs by assisting them to participate in local and international trade exhibitions, thus creating direct linkages with international tourism companies.

The programme will start by focusing on creating better access to new markets and customers, encouraging greater participation in the grading system, and providing key tourist attractions with clean and renewable energy sources.

The programme comprises the following:

- A subsidy towards the costs incurred by tourism establishments to participate in trade exhibitions and marketing roadshows. This will include a capped reimbursement towards predetermined expenses such as airfare, accommodation and exhibition fees for participation in marketing platforms supported by the SAT.
- Support for owners of establishments who want to be graded by the TGCSA in the form of a structured system of retroactive discounts or rebates on the assessment fee for grading. This aims to make grading more affordable for smaller businesses and encourage more establishments to become graded.
- A pilot project to retrofit facilities at state-owned destinations and attractions such as world heritage sites and national botanical gardens with renewable energy technology. This will guide the design of a programme to help make establishments, including those in the private sector, more environmentally sustainable.
- The TIP supports the objectives of South Africa's overall industrial policy, which includes creating jobs, building the local industrial base and transforming to a green economy.

Green Tourism Incentive Programme (GTIP)

The recent and ongoing electricity supply challenges, combined with persistent drought conditions in many parts of South Africa poses a threat to sustainable tourism operations. Added to this, a greater awareness amongst tourists around the impact

of climate change has led to growing market demand for responsible tourism experiences that supports environmental sustainability.

In line with its responsible tourism development objectives, the Department of Tourism has established the R142.5 million GTIP over a three-year period (2017/18 to 2019/20) with a key objective of encouraging privately-owned tourism enterprises to implement responsible tourism practices, utilising cleaner and renewable energy sources and the efficient utilisation of water.

This initiative will not only alleviate pressure on the electricity and water resources of the country and ensure an uninterrupted visitor experience for tourists but will also reduce input costs and facilitate increased competitiveness and operational sustainability for tourism enterprises.

The programme is part of the department's broader initiative to assist the South African tourism sector to adopt practices for the sustainable management and usage of water and electricity resources whilst adhering to responsible tourism principles. The GTIP provides grant funding of up to R1 million to qualifying small and micro tourism enterprises to reduce their energy and water consumption and costs. The programme is managed by the Industrial Development Corporation (IDC) on behalf of the Department of Tourism.

In order to strengthen the programme, the partnership has also been widened to include the National Cleaner Production Centre and the Small Enterprise Finance Agency.

The government introduced the GTIP, administered by the IDC, to encourage private tourism enterprises to move towards more efficient utilisation of energy and water resources. The Department of Tourism is reviewing the implementation modalities of the GTIP to ensure that the much-needed relief for businesses to retrofit is speedily disbursed, so that they can reduce operational costs. A total of R40 million has been put aside for this programme – providing relief in the COVID-19 environment and beyond.

Tourism Transformation Fund

Transformation and more inclusive growth of the tourism sector remains a key priority for the Department of Tourism, in line with broader government objectives and legislation for B-BBEE. As part of its efforts to support sector transformation, the department partnered with the NEF to establish a dedicated capital investment funding mechanism to encourage capital investment by majority black-owned investors in the tourism sector. The TTF aims to utilise grant funding to stimulate accelerated sector transformation and more inclusive growth and is expected to give rise to a new generation of black-owned youth, women and community-based tourism enterprises that will take the tourism sector to new heights.

The fund offers a combination of debt finance from the NEF and grant funding from the department for new and expansionary tourism development projects with majority black shareholding.

The TTF is managed by the NEF and is capitalised by the Department of Tourism to the tune of R40 million annual grant funding, over a period of three financial years up to 2020. The grant funding will be used to reduce the gap that may exist between the prospective investor's own contribution and the approved loan finance and/or equity contribution by the NEF for tourism projects. The grant component will be capped at a maximum of R5 million per successful applicant to unlock investment.

Market Access Support Programme

The cost and difficulty of accessing and engaging international travel buyers serves as a major barrier to unlocking growth potential of small tourism product owners and inbound operators. The aim of the Market Access Support programme is to reduce the cost burden for small tourism enterprises to participate in selected international trade platforms and thereby improving their access to buyers in new and growth markets to unlock demand growth and allow market penetration.

The programme offers financial support to qualifying small tourism enterprises to participate in, and exhibit at selected international trade platforms. Relevant trade platforms (exhibitions and marketing roadshows) included in the programme are identified in consultation with the SAT.

The support offered under the Market Access Support programme typically includes contributions towards the cost of participation, accommodation and economy-class return airfare for applicants approved for support. The cost of participation

(i.e. exhibition fees) at a particular trade platform is paid upfront to the event organiser by the department on behalf of approved applicants.

Tourism Grading Support Programme

The Tourism Grading Support programme was introduced to encourage wider participation in the tourism grading system and to reduce the cost burden of grading on small tourism enterprises. The programme also aims to stimulate an increase in conformity to quality standards in tourism that will enhance the overall visitor experience and improve South Africa's competitiveness as a tourism destination.

The programme offers discounts of between 80% and 90% on the cost of star grading assessment fees for accommodation establishments and meeting venues. The programme is administered by the TGCSA.

National Tourism Sector Strategy (NTSS)

The vision of the NTSS is to position South Africa as one of the top 20 tourism destinations globally. The overall goal of the strategy is to drive the tourism economy, enhance visitor experiences, position South Africa as a destination of choice and sustain good governance in the industry.

The key focus areas of the NTSS are arrivals, GDP and job creation. To achieve all of its objectives, the NTSS focuses on domestic tourism with the intention to increase the number of domestic trips from 30.9 million in 2009 to 54 million by 2020.

Regional tourism is also being targeted with South Africa looking to take advantage of hitherto untapped markets such as outbound tourists.

This strategy represents the government's commitment to intelligent planning and policy formulation. It was developed over two years in close collaboration with local and provincial government, an advisory panel of top industry minds, representatives of various professional bodies, academia, tourism marketing agencies, civil society and the broader public.

The NTSS is a document that the entire sector is committed to and includes coordinated and credible targets. The strategy rests on three pillars, namely:

· driving the tourism economy;

- · enhancing visitor experiences; and
- · ensuring sustainability and good governance in the industry.

Tourism Month

Tourism Month is celebrated annually in September and provides a heightened month-long focus on the importance of the sector to the South African economy.

Tourism Month features themed activities that are aligned to the UN World Tourism Organisation's (UNWTO) World Tourism Day celebrations that take place annually on 27 September.

The 2019 UNWTO theme for World Tourism Day was: "Tourism and jobs – a better future for all," which highlighted the tourism sector's vast capability to create jobs and reduce the country's unemployment rate.

South Africa adopted the UNWTO theme and remains confident that tourism will contribute to more jobs to its maximum potential.

The 2019 Tourism Month activities were hosted in collaboration with KwaZulu-Natal – known as the Kingdom of the Zulu, a melting pot of African, European and Indian cultures. This province boasts of two world heritage sites, the iSimangaliso Wetland Park and the majestic Ukhahlamba-Drakensberg Park

Women in Tourism Programme

The majority of workers in the tourism sector are women, yet many of these women are still relegated to menial or junior roles within tourism establishments. The Women in Tourism Programme is an initiative that propels and supports the development and empowerment of women in the tourism sector.

Premised on the principles of respect; recognition; representation and reward, the programme integrates women from diverse backgrounds to converge on a set of common goals and interests that will ensure their success in the sector.

The programme serves as a mechanism to elevate the status of women in tourism by providing training, empowerment and networking opportunities that facilitate their competitiveness as entrepreneurs, professionals and leaders. In January 2019, the Department of Tourism hosted its annual Women in Tourism Conference in Rustenburg in the North West province under the

theme, "Promoting empowerment and jobs for shared growth, the Women in Tourism".

Discussions included:

- accelerating the economic empowerment and progression of women in the tourism sector;
- expanding the role of women in the tourism sector through the Women in Tourism platform; and
- exploring new and varied business opportunities to advance women entrepreneurs and contribute to job creation.

The Executive Development Programme for Black Women Tourism Managers builds strong business skills and leadership capabilities among black women in the tourism sector to lead key parts of tourism businesses and form a pool of future top leadership, entrepreneurs and industrialists in the sector.

National tourism service excellence requirements

The national tourism service excellence requirements are aimed at improving and maintaining service levels at all service touch points in the tourism value chain as well as guiding the sector to achieve the NTSS objective of positioning South Africa as one of the top 20 global tourism destinations.

Previously, the tourism value chain in South Africa did not have integrated standards and norms, and this contributed to inconsistencies in service levels.

The service excellence requirements provides a yardstick to be used by all tourism service providers to deliver quality service and experiences that equal or surpass world standards.

The South African Bureau of Standards developed the standards on behalf of the tourism sector and benchmarked them against international requirements. The requirements have four key focus areas, namely marketing, products, delivery of service, and monitoring and evaluation.

National Minimum Standard for Responsible Tourism (NMSRT)

Responsible tourism is a management strategy in which the tourism sector and tourists take responsibility for protecting and conserving the natural environment, respecting and conserving local cultures and ways of life, and contributing to stronger local economies and a better quality of life for local people.

It includes providing better holiday experiences for guests and good business opportunities for tourism enterprises. The concept of responsible tourism is gaining ground as a newly emerging trend worldwide.

The Department of Tourism, in partnership with tourism stakeholders and the private sector, particularly accreditation agencies, developed the NMSRT. In doing so, South Africa has taken the lead on the continent by publishing a set of national minimum standards that are aligned with the International Organisation for Standardisation/International Electrotechnical Commission 17011.

The NMSRT comprises 39 criteria divided into four categories, namely:

- · sustainable operations and management;
- · economic criteria;
- · social and cultural criteria: and
- · environmental criteria.

Other projects

Tourism Enterprise Development Programme

The programme is part of the greater objective of the revised NTSS 2016 – 2026 that seeks to ensure sustainable development and growth of tourism enterprises in a manner that facilitates inclusive participation, job creation and contributes to the competitiveness of tourism destinations. The programme provides training and support for emerging and existing tourism businesses to ensure their sustainability in the sector. The programme includes an incubator programme in Pilanesberg with 50 incubatees.

The incubator services are designed to address the identified needs of the SMMEs, and constant monitoring conducted by the Department of Tourism's Monitoring and Evaluation, and Enterprise Development units respectively.

The objective is to create a programme that is aligned to government's focus on SMMEs and facilitate the transformation of the tourism sector to make it inclusive and accessible to new entrants, especially businesses owned and managed by the women and the youth.

Lilizela Tourism Awards

The Lilizela Tourism Awards recognises industry players within four focus areas reflecting eight categories, with the 9th category being the Minister's Award. The awards acknowledge and applaud the efforts of people whose work sets global benchmarks in excellence. The 2019 national awards ceremony took place on 9 November at the Sun International Time Square Arena.

The 2019 Lilizela Tourism award winners were:

- Tour Operator: Earthstompers Adventures (Western Cape).
- · Accommodation Mobility: Soli Deo Gloria (Western Cape).
- Experience Mobility: Cape Town International Convention Centre Company (Western Cape).
- Scenic Beauty: Kagga Kamma Nature Reserve (Western Cape).
- · Wildlife Encounters: Hayward's Grand Safaris (Gauteng).
- Emerging Tourism Entrepreneur of the Year Award: Camping RetrEats (Gauteng).
- · Beach Experience: Chokka Trail (Eastern Cape).
- · Action & Adventure: Baviaans Camino (Eastern Cape).
- Roots & Culture: Traditional African homestays South Africa, (Limpopo).
- Culture & Lifestyle: The Workshop to ko Kasi (Northern Cape).
- Lap of Luxury: Oceana Beach & Wildlife Reserve (Eastern Cape).
- · Marine Adventure: Raggy Charters (Eastern Cape).

Caravan & Camping:

- Mahai Caravan Park Royal Natal (KwaZulu-Natal).
- Dibiki Holiday Resort (Western Cape).
- · Jackalberry Ridge (Mpumalanga).

Backpackers & Hostelling:

- · Saltycrax Backpackers (Western Cape).
- Once in Joburg (Gauteng).
- · Coffee Shack Backpackers & Surf School (Eastern Cape).

Bed & Breakfast:

- · The Kingsman (Eastern Cape).
- Bushbaby River Lodge (Limpopo).
- African Tulip Guesthouse (Western Cape).

Guesthouse:

· River Place Manor (Northern Cape).

- · La Lechere Guesthouse (Limpopo).
- · Panorama Guest House King William's Town (Eastern Cape).
- · Naba Lodge Guest House (Northern Cape).

Country House:

- · Welgelegen Manor (Mpumalanga).
- Pleasant Places Country Guest House (KwaZulu-Natal).
- · Hamilton Parks Country Lodge (Mpumalanga).

Lodge:

- The Gorge Private Game Lodge & Spa (KwaZulu-Natal).
- Kagga Kamma Nature Reserve (Western Cape).
- · Ebundu (Pty) Ltd (Mpumalanga).

Game Lodge:

- Bayala Game Lodge (KwaZulu-Natal).
- · Phelwana Game Lodge (Limpopo).
- · Palala Boutique Game Lodge and Spa (Limpopo).

Self-Catering Shared Vacation:

- · Haga Haga (Eastern Cape).
- Thunzi Bush Lodge (Eastern Cape).
- · Mjejane Bush Camp (Mpumalanga).

Self-Catering Exclusive:

- Bethesda Exclusive Accommodation (Free State).
- Aquarius Luxury Suites (Western Cape).
- Burlington Bush Cottages (Eastern Cape)
- N'Wambu Safari Lodge by Elite Residences (Mpumalanga).

In-Hotel Conference Centre:

· Mont d' Or Hotel (Free State).

Events Venue:

- Naba Lodge Conference Facility (Northern Cape).
- Mthatha Dam Resort Luchaba Nature Reserve (Eastern Cape).
- · Sun Arena (Gauteng).

Function Venue:

- Monakaladi Gardens Wedding and Conference Venue (North West).
- AnnVilla Conference Venue (North West).

Conference Venue:

· The Forum I The Campus (Gauteng).

Convention & Exhibition Centre:

- · Sandton Convention Centre (Gauteng).
- · Olive Convention Centre (KwaZulu-Natal).

Meetings, Exhibitions & Special Events (MESE):

- Birchwood Hotel and OR Tambo Conference Centre (Gauteng).
- · Forever Hotel@ Centurion (Gauteng).

Small Hotel:

- · Eendracht Hotel (Western Cape).
- · Mayfair Hotel (Eastern Cape).

Apartment Hotel:

The Hyde Hotel (Western Cape).

Boutique Hotel:

- · Ekhaya Boutique Hotel (KwaZulu-Natal).
- · Oceana Beach & Wildlife Reserve (Eastern Cape).

Hotel:

- · Road Lodge Potchefstroom (North West).
- Town Lodge Port Elizabeth (Eastern Cape)
- · Lesedi African Lodge & Cultural Village (North West).
- The Oyster Box Hotel (KwaZulu-Natal).
- · Thaba Eco Hotel (Gauteng).

Tour Guides:

- · Fhumulani Sidney Mikosi, Nature Guide (Limpopo).
- · Bulelani Gerald Futshane, Cultural Guide (Western Cape).
- Kwandiwe Waxa, Adventure Guide (Eastern Cape).

Guidelines for international tourists

Every international traveller to South Africa must have a valid passport and, where necessary, a visa.

The Immigration Act, 2002 (Act 13 of 2002), stipulates that all visitors to South Africa are required to have at least one blank page (both back and front) in their passport to enable the entry visa to be issued.

If there is insufficient space in the passport, entry will be denied.

Enquiries may be directed to South African diplomatic representatives abroad or to the DHA in Pretoria, Gauteng. Visas are issued free of charge.

Visitors who intend travelling between South Africa and neighbouring countries are advised to apply for multiple-entry visas.

Passport holders of certain countries are exempt from visa requirements.

Tourists must satisfy immigration officers that they have the means to support themselves during their stay and that they have return or onward tickets. They must also have valid international health certificates.

Visitors from the yellow fever belt in Africa and America, and those who travel through or disembark in these areas, have to be inoculated against the disease.

Malaria is endemic to parts of KwaZulu-Natal, Mpumalanga and Limpopo. It is essential to take anti-malaria precautions when visiting these areas.

Foreign tourists visiting South Africa can have their valueadded tax (VAT) refunded, provided the value of the items purchased exceeds R20. VAT is refunded on departure at the point of exit.

South Africa's transport infrastructure – airlines, railroads, luxury touring buses (coaches) and motor vehicles – is such that tourists can travel comfortably and quickly from their port of entry to any part of the country.

The South African Airways, as well as a number of international airlines, operate regular scheduled flights to and from South Africa.

Several domestic airlines operate in the country. There are also mainline trains to all parts of the country.

The tourist accommodation industry in South Africa provides a wide spectrum of accommodation, from formal hotels to informal holiday flats and cottages, game lodges and reserves, guest houses, youth hostels and bed-and-breakfast establishments.

Tourist guiding

The Department of Tourism entered into an agreement with the CATHSSETA, seeking to prioritise tourist-guide training and development throughout South Africa.

The MoU with the CATHSSETA also addresses areas of transformation within the tourist guide sector, as well as the maintenance of standards through quality training and effective skills development programmes aimed at existing tourist guides.

The department engaged the Road Traffic Management Corporation to educate traffic officials, throughout South Africa, on how to enforce the legislation pertaining to tourist guides. It works closely with the DoT with a view to ensuring enforcement of tourist-guiding issues relating to tour operators and related regulations in the National Land Transport Act, 2009 (Act 5 of 2009).

The Department of Tourism wants industry bodies that are committed to growing the tourist-guiding sector and elevating the profession to enter into formal agreements with stakeholder bodies that share department's vision.

It undertook a process to review the Regulations in Respect of Tourist Guiding. This included wide consultations with tourist guides and key stakeholders throughout the country to improve processes and systems to register tourist guides and ensure compliance within the sector.

The department is working with the provinces to establish a centralised database of tourist guides. Once a viable database is in place, the department will be able to engage the departments of Home Affairs, and Justice and Correctional Services, and other relevant authorities to ensure that the information received from the provinces is subjected to a vetting process as prescribed in the Tourism Act of 2014.

The training programmes for tourist guides taking place in provinces focus on skills development for existing tourist guides to make them more marketable and employable within the sector.

Tourism niche markets

Domestic tourism (Sho't Left)

The Sho't Left Campaign aims to promote a culture of local holiday travel, targeting ordinary South Africans and their families who have a desire to see more of the country but do not know where to go.

The Sho't Left Campaign was relaunched in August 2007, challenging South Africans to "see your world differently", even when only visiting family or friends. The campaign is aimed at young upcoming individuals, independent couples and families, with research into the domestic tourism market indicating that over five million South Africans have both the resources and the desire to travel.

Adventure tourism

The country's diverse terrain, together with an ideal climate for outdoor activities, makes it perfect for the adventure tourism niche market. Activities such as climbing, surfing, diving, hiking, horseback safaris, mountain-biking, river-rafting and just about any other extreme activity are supported by dedicated operators.

South Africa offers some of the best rock climbing and abseiling opportunities in the world. Those who prefer rivers have a choice of trips ranging from mostly scenic to Grade 5 white-water rafting. Opportunities for escorted or self-guided trips are also available.

For those who want to take to the skies, there are more than 100 listed paragliding or hang-gliding launch sites as well as numerous lesser known sites. There are also many opportunities for helicopter rides balloon and microlight flights, aerobatics and skydiving.

Thousands of km of hiking trails wind through the country in desert, forest, mountain or coastal terrains, many with adjacent mountain-biking trails.

In addition, South Africa offers a wide variety of horse trails through vineyards, on beaches and in the mountains. For the more adventurous there are also horseback safaris in game reserves. The 216-m Bloukrans Bridge on the border of the Eastern and Western Cape offers the highest commercial bungee jump in the world.

Business tourism

South Africa remains one of the top 15 long-haul businessevents destinations in the world and is the premier businessevents destination in Africa. The business-events industry was identified as an important contributor towards the NTSS's target of 15 million international arrivals by 2020.

The government recognises business events tourism as an area with significant growth potential and has therefore established the South Africa National Convention Bureau (SANCB) to further promote growth in the conferencing industry. The SANCB is tasked with coordinating national bidding, undertaking research and collaborating with city and provincial convention bureaus and the business events industry to present a united front for destination South Africa.

Cruise tourism

The Department of Tourism works closely with the cruise line industry to ensure that packages and excursions are developed and that passengers are encouraged to visit the country's shores, enjoy what it has to offer and inspire other travellers to visit South Africa.

Cultural tourism

Heritage and cultural tourism is the fastest-emerging competitive niche within domestic and international tourism markets. This category accounts for about two-thirds of international tourism.

The National Heritage and Cultural Strategy is aimed at guiding the integration of heritage and cultural resources with mainstream tourism. It is set to stimulate sustainable livelihoods through heritage and cultural tourism products, as well as to diversify the sector and raise awareness of heritage and cultural resources.

South Africa's diversity is reflected in its cultural tourism, with many destinations commemorating the past. These range from the ancient nomadic San culture to European settlement, apartheid rule and the struggle for political freedom.

Cultural tourist destinations include the following:

- Ukhahlamba-Drakensberg Park in KwaZulu-Natal is home to the ancient rock art of the San.
- Cradle of Humankind near Johannesburg is the richest hominid fossil site in the world.
- Mapungubwe in Limpopo is one of the richest archaeological sites in Africa, where an advanced South African culture prospered between 1 200 AD and 1 270 AD.
- Soweto's Heritage Trail is a reminder of the events that characterised South Africa's liberation struggle, such as the student uprising on 16 June 1976.

Many cultural villages have been established throughout South Africa to reflect the different cultures and traditions of the country's people.

Medical tourism

South Africa has emerged as a medical tourism destination of choice for travellers from other African countries as well as further afield; and the industry is proving to have extensive growth potential.

Most medical tourists come to South Africa for cosmetic surgery, but the country's skilled surgeons can also perform organ transplants, cardiac, orthopaedic and obesity surgery, and dentistry.

Nature-based tourism

South Africa's fauna and flora, and varied landscapes have enormous recreational value and attract several million tourists each year.

Protected natural areas serve not only to maintain biodiversity, but sustainable visitor access to these areas adds economic, recreational and aesthetic value to that which is being conserved within their borders. It also helps to preserve a wealth of traditional indigenous knowledge related to biodiversity, which is in itself a tourism resource.

South Africa has 20 national parks as well as numerous private game farms and nature reserves.

Four of the country's UNESCO world heritage sites are natural sites, while one is a mixed cultural/natural site. These are the Cape Floral Region, the iSimangaliso Wetland Park, the Vredefort Dome, Barberton Makhonjwa Mountains and the uKhahlamba Drakensberg Park.

South Africa's popularity as an avitourism destination is due to the large number of birds, endemic species and major bird habitats. Birdlife South Africa, the country's national birding organisation, has more than 8 000 members and 40 branches nationwide.

Rural tourism

The National Rural Strategy is aimed at creating communitydriven bed-and-breakfast operations, catering for international and domestic tourists.

In supporting the geographic spread of tourism and in particular tourism growth in rural areas and enhancing the supply of rural tourism products, the Department of Tourism is focusing on rural communities.

Culture and heritage products are the fastest emerging competitive niche offerings in the domestic and international markets.

Sustainable development will be achieved if the people, whose land, culture and natural resources are used for tourism, benefit from such use in a meaningful way.

Sports tourism

It is estimated that sports tourism contributes more than R6 billion to the South African tourism industry. More than 10% of foreign tourists come to South Africa to watch or participate in sports events, with spectators accounting for 60% to 80% of these arrivals.

The world-class sporting events on South Africa's annual calendar include:

- the annual Cape Argus Cycle Race, which caters for 35 000 people riding and pushing their bikes over a 10-km course;
- the Midmar Mile in KwaZulu-Natal, which attracts 18 000 open-water swimmers annually; and
- · the Comrades Marathon.

The Sports and Events Tourism Exchange is the only event of its kind in Southern Africa and provides a platform that brings together businesses from the sports, events and tourism industries.

Township tourism

Township tours have the potential to present South Africa's culture and heritage and the Department of Tourism plans to develop packages to achieve that goal. The government wants to capitalise on job-creation opportunities in this sector.

Wine tourism

Wine tourism is growing fast worldwide and plays an especially important role in South Africa with its centuries-old reputation for making high-quality wine. International Wine Review, one of the world's most influential opinion formers on wine, has rated South Africa's wine tourism the best developed in the world.

The country's vineyards are mostly situated in the Western Cape near the coast.

All South African wine routes fall under the auspices of the Wine of Origin Scheme.

Stylistically, South African wines fit somewhere between Old World and New World.

Regional tourism

Western Cape

The Western Cape lies at the southern tip of Africa. The province's unmatched natural beauty, famous hospitality, cultural diversity, excellent wine and rich cuisine make it one of the world's greatest tourist attractions.

The tourism industry in the province has grown faster and created more jobs than any other province. Tourism directly contributes R17 billion to the provincial economy and accounts for 204 000 formal jobs in the province.

Cape Metropole

Tourism in the city of Cape Town, which lies at the foot of the magnificent Table Mountain, centres on the V&A Waterfront. A working harbour, the V&A Waterfront offers everything from upmarket shopping malls, arts and craft markets, and a variety of restaurants to theatres, live music and museums.

Table Mountain, which forms part of the Table Mountain National Park, is one of the New Seven Wonders of Nature. A modern cableway takes visitors to the top of the mountain, providing spectacular views.

Other major attractions in the city include the Bo-Kaap Museum, the Castle of Good Hope, the Company's Garden, the District Six Museum, flea markets, the Grand Parade, the Houses of Parliament, the South African Cultural History Museum and the South African National Gallery.

The Gold of Africa Museum, established by Anglo Gold, houses a celebrated collection of more than 350 gold artefacts.

Air flips and trips are available, as are many boat and yacht trips from Table Bay Harbour.

There are also trips to Robben Island (proclaimed a world heritage site and also the place where former President Nelson Mandela was imprisoned for 18 of his 27 years in prison).

The Nelson Mandela Gateway to Robben Island is in the Clock Tower Precinct at the V&A Waterfront. The gateway houses interactive multimedia exhibitions, an auditorium, boardrooms, the Robben Island Museum and a restaurant.

Jazz is big in Cape Town. From traditional blues through progressive jazz to African-influenced jazz, every taste is catered for at a number of restaurants, jazz cafés, cigar bars,

pubs and wine farms. The top jazz event in the Western Cape is the annual Cape Town International Jazz Festival.

The South African Rugby Museum in Newlands reflects the history of the sport as far back as 1891.

The Rhodes Memorial in Rondebosch on the slopes of Table Mountain was built from granite from the mountain as a tribute to the memory of Cecil John Rhodes, Prime Minister of the Cape from 1890 to 1896.

The University of Cape Town is worth a visit for its historic Middle Campus and many buildings designed by Sir Herbert Baker.

Cape Point, part of the Table Mountain National Park, offers many drives, walks, picnic spots and a licensed restaurant. Care has been taken to protect the environmental integrity of this 22 100 ha reserve of indigenous flora and fauna.

Simon's Town's naval atmosphere and Historic Mile are major attractions in the area. A statue of the famous dog and sailors' friend Able Seaman Just Nuisance stands at Jubilee Square.

Hout Bay is renowned for its colourful working harbour. Seafood outlets, round-the-bay trips to the nearby seal colony, shell and gift shops, and a famous harbour-front emporium attract many visitors. Duiker Island is a seal and seabird sanctuary.

The World of Birds Wildlife Sanctuary is one of the largest bird parks in the world and houses some 3 000 birds of 400 different species.

Big Bay in Bloubergstrand is a surfers' paradise and hosts an international windsurfing event.

Rietvlei Nature Reserve is a unique wetland area with over 110 bird species, including pelicans and flamingos.

Canal Walk in the suburb of Century City is one of the largest shopping centres in Africa, with close to 400 shops, and is home to the largest cinema complex in South Africa.

New Year in Cape Town is a festive affair, when the Cape minstrels take to the streets with their upbeat music and fancy costumes.

The Monkey Town Primate Centre is home to over 200 individual primates and is located east of Somerset West on the N2.

Strawberry-picking in Cape Town on the Mooiberge Strawberry Farm is available in season, which begins in November.

Cape winelands

The Cape winelands feature dramatic mountains, rolling farmlands and peaceful vineyards. They are home to Route 62 – the world's longest wine route.

The Stellenbosch Wine Route comprises over 100 wine estates, most of which offer cellar tours.

Stellenbosch is the oldest town in South Africa. The town is a gracious blend of old Cape Dutch, Georgian and Victorian architecture. Dorp Street consists of one of the longest rows of old buildings in the country.

The Stellenbosch Village Museum consists of four homesteads and gardens ranging from the late-17th to the mid-19th centuries. The Stellenbosch Toy and Miniature Museum houses a collection of 1:12 scale miniatures such as room boxes, miniature houses, antique dolls, cars and cuddly toys.

The Spier Summer Arts Festival livens up summer nights from November to March at the Spier Wine Estate near Stellenbosch. Supervised pony and cart rides for children are available on the lawns of the Spier Estate. There is also a horse-carriage tour and equestrian centre for older children.

The Freedom Monument at Pniel commemorates the freed slaves who were the first settlers at the mission station, established in 1843.

Franschhoek has become known as the "Gourmet Capital" of the Cape. The Huguenot Monument was built in 1944 to commemorate the arrival in 1688 of the Huguenots who were predominantly French. In April each year, the region hosts the South African Cheese Festival. Visitors can also enjoy various hiking trails and historical walks, as well as the Vignerons de Franschhoek Wine Route. There is also an annual book/literary festival in Franschhoek. Butterfly World, one of the more unique attractions of the Western Cape winelands, consists of a tropical garden in a 1 000 m² greenhouse.

The Giraffe House Wildlife Awareness Centre comprises 15 ha and focuses mainly on African wildlife. Giraffe House provides a place for people to enjoy a picnic in the fresh air, while experiencing and learning about animals and conservation.

The Drakenstein Lion Park was established as a sanctuary for lions born in captivity. The Jonkershoek Nature Reserve,

which includes the smaller Assegaaibosch Nature Reserve, is near Stellenbosch, comprising the Jonkershoek Mountains and portions of the upper Jonkershoek Valley. The reserve stretches over 9 800 ha and its rugged terrain is ideal for hiking. Assegaaibosch is much smaller and is suitable for shorter walks and picnics.

At Le Bonheur Estate, visitors can experience guided crocpond tours, which lead across open dams via rampways. Over 1 000 crocodiles are housed in these dams. Visitors can touch a baby crocodile and, during summer months, witness them being fed.

Paarl is famous for its Cape Dutch and Victorian architectural treasures found along a 1-km stretch of the main street. The area's fynbos supports many south-western Cape endemics, such as the Cape sugarbird and orange-breasted sunbird. The Afrikaans Language Monument is on the slopes of Paarl Mountain, while the Afrikaanse Taalmuseum (Language Museum) is in the centre of the town.

The town of Wellington lies in a picturesque valley, with the majestic Hawequa Mountains on its eastern border. Wellington is also the home of South Africa's dried-fruit industry.

Experience life as the pioneers did in years gone by at the Kleinplasie Living Museum. The KWV Brandy Cellar, the largest of its kind in the world, offers cellar tours and brandy tastings.

The Hex River Valley is the largest producer of table grapes in southern Africa. Visitors can pick their own grapes at harvest time and sample the variety of export-quality produce.

The well-known Hex River 4x4 trail and the ochre San rock art trail is a must for nature lovers. De Doorns lies in the heart of the Hex River Valley. Bonnievale, on the Breede River, features several cheese factories.

For the adventurous outdoor enthusiast there are canoe trips, as well as birdwatching and riverboating.

Surrounded by vineyards, orchards, and roses, Robertson is known as "The Valley of Wine and Roses". It is known for its connoisseur-quality wines and its thoroughbred horses. Renowned for its muscadel wines, Montagu is the gateway to the Little Karoo.

Relax in the healing waters of the Avalon Springs or visit the Montagu Museum, which houses, among other things, original

cartoons and books by well-known cartoonist Thomas Ochse Honiball.

The picturesque village of Gouda is known for the Parrotts Den pub, a living museum in the Gouda Hotel.

McGregor has a variety of charming thatched cottages and well-preserved Victorian houses, making it one of the best-preserved examples of mid-19th-century architecture in the Western Cape.

Prince Alfred Hamlet is the gateway to the Gydo Pass, known for its scenic views. This quaint village lies in an important deciduous-fruit farming area. Hidden amid vineyards and wine estates lies Rawsonville, known for its award-winning wines.

Tourists can enjoy an afternoon drive along the beautiful Slanghoek Valley with its lush vineyards and panoramic views or relax in the mineral springs at Goudini Spa.

Garden Route

The Garden Route spans roughly 200 km of the southern coast, incorporating a stretch of coastline that includes Mossel Bay, George, Wilderness, Sedgefield, Knysna, Plettenberg Bay and Nature's Valley – each with its own charm and attractions. Famed for its lush greenery and the vast Tsitsikamma Forest, the Garden Route is the most biodiverse region in the world.

The Garden Route features the Pont at Malgas, which is one of the two remaining ponts in the country, ferrying vehicles and livestock across the Breede River. The Grootvadersbosch Nature Reserve outside Heidelberg comprises the popular Bushbuck Trail, a wilderness trail and two mountain-biking trails. Riversdale is one of South Africa's most important fynbos export areas. Other attractions include the Julius Gordon Africana Museum.

At the historical Strandveld Architectural Heritage Site at Still Bay, visitors can watch tame eels being fed. Ancient fish traps can be seen at Morris Point and the harbour.

At the aloe factories at Albertinia, aloe juice is extracted for medicine and high-quality skincare products. Nearby, bungeejumping at the Gouritz River Gorge, hiking, mountain-biking and angling are popular pastimes.

The Point in Mossel Bay is not only popular among surfers, but its natural pool formed by rock is also a favourite swimming spot at low tide. The Saint Blaize trail starts here and is the ideal place from which to watch the whales and dolphins at play in season.

The harbour at Mossel Bay is one of the most modern commercial and recreational harbours on the southern coastline of the Western Cape. Other attractions include the Attequas Kloof Pass, Anglo-Boer/South African War blockhouses and the Bartolomeu Dias complex. Great Brak River offers a historic village with many opportunities for whale watching and dolphin watching along the extensive coast.

The Slave Tree in George, located just outside the Old Library, was planted in 1811, when George was laid out. It is known to be the biggest English oak in the southern hemisphere. George is popular among golfers and is home to the renowned Fancourt Country Club and Golf Estate, as well as various other acclaimed golf courses. Visitors can board the Power Van at the Outeniqua Transport Museum and enjoy a glimpse of the Garden Route Botanical Garden from this rail bus. The Big Tree at Woodville, an Outeniqua yellowwood, is estimated to be around 850 years old. It is located about 40 km outside of George in the direction of Knysna.

The George Airport, Outeniqua Pass, railway line and the N2 offer convenient access to this region, making George the ideal hub from which to explore the Garden Route and Little Karoo.

Victoria Bay and Wilderness are popular for their unspoilt beaches. Wilderness is the western gateway to the southern Cape lakes area. It is a nature lover's paradise, best known for its beaches, lakes, placid lagoon and lush indigenous forests.

The Langvlei and Rondevlei bird sanctuaries in the Wilderness National Park, which hosts over 230 different bird species, is popular among birdwatchers. Sedgefield borders Swartvlei Lagoon, the largest natural inland saltwater lake in South Africa. Activities include beach horse riding, hiking, angling and birdwatching.

Knysna nestles on the banks of an estuary, guarded by The Heads (two huge sandstone cliffs) and surrounded by indigenous forests, tranquil lakes and golden beaches.

This natural wonderland is home to the largest and smallest of creatures, from the Knysna seahorse to the Knysna elephants, rare delicate butterflies and the endemic Knysna loerie, a colourful forest bird.

The abundant fynbos and forest settings host over 200 species. Knysna is also famous for its delectable homegrown oysters, enjoyed with locally brewed beer in quaint pubs and restaurants. The Knysna Oyster Festival, a celebration of the good life, has established itself as one of the most popular annual events in the Western Cape.

An eclectic mix of art galleries presents the diversity of talent in the area. There are also lagoon cruises, forest hikes, golf and adventure sports on offer.

Plettenberg Bay is adventure country, offering boat-based whale watching, blackwater tubing, hiking, as well as forest and cycling trails. The Keurbooms River Nature Reserve at Plettenberg Bay offers a canoeing trail, while the Robberg Nature Reserve is a treasure trove of land, marine, geological and archaeological wealth.

Little Karoo

The Little Karoo's fascinating landscape is fashioned almost entirely by water. Its vegetation ranges from lush greenery in the fertile river valleys to short, rugged Karoo plants in the veld. Gorges feature rivers that cut through towering mountains, while breathtakingly steep passes cross imposing terrain. The region is also home to the world's largest bird – the ostrich. The Little Karoo is rich in culture and history. Oudtshoorn, the world's ostrich-feather capital, is the region's main town.

The annual Klein-Karoo Nasionale Kunstefees (National Arts Festival) is held in the town. Some 29 km from Oudtshoorn lie the Cango Caves, a series of subterranean limestone caverns. Bearing evidence of early San habitation, the cave features magnificent dripstone formations.

Amalienstein and Zoar are historic mission stations midway between Ladismith and Calitzdorp. Visitors can go on donkey-cart and hiking trails through orchards and vineyards, while the Seweweekspoort is ideal for mountain-biking, hiking, and protea and fynbos admirers. Calitzdorp has four wine estates, three of which are open to the public.

The spring water of the Calitzdorp Spa is rich in minerals and reputed to have medicinal properties. The Gamka Mountain Reserve is home to the rare and endangered Cape mountain zebra.

Excellent wines and port are produced in the Calitzdorp and De Rust areas. The Swartberg Nature Reserve and Pass with its gravel roads is also worth a visit. De Rust lies at the southern entrance to Meiringspoort. The Meiringspoort Gorge extends 20 km through the Swartberg Mountain Range. Halfway through is a beautiful 69-m waterfall. Wine farms in the area are open to the public.

Ladysmith is home to the Towerkop Cheese Factory. There are various hiking, mountain-biking and 4x4 trails in the area, as well as the Anysberg, Little Karoo and Towerkop nature reserves.

Uniondale, on the main route between George and Graaff-Reinet, features the largest water wheel in the country, the Old Water Mill. Uniondale Poort is a scenic drive linking Uniondale with Avontuur in the Langkloof Valley.

At Vanwyksdorp, visitors can see how fynbos is dried and packed for the export market. Donkey-cart rides take visitors to Anglo-Boer/South African War grave sites.

Central Karoo

The Central Karoo, a fascinating semi-desert area, lies in the heart of one of the world's most unique and interesting arid zones. This ancient, fossil-rich land is five times the size of Great Britain. Here, visitors will find the Earth's largest variety of succulents. Beaufort West, the oldest town in the Central Karoo, is often referred to as the "Oasis of the Karoo". The local museum displays awards presented to heart-transplant pioneer, Professor Chris Barnard, a son of this town.

A township route introduces visitors to the Xhosa culture in the area. The Karoo National Park, on the town's doorstep, is home to a variety of game, as well as the highly endangered riverine rabbit.

Matjiesfontein, a national monument, offers tourists a peek into yesteryear and the opportunity to overnight in Victorian splendour. The village houses a transport museum and the Marie Rawdon Museum.

Experience the vastness of the Great Karoo in Murraysburg, an ecotourist and hunter's paradise.

Laingsburg, a tiny village that was devastated by floods about a century after it was established, was rebuilt afterwards. It is the best place to study the geology of the region.

Prince Albert is a well-preserved town at the foot of the Swartberg Mountains. It is the ideal place to sample Karoo cuisine, see examples of local architecture dating back to the early 1800s and enjoy several scenic drives.

The Fransie Pienaar Museum introduces visitors to the cultural history of the area. It has a fossil room and an exhibit covering the gold rush in this area in the 19th century. The museum has a licence to distil and sell "witblits" (literally white lightning, also known as "firewater" in the local parlance). Prince Albert is the closest town by road to Gamkaskloof.

The Hell, a little valley in the heart of the Swartberg Mountains, was the home of one of the world's most isolated communities for almost 150 years. Gamkaskloof is a nature reserve and national monument managed by Cape Nature Conservation. It has overnight facilities and can be accessed by a 57-km long (but two-hour drive) winding road which starts at the peak of the Swartberg Pass.

West Coast

The West Coast is a region of outstanding beauty and contrast. The coast's scenic beauty is matched only by culinary experiences of mussels, oysters, calamari, crayfish and abalone in season, or linefish pulled from the Benguela Current's cold waters.

During April every year, Lambert's Bay has the Crayfish and Cultural Festival. The area is not only a birder's paradise, but every year migrating whales visit the coastal waters from July.

Vredenburg, the business centre of the area, has a popular golf course with a bird hide. Lambert's Bay is a traditional fishing village, with Bird Island as a popular tourist attraction. It is a breeding ground for African penguins, the Cape cormorant and other seabirds.

Within two months of the first good winter rains, wild flowers on the West Coast explode in a brilliant display of colour.

The Swartland region is known for its wheat fields, vineyards, wineries and outdoor activities.

Further north, visitors encounter the Olifants River Valley and the vast plains of the Knersvlakte with its wealth of indigenous succulent plants.

The citrus area in the Olifants River Valley is the third-largest in South Africa.

The town of Darling draws visitors to its country museum and art gallery, annual wild flower and orchid shows, basket factory and wine cellars.

The entertainment venue "Evita se Perron" is situated at the old Darling Railway Station and offers top performances by South African entertainers.

Malmesbury is the biggest town in the Swartland. Major attractions include the Malmesbury Museum and the historical walkabout.

The Riebeek Valley is known for its scenic beauty. The area has become a popular haven for well-known artists of various disciplines. Wines and olives can be tasted at various cellars.

Elands Bay is a popular holiday resort and surfer's paradise. Khoi and San rock art can be viewed at the Elands Bay caves.

Moorreesburg and Koringberg are major wheat-distributing towns. Tourists can visit the Wheat Industry Museum, one of only three in the world. Birdwatching, hiking, 4x4 routes, clay-pigeon shooting, mountain-biking trails, canoeing and waterskiing at the Misverstand Dam are popular activities.

Yzerfontein is famous for its unspoilt beaches, fynbos, beautiful views and whale watching. Another major attraction is the historical lime furnaces.

Langebaan, a popular holiday destination, is home to the West Coast National Park. An internationally renowned wetland that houses about 60 000 waterbirds and waders, the park attracts thousands of visitors each year. The oldest anatomically modern fossilised human footprints were also discovered here.

The Langebaan Lagoon forms part of the park and is zoned for specific activities. The Postberg section of the park, across the lagoon, is famous for its wild flowers that bloom mainly during August and September.

Cape Columbine at Paternoster is the last manned lighthouse build on the South African coast. The Columbine Nature Reserve is home to a variety of seabird species.

Saldanha is a water sport enthusiast's paradise. Its attractions include Doc's Cave, a landmark on the scenic breakwater drive, and the Hoedjieskoppie Nature Reserve.

There are various hiking trails in the SAS Saldanha Nature Reserve.

St Helena Bay is best known for the Vasco Da Gama Monument and Museum. Visitors can enjoy fishing (snoek in season), hiking as well as whale watching and birdwatching.

Piketberg offers arts and crafts, fauna and flora, wine culture and recreation.

The Goedverwacht and Wittewater Moravian mission stations are close to the town. Porterville is famous for its Disa Route (best in January and February).

The Groot Winterhoek Mountain Peak in the Groot Winterhoek Wilderness Area is the second highest in the Western Cape.

The Dasklip Pass is popular with hang-gliders. At Velddrif/ Laaiplek, visitors can indulge in bokkems (a West Coast saltedfish delicacy) at factories along the Berg River. Tourists can also visit the salt-processing factory and the West Coast Art Gallery in town.

The wine route from Citrusdal to Lutzville produces a selection of internationally acclaimed wines. Citrusdal is famous for its citrus products and wines. The Citrusdal Museum depicts the pioneering days of the early colonists. The Goede Hoop Citrus Co-Op is the largest single packing facility in South Africa. World-renowned Rooibos tea is also produced here.

The annual Citrusdal Outdoor Calabash features 4x4 outings, lectures and visits to rock-art sites and an arts and crafts market. Annually, scores of skydiving enthusiasts visit Citrusdal for a skydiving "boogie" that lasts several days. The oldest orange tree in the country, calculated to be more than 250 years old, grows in the Citrusdal Valley. The Sandveldhuisie is an example of a typical Sandveld dwelling.

The Cederberg Wilderness Area features the elephant's foot plant, the rare snow protea and some of the best examples of San rock art in the Western Cape.

Visitors to Clanwilliam can visit the Rooibos and Velskoen factories as well as the grave of the well-known South African poet Louis Leipoldt.

Various historical buildings can also be viewed. The Clanwilliam and Bulshoek dams are popular among water sport enthusiasts.

Wuppertal, at the foot of the Cederberg mountains, features the oldest Rhenish Mission Station. Proceeds from 4x4 trails in

the area fund the creation of new hiking trails and the building of more overnight huts and guest houses.

The town, which is well-known for its Rooibos and Buchu production, has added one more attraction to its tourism offerings – the Cederberg Donkey Cart Route. The project entails a three-day tour through the Cederberg Mountain area and Heuningvlei, with accommodation facilities for overnight visitors.

Vredendal is the centre of the Lower Olifants River Valley. Major attractions include marble-processing and manufacturing, industrial mines (dolomite and limestone), the KWV Grape Juice Concentrate Plant and Distillery and the South African Dried Fruit cooperative. The town is also home to the Vredendal Wine Cellar, the largest cooperative wine cellar under one roof in the southern hemisphere.

The picturesque town of Doringbaai with its attractive lighthouse is well known for its seafood.

Strandfontein, about 8 km north of Doringbaai, is essentially a holiday and retirement resort with a panoramic view of the ocean. Klawer was named after the wild clover that grows in the area. During the flower season, the area is a symphony of colour. The Doring River features hiking trails and opportunities for river-rafting. Lutzville and Koekenaap are synonymous with wine and flowers in season.

Visitors can also view the Sishen-Saldanha Railway Bridge. Where the railway line spans the Olifants River, it is divided into 23 sections, each 45 m long. The 14 100-t deck was pushed into position over teflon sheets with hydraulic jacks from the bridgehead. It is the longest bridge in the world built using this method.

Vanrhynsdorp houses the largest succulent nursery in South Africa. The Latsky Radio Museum houses a collection of old valve radios, some dating back to 1924. The Troe Troe and Rietpoort mission stations are a must-see for history enthusiasts.

Overberg

In the most southerly region of Africa east of Cape Town, lies the Overberg.

The Hangklip-Kleinmond area comprises Kleinmond, Betty's Bay, Pringle Bay and Rooi Els. It is a popular holiday region,

ideal for whale watching, and includes the Kleinmond Coastal Nature Reserve and the Harold Porter Botanical Garden.

The Penguin Reserve at Stoney Point, Betty's Bay, is one of two breeding colonies of the jackass penguin off Africa.

South Africa's first international biosphere reserve, the Kogelberg Biosphere Reserve, was proclaimed by the UNESCO in 1999. It runs along the coast from Gordon's Bay to the Bot River Vlei, stretching 2 km out to sea, and inland to the Groenlandberg Mountains near Grabouw.

Hermanus is a popular holiday resort and famous for the best land-based whale watching in the world.

Stanford is one of the few villages in South Africa where the market square has been retained. The central core of the village has been proclaimed a national conservation area. Awardwinning wines are produced in the area.

Gansbaai is known for its excellent rock and boat angling, diving, shark-cage diving and whale watching.

The Danger Point Lighthouse, named as such because of the ships that have been wrecked and lives lost on this dangerous coast, is open to the public.

De Kelders is the only freshwater cave on the African coast. Spectacular views of southern right whales can be enjoyed from the cliffs at De Kelders and along the coast to Pearly Beach.

Also popular are white-shark tours, diving safaris and fishing trips.

Elim was founded by German missionaries in 1824, with its only inhabitants being members of the Moravian Church. Visitors are welcome to attend services.

The Old Watermill (1833) has been restored and declared a national monument.

Popular sites in Napier include the Militaria Museum and Rose Boats and Toy Museum.

The Shipwreck Museum in Bredasdorp, founded in 1975, specialises in shipwrecks found along the South African coastline. The town also has the Audrey Blignault Museum.

De Mond Nature Reserve is home to some rare bird species, including the Damara tern and giant tern.

The Geelkop Nature Reserve derives its name from the mass of yellow flowering plants that cover the hill during spring.

The lighthouse at L'Agulhas, which forms part of the

Agulhas National Park, is the country's second-oldest working lighthouse. It celebrated its 150th anniversary in 1999. The Agulhas National Park is a ruggedly beautiful coastal plain of 20 959 ha.

At Cape Agulhas, the southernmost tip of the continent, the waters cleave into the Indian and Atlantic oceans.

The wrecks of some 130-seafaring craft yachts, Spanish galleons, Dutch East Indiamen, the legendary Birkenhead, and even modern-day fishing trawlers, have found a watery grave around the notorious Cape of Storms.

Struisbaai has the longest white coastline in the southern hemisphere. Arniston was named Waenhuiskrans (coach-house cliff) by the local fishers in honour of the huge sea cave capable of housing several oxwagons. For outsiders, it was named after the Arniston, a ship wrecked there in 1815. The Waenhuiskrans Cave can be explored at low tide.

The De Hoop Nature Reserve on the way to Swellendam includes an internationally renowned wetland and bird sanctuary. It is a winter retreat for the Southern Right whale and the Western Cape's only Cape Griffon Vulture Colony. The red Bredasdorp lily and many species of protea and erica are found in the Heuningberg Nature Reserve.

Swellendam is well-known for its youngberries and eclectic architecture. The Drostdy Museum consists of a group of buildings containing a huge selection of period furniture.

The Bontebok National Park, about 7 km from Swellendam, provides sanctuary to the threatened bontebok and other species. Known for its world class wine, Barrydale offers the visitor fruit and fresh air in abundance. Situated on the N2, about 160 km from Cape Town, Riviersonderend offers beautiful mountain and river scenery, a nine-hole golf course and sightings of the blue crane.

Caledon is famous for its natural mineral waters, hot springs and wildflower shows. Southern Associated Maltsters is the only malt producer for the South African lager beer industry and the largest in the southern hemisphere.

Genadendal is the oldest Moravian village in Africa, with church buildings and a school dating back to 1738.

The Genadendal Mission and Museum complex documents the first mission station in South Africa.

Villiersdorp houses the Dagbreek Museum that dates back to 1845 and was declared a monument in 1994. The historical home, Oude Radyn, is possibly the only building in the Western Cape to have Batavian wooden gutters and down pipes.

The Theewaterskloof Dam, outside Villiersdorp, is the seventh-largest dam in the country. The Villiersdorp Wild Flower Garden and Nature Reserve has an indigenous herb garden and a reference library.

The Grabouw/Elgin district produces about 60% of South Africa's total apple exports and fine wines. The valley is also renowned for cultivating fresh chrysanthemums, roses and proteas.

The Elgin Apple Museum is one of only two in the world. Sir Lowry's Pass offers spectacular views of False Bay from Gordon's Bay to Cape Point.

Northern Cape

Characterised by its vast expanses of space and silence, warm sunny climate, friendly people and hospitality, the Northern Cape is a province with a rich culture heritage.

Diamond fields

The Big Hole in Kimberley is the largest hand-dug excavation in the world. In 1871, diamonds were discovered at the site and mined manually by prospectors.

The Kimberley Tram Service dates back to the beginning of the 20th century and still transports passengers from the City Hall to the Mine Museum.

Underground mine tours are a big attraction, as are the famous ghost tours, during which many historical buildings are seen from a different perspective.

Hand and mechanical diamond-digging by private diggers can be viewed by appointment.

The McGregor Museum houses invaluable collections of the archaeological finds in the area, as well as San art works.

The house where Sol Plaatje (African National Congress founding member and human rights activist) lived in Kimberley, has a library of Plaatje's and other black South African writers' works, and several displays, including a portrayal of black involvement in the Anglo-Boer/South African War.

The Pioneers of Aviation Museum near Kimberley Airport houses a replica of the Compton-Paterson biplane, which was used for pilot training by the flying school operated by the Paterson Aviation Syndicate at Alexandersfontein.

A township tour of Galeshewe provides a fresh perspective on South Africa's socio-historical realities. Pan African Congress founder Robert Sobukwe's house is there.

The Magersfontein Battlefield outside Kimberley, with its original trenches and other defences intact, is the site of the Boers' crushing defeat of the British during the Siege of Kimberley.

A cultural centre at Wildebeestkuil outside Kimberley features! Xun and Khwe artwork for sale and a tour of rock engravings by these indigenous people.

Barkley West attracts many water sports enthusiasts and anglers. Tucked along the Vaal River near Barkley West lies the Vaalbos National Park.

The park is not only home to large raptors, but also a breeding centre for endangered African herbivores such as rhino, roan and sable antelope and disease-free buffalo.

Kalahari

At Black Rock, visitors can view a worked-out manganese mine. Danielskuil lies at the foot of the Kuruman hills. The Tswana people occupied the area before it became home to the Griquas. Boesmansgat, on the farm Mount Carmel outside Danielskuil, is a unique natural sinkhole – the second-deepest and largest of its kind in the world.

Known as the "Oasis of the Kalahari", Kuruman is blessed with a permanent and abundant source of water that flows from Gasegonyana (Setswana for "the little water calabash") – commonly called the "Eye of Kuruman" – which yields 20 million litres of water per day.

Moffat's Mission in Kuruman features the house of missionary Robert Moffat, the church he built as well as several other historic buildings. Moffat translated the Bible into Setswana – the first African language in which the Bible was made accessible.

The printing press on which he printed the first 2 000 copies can still be viewed. The church he built seats 800 people and is still in use. Explorer David Livingstone married Moffat's daughter and started many famous travels from this mission station.

The Wonderwerk Cave at Kuruman features extensive San paintings that may be viewed by appointment. The Kalahari Raptor Centre cares for injured birds. Many of these majestic creatures can be seen at close quarters.

The Witsand Nature Reserve, situated about 80 km southwest of Postmasburg, features a 100-m high dune of brilliant white sand. It stretches for about 9 km and is about 2 km wide.

Green Kalahari

The Roaring Sands site on the farm Doornaar, near Groblershoop, is a popular tourist attraction. Its high sand dunes, surrounded by typically red Kalahari dunes, are said to "roar" when the wind blows.

Along the hand-built irrigation canals at Kakamas 11 waterwheels are still used. Kanoneiland is a settlement on the biggest island in the Orange River. At Keimoes, the Orange River flows at its widest.

The Tierberg Nature Reserve offers spectacular views of the Keimoes Valley and the many islands in the Orange River. The original irrigation canal system is still in use. The Orange River Wine Cellar's largest cellar is situated here.

Kenhardt is the oldest town in the Lower Orange River area. The Quiver Tree Forest and Kokerboom Hiking Trail, consisting of between 4 000 and 5 000 quiver trees, are within easy driving distance of the town.

Upington is the commercial, educational and social centre of the Green Kalahari, owing its prosperity to agriculture and its irrigated lands along the Orange River. A camel-and-rider statue in front of the town's police station pays tribute to the "mounties", who patrolled the harsh desert territory on camels.

The Kalahari Desert SpeedWeek is an annual eight-day speed festival held in a far north-western corner of South Africa. It is a motorsport event where anybody is welcome to enter, and anything with an engine is eligible. Over the years, the event has also become a meeting place for all sorts of eccentric machinery and people.

The Orange River displays its impressive power at the Augrabies Falls in the Augrabies Falls National Park. Visitors can hire canoes to ensure closer contact with the natural heritage surrounding the world's sixth-largest waterfall.

The Kgalagadi Transfrontier Park comprises 38 000 m² of land, making it one of the largest conservation areas in the world. Straddling the Green Kalahari and Botswana, the park is a two-million-ha sanctuary for various raptors, antelope, gemsbok, springbok, blue wildebeest, red hartebeest, eland, Kalahari lion, black-maned lion, brown and spotted hyena, leopard, cheetah and smaller game, including mongoose, porcupine and the endangered honey badger.

Namaqualand

The Namas are the indigenous people of Namaqualand. Their traditional Nama reed huts still abound in Leliefontein, Nourivier and Steinkopf. Namaqualand is famous for an annual show in spring when an abundance of wild flowers covers vast tracts of desert.

The flowers sprout and survive for a brief period before they wilt and disappear in the heat and dry conditions just as suddenly as they appeared. The small town of Garies is the centre for those setting out to enjoy this show of exuberance in the Kamiesberg.

Since diamonds were discovered along the West Coast in 1925, Alexander Bay has become known for its mining activities. The town is no longer a high-security area and no permits are needed to enter. The Alexkor Museum paints a picture of the history of the area. The town also features the world's largest desert lichenfield, which has some 26 species.

At Hondeklip Bay, visitors can dive for crayfish and watch the local fisherfolk conduct their trade. Port Nolloth is a centre for the small-scale diamond-recovery and crayfish industries. It is the only holiday resort on the Diamond Coast. The local factory sells fish and crayfish in season.

Set in a narrow valley bisecting the granite domes of the Klein Koperberge lies Springbok.

South of Springbok, near Kamieskroon, lies the Skilpad Wild Flower Reserve, part of the Namaqua National Park, which captures the full grandeur of the flower season. The 1 000-ha reserve is open only during the flower season.

The Goegap Nature Reserve comprises 15 004 ha of typically granite, rocky hills and sandy flats. The reserve also offers a 4x4 trail, as well as several hiking and mountain-biking trails.

Namaqualand is also home to the Ai-Ais Richtersveld National Park. It is managed jointly by the local Nama people and the SANParks.

Upper Karoo (Bo-Karoo)

Flanked by the Towerberg, Colesberg is one of the Northern Cape's most beautiful towns. The town features one of the country's last working horse mills. An Anglo-Boer/South African War tour is also on offer. A weekend tour includes a visit to the Norval's Pont prisoner-of-war camp and cemetery.

Colesberg has bred many of the country's top Merino sheep. It is also renowned for producing high-quality racehorses.

De Aar is the most important railway junction in South Africa. The author Olive Schreiner lived in the town for many years. Visitors can dine in her former house, which has been converted into a restaurant.

Hanover is known for its handmade shoes and articles made mostly from sheepskin and leather.

The "Star of South Africa" diamond was discovered at Hopetown. The town also features an old toll house and a block house dating from the Anglo-Boer/South African War.

At Wonderdraai, near Prieska, visitors can see the horseshoeshaped island formed by the flow of the Orange River. It seems as if the river turns to flow uphill.

Vanderkloof, built to house the people building the Vanderkloof Dam, was turned into a flourishing holiday resort. Visitors can enjoy waterskiing, boardsailing, boating and swimming, or visit the Eskom hydro-electric power station within the dam's wall.

The rare riverine rabbit is found in the Victoria West Nature Reserve.

Hantam Karoo

Near Brandvlei lies Verneukpan where Sir Malcolm Campbell unsuccessfully attempted to break the world land-speed record in 1929.

Carnarvon is well known for its corbelled dome-roofed houses built of flat stones because of a lack of wood.

The floors of these interesting houses were smeared and coloured with a rich red mixture of fat and oxblood and polished with smooth stone.

A few km outside Fraserburg lies the Gansfontein palaeosurface. Discovered in 1968, it comprises several trackways of large, four-footed and five-toed mammalian reptiles. The prints are estimated to be some 190 million years old.

Sutherland, birthplace of Nicolaas Petrus van Wyk Louw, well-known Afrikaans author and poet, is also known for its brilliant night skies and cold, biting winters.

The South African Astronomical Observatory's observation telescopes, including the Southern African Large Telescope, are in Sutherland. The sterboom (star tree), which blossoms in September, is found only in Sutherland.

The Tankwa Karoo National Park, on the southern border of the Northern Cape, 70 km west of Sutherland, encompasses the Succulent Karoo Biome, the world's only arid hotspot, stretches 116 000 km² from the south-western Cape into southern Namibia.

The landscape offers seasonal contrasts of coloured wild flowers and stark desert, set against the backdrop of the Roggeveld Escarpment to the east, Klein Roggeveld to the south and the Cederberg to the west. Its extensive desert plateaus are ideal for viewing game such as gemsbok, Cape mountain zebra, springbuck and bustards.

Free State

The Free State lies in the heart of South Africa, with the Kingdom of Lesotho nestling in the hollow of its bean-like shape.

Between the Vaal River in the north and the Orange River in the south, this rolling prairie stretches as far as the eye can see.

This central region is characterised by rolling fields of wheat, sunflowers and maize, and forms the principal bread basket of South Africa.

Motheo

With its King's Park Rose Garden containing more than 4 000 rose bushes, the Free State's major city, Bloemfontein, has rightfully earned the nickname "City of Roses". The city also hosts an annual rose festival.

The Eerste Raadsaal (First Parliament Building), built in 1849 as a school, is Bloemfontein's oldest surviving building. Still in

its original condition, this historical building is used as the seat of the provincial legislature.

The National Afrikaans Literary Museum and Research Centre has works by prominent Afrikaans authors. Exhibits in the Afrikaans Music Museum and Theatre Museum (part of the centre) include old musical instruments, sheet music, costumes, photographs and furniture.

The museum is notable for its wide collection of fossils, cultural-historical exhibits and archaeological displays, including the Florisbad Skull, which was discovered in the 1930s at the Florisbad Spring.

The National Women's Memorial is a sandstone obelisk, 36.5 m high, which commemorates the women and children who died in concentration camps during the Anglo-Boer/South African War. Visitors get a glimpse of life in the concentration and prisoner-of-war camps. The research library contains an extensive collection of Africana.

The Old Presidency dates back to 1885 and was the official residence of three presidents of the former Republic of the Orange Free State. It houses a museum depicting their respective terms of office, and is a cultural centre for art exhibitions, theatrical productions and musical events.

The Observatory Theatre in Bloemfontein's Game Reserve is a unique attraction. Naval Hill is the biggest game reserve completely surrounded by a city. Bloemfontein hosts the Mangaung African Cultural Festival, popularly known the MACUFE, in September every year. The Sand du Plessis Theatre and Art Gallery at Oliewenhuis are also worth visiting.

Botshabelo (Place of Refuge), 45 km from Bloemfontein on the N8 road to Lesotho, is believed to be the largest township settlement in the Free State – and the second-largest in South Africa after Soweto.

Nearby, the town of Thaba Nchu features luxury hotels and a casino, with the Maria Moroka Nature Reserve surrounding Thaba Nchu Sun and the Setlogelo Dam.

Xhariep

Bethulie used to be a London Missionary Society station. The original mission buildings still stand.

The Pellissier House Museum depicts the history of the area.

There is an Anglo-Boer/South African War concentration camp cemetery in Bethulie.

The Gariep Dam, more than 100 km long and 15 km wide, is part of the Orange River Water Scheme, the largest inland expanse of water in South Africa. Between the dam and Bethulie is the Gariep Dam Nature Reserve. On the southern side of the dam lies the Oviston Nature Reserve.

Philippolis, the oldest town in the Free State, was founded as a London Missionary Society station in 1824. It was the first mission station in the province.

Trompsburg is the hub of the Free State Merino sheep-farming industry. The Tussen-die-Riviere Nature Reserve reputedly supports more game than any other sanctuary in the Free State.

A fountain near Koffiefontein was a favourite resting place for transport riders in the 19th century. In June 1870, one of these transport riders picked up a diamond near the fountain. This prompted a rush, and by 1882 Koffiefontein was a booming town with four mining companies.

Thabo Mofutsanyana

Snowcapped mountains and beautiful scenery provide a backdrop to this pristine area.

Clocolan is known for the beauty of its cherry trees when they are in full bloom in spring. San rock paintings and engravings are also found in the area.

Clarens is often described as the "Jewel of the Free State", owing to its exceptionally beautiful scenery. San paintings are found on farms in the area. Close by, the Highlands Route meanders along the foothills of the Maluti Mountains and follows the Lesotho border via Ladybrand and ends at Zastron in the south. The town is known for the many arts and crafts shops, which offer the visitor a wide range of curios and original artwork.

Ficksburg is known for its asparagus and cherry farms. Every November, a cherry festival is held there. The town is a gateway to the Mountain Kingdom of Lesotho.

Rosendal, surrounded by the Witte Mountains, celebrated its centenary in 2011.

The Golden Gate Highlands National Park, known for its impressive sandstone cliffs and rock formations, is a popular holiday destination.

The birdwatching mecca of Seekoeivlei Nature Reserve near Memel constitutes a wetland with Ramsar status, and is surrounded by private game and holiday farms.

Lejweleputswa region

Bethlehem, which lies on the banks of the Jordaan River, was founded by the Voortrekkers in the 1840s. The banks of the Jordaan River form part of the Pretoriuskloof Nature Reserve. This is a sanctuary for birds and small game. The museum in Miller Street depicts the history of the area.

Van Reenen's Pass winds through the Drakensberg, and was originally used by migrating herds of zebra, hartebeest, blesbok and wildebeest. The Llandaff Oratory in the nearby village of Van Reenen is believed to be the smallest Roman Catholic church in the world.

At Harrismith, there are various memorials in honour of those who fought in the Anglo-Boer/South African War and World War I. Of particular interest is a memorial for the Scots Guards and Grenadier Guards.

Platberg, the 2 394-m "flat mountain", is the town's landmark. A well-known race, claimed by some to be the toughest in the country, is run annually up, along and back down the mountain.

Sterkfontein Dam is ideal for water sports and fishing. An open-water swimming race takes place there annually.

The Riemland Museum in Heilbron depicts the heritage and agricultural activities of the region.

The QwaQwa district is a traditional home to the Basotho people. The Basotho Cultural Village in the QwaQwa Nature Reserve is a living museum where visitors can witness the Sotho traditions and lifestyle in the chief's kraal.

Karakul carpets, mohair, wall hangings, copper, glassware and brass are made and sold at Phuthaditjhaba. The nearby Metsi Matsho and Fika Patso dams are renowned for trout fishing.

Welkom is known for its gold mines. It is also the only city in the country where traffic circles are used instead of traffic lights.

The world's deepest wine cellar is at the St Helena Mine, which is 857 m below the Earth's surface. Bothaville is regarded as the centre of the Free State Maize Route. The Nampo Harvest Farm and Festival attracts more than 20 000 visitors

each year and is the second-largest private agricultural show in the world. Bothaville also hosts the annual Food and Witblits festival, drawing visitors from all over South Africa.

The sandstone church in Kestell is possibly the most impressive of all the Eastern Free State's sandstone buildings. Winburg is the oldest town and first capital of the former Republic of the Orange Free State. The Voortrekker Museum depicts the daily routine of the trekkers. A concentration camp cemetery is situated nearby.

Sasolburg originated in 1954 with the establishment of Sasol, the synthetic fuel producer. Parys, situated on the banks of the Vaal River, offers tourists a tranquil river retreat. The nearby Vrederfort Dome World Heritage Site was caused by the collision of a meteorite with the Earth many years ago. It is the only world heritage site in the Free State. It features unique fauna and flora, including 100 different plant species, more than 300 bird types and a variety of small mammals.

Jukskei is the first indigenous game that has developed to international participation. The Jukskei Museum in Kroonstad has over 3 500 objects that depict the development of the game.

Jagersfontein has the deepest man-made hole in the world. The Excelsior diamond of 971 carats was found in this open-cast mine in 1893. Eagles nest against the cliffs of the mine.

Eastern Cape

The main feature of the Eastern Cape is its magnificent coastline with its open sandy beaches, secluded lagoons and towering cliffs.

Added to the diverse coastal experiences are more than 60 state-owned game reserves and over 30 private game farms, which collectively cover an area greater than the Kruger National Park.

Amatola Mountain region

The Amatola Mountains are famous for their scenery and history, and stretch from Adelaide in the east to Stutterheim in the west. With its lush forests and ancient battlefields, it is an area steeped in Xhosa culture and early settler history.

The dense forests of the Amatolas are a haven for the endangered Cape parrot, and were also home to the first

dinosaur to be identified in South Africa, the Blinkwater Monster, a large fossilised reptile discovered near Fort Beaufort.

Outdoor enthusiasts enjoy Cathcart where trout fishing, hiking, riding and birdwatching are among the attractions. The Amatole Hiking Trail is a well-known scenic, but strenuous, trail.

The coastal city of Port Elizabeth is a superb holiday destination offering a diverse mix of eco-attractions. It also hosts the annual Buoy open-water swim and the Isuzu National Sailing Week held annually in April in Algoa Bay.

The Red Location Museum of the People's Struggle in New Brighton – winner of three international awards – was designed to be a monument to South Africa's struggle against apartheid and an integral part of community life in a township that acted as a crucible for the struggle.

Bay World has an oceanarium and snake park, and many splendid museums. Within the city there are some beautiful parks with well-landscaped gardens. These include: St George's Park, which covers 73 ha and houses the famous Port Elizabeth Cricket Club, the oldest bowling green in South Africa; Prince Alfred's Guard Memorial; the 1882 Victorian Pearson Conservatory; and the 54-ha Settlers' Park.

Tourists can also explore the Donkin Heritage Trail, take a ride on the famous Apple Express, and hike along the site of ancient shipwrecks on the Sacramento Trail. At King William's Town, tourists can visit the Amathole Missionary Museum. The grave of the Black Consciousness activist, Steve Biko, is also in the town.

Other attractions include the Greater Addo Elephant National Park and game reserves; the traditional healing village, Kaya Lendaba, birdwatching; air tours; canoeing; various mountain-biking and horse-riding trails; and organised outdoor excursions.

Wild Coast

Since Portuguese mariners first pioneered the sea route around the Cape to India, this notorious coast has claimed countless ships.

Southern right and humpback whales and their calves are regularly spotted from the high dunes, usually between May and November, while common and bottlenose dolphins are often seen close to shore.

The entire region is the home of a major section of the isiXhosa-speaking southern Nguni (or Pondo) tribes. Brightly coloured examples of their beadwork, together with traditional pottery and basketry, can be bought from roadside vendors and at some trading posts.

Visitors to the rural village of Qunu can view the childhood home of Nelson Mandela. In Mthatha, the Nelson Mandela Museum tells the story of this great figure through a display reflecting the life and times of Mandela.

Mandela received thousands of gifts from presidents, groups and ordinary people. Accepted on behalf of the people of South Africa, they are in safekeeping at the museum for the benefit and appreciation of the nation. Artefacts range from children's letters to bejewelled camel covers.

Coffee Bay is popular among surfers, anglers and shell collectors. To the south is the prominent rock formation, the Hole in the Wall. The local Xhosa people call this place Izi Khaleni ("Place of Thunder"). During high tide, the waves break through the hole in such a way that the concussion can be heard throughout the valley.

East Griqualand

East Griqualand is an area of great beauty, featuring colourful, living history. Kokstad lies in the Umzimhlava River basin between Mount Currie and the Ngele Mountains.

The original town hall, built in 1910, is a national monument, now serving as the local library. The former library, built in 1907, is also a national monument and houses the Kokstad Museum.

The Weza State Forest runs through indigenous forests and commercial plantations. The forest is home to several antelope species and a huge variety of birds. The southernmost portion of the Ukhahlamba Drakensberg World Heritage Site, the impressive Swartberg, Bokkiesberg, Cedarberg and Ngele mountain ranges lie in East Griqualand.

Between Kokstad and Matatiele, the hamlet of Cedarville provides tranquil canoe-borne excursions into its surrounding, water-filled hollows. Steam-train journeys can be undertaken between Swartberg and Creighton.

Karoo

The vast plains of the Karoo have an air of grandeur, and its many picturesque towns are steeped in history. The Owl House in Nieu-Bethesda displays the creative talent of the late Helen Martins. Statues of mermaids, wise men, camels, owls and churches create a wonderland in the garden. All the artworks were created with broken bottles, bits of mirror and cement.

More than 200 houses in Graaff-Reinet have been restored to their original Victorian appearance and proclaimed national monuments. The Old Library Museum houses the Lex Bremner Fossil Collection of Karoo reptile fossils and a collection of Khoi and San art reproductions. Urquhart House has a popular genealogical research centre.

Almost 50 km south-west of Graaff-Reinet is the Kalkkop Crater, which is of major scientific importance. To the north-west of Graaff-Reinet lies the Valley of Desolation. A steep and narrow road leads into the mountains that surround the valley.

The Valley of Desolation is a national monument within the Karoo Nature Reserve, and was formed millions of years ago by weathering erosion. The first evidence of the presence of dinosaurs in South Africa can be viewed at Maclear.

The Mountain Zebra National Park is a haven for the Cape mountain zebra species, which at one time inhabited most of the Cape. The park saved these animals from extinction and their population stands at about 300. Other species found in the park include various antelope such as eland, the African wildcat, bat-eared fox, and more than 200 bird species, including the pale-winged starling, the booted eagle and the blue crane.

N6 Route

This route runs from Bloemfontein to East London. Popular attractions include the slopes of the Tiffindell Ski Resort and the trout-filled streams, as well as the many caves adorned with ancient rock art. Several historic towns can be found in the region, including Smithfield, Barkly East, Lady Grey, Elliot, Aliwal North, Burgersdorp, Queenstown and Rhodes.

Sunshine Coast

The Sunshine Coast comprises miles of beaches. Port Alfred lies at the mouth of the Kowie River. Coastal hills are home

to the oribi - a small territorial buck that was recently near extinction.

Inland, Makhanda (previously Grahamstown) is sometimes referred to as the "City of Saints" due to the more than 40 churches in the town. It is also known for the National Arts Festival, which is held annually. During the festival, Grahamstown is transformed into a dedicated arts venue where performers, visual artists, audiences, writers and crafts people fuse in a celebration of creative energy.

Other attractions include various museums and historical buildings, the oldest post box in South Africa, botanical gardens, the cathedrals of St Michael and St George, nature reserves and hiking trails. Situated north-east of Makhanda, the Great Fish River Reserve consists primarily of valley bushveld habitat and is surrounded by tribal land and commercial game reserves and farms.

The reserve has abundant wildlife such as white rhino, giraffe, waterbuck, Cape buffalo, hippo, kudu, springbok and eland.

There are several historic forts and remains from the frontier wars located in the area.

East London, which forms part of the Nelson Mandela Bay Metropolitan Municipality, is South Africa's only river port city. It was originally established as a supply port to serve the colonial British military headquarters at King William's Town. The East London Aquarium houses approximately 400 different marine and freshwater species.

The museum depicts the natural environment and rich heritage of the region. Best known for the prehistoric coelacanth, the museum also displays reconstructions of the extinct dodo of Mauritius, along with the only extant dodo egg in the world.

The Baviaanskloof Wilderness Area is the largest of the inland protected areas and provides opportunities to visit fynbos-covered mountains on foot or in off-road vehicles. There is a fascinating shell collection at the Shell Museum at Kei Mouth

Tsitsikamma

This region, stretching from Plettenberg Bay to Jeffreys Bay, is renowned for its dense forests, majestic mountains and deep river gorges. It forms the eastern end of the Garden Route.

The word "tsitsikamma" is derived from the Khoekhoen words "tse-tsesa" meaning "clear", and "gami" meaning "water". South Africa's first marine park, the Tsitsikamma National Park, extends along a rocky coastline of 50 km and 3 km out to sea.

Inland, adventure seekers will find deep gorges and temperate evergreen forests crisscrossed by six hiking trails, including the five-day Otter Trail. The varied wildlife includes dolphins and whales, caracal, genet, chacma baboon, dassie and mongoose. Prominent bird species in the area are the African black oystercatcher, the orange-breasted sunbird, the Nerina trogon and the colourful Knysna loerie. A lucky few may catch a glimpse of the rare Cape clawless otter, after which the Otter Trail is named. Another popular adventure is a blackwater tubing experience on the Storms River.

Limpopo

The Limpopo landscape is made up of dramatic contrasts characterised by hot savanna plains and mist-clad mountains, age-old indigenous forests and cycads alongside modern plantations, ancient mountain fortresses and the luxury of contemporary infrastructure and modern-day facilities.

Steeped in history, Limpopo celebrates a rich cultural heritage, and at many archaeological sites the mysteries of the past and ancient peoples are still being unearthed.

Much of the land, particularly in the Kruger National Park and other game and nature reserves, is unspoilt, and provides sanctuary to large numbers of game.

Waterberg

The Nylsvley Nature Reserve has one of the greatest concentrations of waterfowl and bushveld birds in South Africa. More than 400 species frequent the area. The Mokopane vicinity has several nature reserves.

The Arend Dieperink Museum features a fine cultural-historical collection.

The Makapansgat Caves are notable for their fossils and the caves are being developed into an archaeological site. Makapan Valley is an extension of the Cradle of Humankind World Heritage Site. The Thabazimbi district has a large concentration of private game reserves and is one of the fastest-growing ecotourism areas in the country.

The Marakele National Park is home to some rare yellowwood and cedar trees and the world's largest colony of Cape vultures.

Bela Bela is known for its hot springs. There are also a number of game reserves and leisure resorts in the area.

The Waterberg range is rich in indigenous trees, streams, springs, wetlands and birdlife. Cliffs known as the "Palace of The Vultures" harbour a large breeding colony of Cape vultures. Modimolle is the region's main town.

Capricorn district

The Bakone Malapa Open-Air Museum outside Polokwane is a traditional Northern Sotho kraal. Men and women practise traditional skills such as making baskets, clay pots, furniture and utensils, as well as preparing hides.

Polokwane is considered the premier game-hunting destination in South Africa. Polokwane offers a variety of museums and art galleries, including the Bakone Malapa Museum, the Polokwane Museum and the Hugh Exton Photographic Museum. Zion City at Moria, near Polokwane, is the headquarters of the Zion Christian Church, which attracts more than a million pilgrims every Easter.

Vhembe district

The Mapungubwe archaeological site, 80 km west of Musina, lies within the boundaries of the Mapungubwe National Park. It is one of the richest of its kind in Africa and a world heritage site.

Excavations in the 1930s uncovered a royal graveyard, which included a number of golden artefacts, including the famous gold-foil rhinoceros.

The Schoemansdal Voortrekker Town and Museum, west of Makhado, is built on the site of an original Voortrekker village and depicts their lifestyle between 1848 and 1852.

Also, worth visiting is the Big Tree in the Mutale Municipality, the Tshatshingo potholes, the mystical lake of Dzivhafundudzi and the holy forest and waterfalls at Phiphidi.

Mopani district

The Lekgameetse Nature Reserve in the northern foothills of the Drakensberg is part of the Cloud Mountain Biosphere.

This 18 000 ha nature reserve is well known for its abundant butterflies.

The Modjadji Nature Reserve, north of Tzaneen, is named after the legendary Rain Queen, Makobo Constance Modjadji, who is believed to have settled in the area early in the 16th century. The reserve encompasses the world's largest concentration of the cycad species Encephalartos transvenosus, also known as the Modjadji cycad.

The Hans Merensky Nature Reserve and Mineral Spa on the southern banks of the Great Letaba River supports a large variety of game. At the adjoining Tsonga Kraal Open-Air Museum, arts, crafts and traditional huts reflect the Tsonga lifestyle of 100 years ago.

The Kruger National Park (northern section) is home to a large number and wide variety of amphibians, reptiles and birds, as well as 147 mammal species, including the Big Five.

Thulamela, in the northern part of the Kruger National Park, yielded the skeletons of two ancient royals and a multitude of artefacts, including gold bangles, beads and a double gong.

Bohlabela district

On the way to the Kruger National Park, visitors can enjoy wildlife experiences at Manyeleti, home to the Big Five. Adventurers can attempt mountain-climbing at the Mangwazi Nature Reserve, enjoy the Mapulaneng Trail at Zoeknog and the Injaka Dam at Bushbuckridge.

North West

North West has several cultural villages that entertain and enrich visitors. A number of game reserves have been established, including the Pilanesberg National Park, situated in the transition zone between the Kalahari and the Lowveld.

Home to the Big Five, the park offers a wide variety of accommodation and is close to popular attractions such as Sun City and only a two/three-hour drive from Johannesburg. The park has an area of approximately 550 km², making it the fourth

largest park in South Africa supporting more than 7 000 head of game and 350 bird species.

Central district

The historic route of Mahikeng includes an Anglo-Boer/South African War siege site, the Molema House where Sol Plaatje lived while writing his Mafikeng Diary, and the Mahikeng Museum. The Lichtenburg Biodiversity Conservation Centre and the Botsalano Game Reserve are well worth a visit.

The Groot Marico region is known as mampoer country and visitors can explore the Mampoer Route. The Kortkloof Cultural Village is dedicated to the Tswana people.

Other attractions include the Wondergat; the Bosbult Monument, which commemorates a battle fought during the Anglo-Boer/South African War; the Kaditshwene Iron Age Village Ruins; and various hiking trails.

Ottosdal is in the centre of North West. It was established as a Dutch Reformed Church parish on the farm Korannafontein in 1913 and named after its owner. Gerhardus Petrus Otto.

It is the only place in South Africa where the unique "wonderstone", or pyrophyllite, is found and mined. The annual agricultural show in Ottosdal is one of the oldest in the province.

Trenches and cemeteries dating from the Anglo-Boer/South African War can be found on the farms Gestoptefontein and Driekuil. In the Garden of Remembrance are graves of soldiers killed during the war. The Old Farmhouse built in 1910 houses a unique African collection. The Old Watermill built around 1860 is a national monument.

The Ottosdal Night Race is organised in conjunction with the Diamond Marathon Club. The event consists of 42.2-km, 21.1-km and 10-km races and a 5-km fun run.

San rock engravings, Stone Age implements and structures are found on farms such as Witpoort, Gestoptefontein, Driekuil and Korannafontein.

Eastern district

Hartbeespoort Dam is a popular spot for weekend outings, breakfast runs and yachting. The Hartbeespoort Reptile and Animal Park is on the banks of the dam. Cultural experiences in the area include the popular Mapoch and Gaabo Motho cultural villages as well as the Ring Wagon Inn.

The Ann van Dyk Cheetah Centre (formerly the De Wildt Cheetah Breeding and Research Centre) specialises in breeding cheetah and other endangered wildlife species.

Other places of interest include the Borakalalo Game Reserve, the Margaret Roberts Herb Farm and the Phaladingwe Nature Trail

Bophirima district

The Taung Skull Fossil Site and Blue Pools are renowned for the Taung skull found in the Buxton quarries. The Taung Skull Fossil Site is an extension of the Sterkfontein Fossil Hominid Site. This region is popular with adventure seekers – especially those who enjoy 4x4 routes and hunting farms.

Rustenburg district

The 60 000-ha Madikwe Game Reserve is home to 66 large mammal species. Over 10 000 animals of 27 major species have been reintroduced under Operation Phoenix. Hot-air balloon trips, day and night game drives and bushwalks are available.

The reserve has the second-largest elephant population in South Africa and guests are assured of sighting not only the Big Five but also the elusive cheetah and endangered wild dog.

Sun City and the Palace of the Lost City are very popular tourist attractions, offering gambling, golf, extravaganza shows, water sports and an artificial beach. There are various hiking trails in the region. The Heritage Route starts at the Sterkfontein Caves World Heritage Site and ends at Pilanesberg.

Southern district

The OPM Prozesky Bird Sanctuary in Potchefstroom has over 200 bird species and is situated adjacent to the Mooi River.

The Oudorp Hiking Trail takes visitors through the old part of Klerksdorp, where 12 Voortrekker families settled.

Other attractions in the region include the Potchefstroom Lakeside Resort, the Faan Meintjies Nature Reserve in Klerksdorp, mine tours at Orkney, the Diggers Route at Wolmaransstad and the Bloemhof Dam Nature Reserve.

Mpumalanga

Mpumalanga – "The Place Where the Sun Rises" – epitomises every traveller's dream of the true African experience. Located in the north-eastern part of South Africa, the province is bordered by Mozambique to the east and the Kingdom of Eswatini to the south and east.

The climate and topography vary from cool highland grasslands at 1 600 m above sea level, through the Middleveld and escarpment, to the subtropical Lowveld towards the Kruger National Park and many private game reserves.

Scenic beauty, climate and wildlife, voted the most attractive features of South Africa, are found in abundance in this province. Attractions range from game viewing and birdwatching to scenic drives across the valleys and peaks of the vast Drakensberg escarpment, and include agritourism, industrial and adventure tourism and cultural experiences.

Historical sites and cultural villages, old wagon routes and monuments mark events and characters who passed this way in search of adventure and wealth.

Ndebele bead work and wall-painting in the north-west, the arts and crafts of the Lowveld. The different traditional villages throughout the province offer a unique insight into the people's history and cultures.

Mbombela

Mbombela is the capital of Mpumalanga and the commercial and administrative hub of the Lowveld.

The Mbombela Historical Trail is an hour-long walking route stretching from the Promenade Centre to the Civic Centre.

The Blue Train runs between Pretoria and Mbombela on a chartered route called the Valley of the Olifants Route. Rovos Rail trains also travel to Mbombela.

The Green Heritage Hiking Trail in the Mbombela Nature Reserve is one of several walks in the reserve and one of many in the region.

Not to be missed is the Lowveld Botanical Garden, as well as the Reptile Park, the Sudwala Caves and the PR Owen Dinosaur Park.

The tranquil town of White River to the north of Mbombela is well known as an artist's haven and a gateway to the Kruger

National Park. Rottcher Wineries have taken advantage of the area's prime production of oranges to make a truly unique wine, which has been a hallmark of the area for over 50 years.

Panorama

Barberton features many reminders of the early gold-rush era. Museums include Belhaven, Fernlea House and Stopforth House. The only known verdite deposits in the world are found in the rocks of the Barberton district. The annual Diggers Festival is held in September.

The Blyderivierspoort Nature Reserve near Graskop is characterised by striking rock formations and a rich diversity of plants. Within the reserve, the Bourke's Luck potholes were formed by river erosion and the action of floodwater.

The Blyde River Canyon is a 26-km-long gorge carved out of the face of the escarpment, and is one of the natural wonders of Africa. The canyon is the third-largest in the world, the only green canyon, and hosts three rivers that feed the Blydepoort Dam at Swadini. God's Window provides a magnificent panoramic view across miles of densely forested mountains, the green Lowveld and the canyon.

The Blyderivierspoort Hiking Trail is one of the most popular in the country. The southern section of the Kruger National Park, which is a major tourist attraction, falls within this region.

Kaapsehoop is a historical village known for the wild horses that frequent the district. Blue swallows are regular visitors from September to April.

The Lydenburg Museum is in the Gustav Klingbiel Reserve, which is the site of archaeological ruins from the Later Iron Age.

The Lydenburg Heads, human-like masks dating back to 500 AD, were discovered in this area.

Sabie is the centre of the largest man-made forest in South Africa and a popular mountain-biking destination.

The Cultural Historical Forestry Museum depicts various aspects of the country's forestry industry. The Bridal Veil, Horseshoe and Lone Creek waterfalls, and Mac Mac pools and falls just outside Sabie are well worth a visit.

The 69-km Prospector's Trail starts at the Mac Mac Forest Station and leads to the Bourke's Luck potholes.

At the Montrose Falls in Schoemanskloof, the Crocodile River cascades 12 m into a series of rock pools. It is also the starting point of the annual Lowveld Crocodile Canoe Marathon, held in February.

Pilgrim's Rest is a living museum and a replica of the early gold-mining town. The Alanglade House Museum offers guided tours of the former mine manager's house, while the Diggings Museum just outside the town arranges guided tours of gold-panning activities.

This area was the setting for Jock of the Bushveld, the novel by Sir Percy Fitzpatrick about the experiences of a man and his dog as they shared adventures in the world of African goldmining. The Dredzen Shop Museum features a range of items in use nearly a century ago.

Mount Sheba Nature Reserve, south of Pilgrim's Rest, is best known for its indigenous forest – one of few left in the region.

Highlands Meander

The Highlands Meander is a mecca for fly fishers. It is in the pristine waters of this region that one finds various stocks of fish, with trout as the major drawcard.

At the Verloren VIei and Steenkampsberg nature reserves at Dullstroom, one can get a rare glimpse of the endangered blue, wattled and crowned cranes.

The Loskop Dam Nature Reserve offers game-watching, boating and fishing. Many hiking trails are available, such as the Elandskrans Trail, which includes a 30-minute train ride between Waterval-Boyen and Waterval-Onder

Cultural Heartland

Visitors to the Cultural Heartland can immerse themselves in the true cultural heritage of Mpumalanga. Here, one can learn about the proud and welcoming Ndebele people, revered for the striking and colourful geometric patterns on their houses, clothing and beadwork.

This region also has illuminating historical sites such as the Botshabelo Historical Village near Middelburg.

Cosmos Country

Cosmos Country covers parts of what is known as the energy belt of Mpumalanga, which is home to a number of power stations. This region also has the world's largest underground coal-mining complex and the Sasol plant that is renowned for its oil-from-coal technology. The carpet of cosmos flowers that blossom in late summer lures visitors to this region.

Wild Frontier

Various archaeological discoveries dating back almost three billion years were made in the imposing mountains of this region. Visitors can enjoy a rare glimpse of the San paintings embossed in some rocks. The region also holds rich historical sentiments centred on the monument of the late Mozambican President Samora Machel, constructed in the village of Mbuzini.

Grass and wetlands

Grass and wetlands are a paradise with their variety of bird species. This region stretches across the deep valleys and mountains of the east where thermal springs bubble to the surface. There are 270 pans and lakes within a 20 km radius of Lake Chrissie. In this region, visitors can take part in the unusual "frogging expedition" or simply gaze at the stars during "star-gazing weekends".

Gauteng

Gauteng, the "Place of Gold", is the commercial powerhouse of the country, but its offerings are not limited to commerce and industry. Anchored by the cities of Johannesburg and Pretoria, Gauteng provides plenty in the way of entertainment through its network of upmarket shopping malls, casinos, street markets, theatres, restaurants, museums and parks.

Gauteng is characterised by a cosmopolitan mix of people from all walks of life. The province's unique cultural and social legacy is evident from the many excellent museums, theatres, cultural precincts and craft markets.

Although Gauteng is the most populated, built-up and industrialised province, it still has natural areas offering a variety of leisure activities such as day hikes, picnic spots and sports activities.

The Vaal Dam, which supplies water to most of Gauteng's residents, covers some 300 km² and is a popular venue for water sports. Numerous resorts line the shore. The dam also attracts diverse bird species.

Tourism attractions in and around the Cradle of Humankind have grown to more than 380, with over half of these offering graded accommodation.

The broader 47 000-ha Cradle of Humankind site has many caves, the most famous of which are the Sterkfontein caves.

In 1999, Sterkfontein and its environs were declared a world heritage site. About 40% of all the world's human ancestor fossils have been found here, including several of the world's most famous and important fossils. A further 500 hominid fossils and more than 9 000 stone tools have been excavated in the area during ongoing work. The famous skull of Mrs Ples, an estimated 2.5-million-year-old hominid fossil, and Little Foot, an almost complete hominid skeleton some 3.3 million years old, were discovered at the Sterkfontein Caves near Krugersdorp.

The Krugersdorp Game Reserve provides sanctuary for several game species, including four of the Big Five. The African Fauna and Bird Park houses various species of wildlife and birds.

The Walter Sisulu National Botanical Garden has a 70-m high waterfall and a breeding pair of black eagles.

Some 40 km north of Pretoria is a ring of hills 1 km in diameter and 100-m high. These are the walls of the Tswaing Meteorite Crater, left by an asteroid that hit the area some 200 000 years ago. There is a museum adjacent to this site. The crater is covered with indigenous trees and bushes, which attract a variety of bird life.

The old mining town of Cullinan has developed around the Premier Diamond Mine. The mine has produced some of the world's most famous diamonds, including the Cullinan Diamond, the world's largest at 3 106 carats.

Johannesburg

The Adler Museum of the History of Medicine depicts the history of medicine, dentistry and pharmacy in South Africa. The Pharmacy Museum in Melrose houses a large variety of

medicines, including more than 670 traditional medicines that have been collected throughout southern Africa.

Newtown is at the heart of initiatives to revitalise the inner city of Johannesburg. Here, visitors will find the renowned Market Theatre, jazz bars, dance studios and artists' communes among museums, libraries and other places of historic interest.

The Absa Money Museum lies in downtown Johannesburg. Historical records stretch all the way back to the beginnings of Johannesburg, and displays ranges from fairly early money forms, like cowrie shells and Venetian glass beads, through to gold coins recovered from sunken ships. The scientific study of money and its history, or Numismatics, is the essence of the museum's displays.

The Nelson Mandela Bridge is a landmark gateway into Newtown. It is the largest cable-stayed bridge in southern Africa.

Museum Africa in Newtown tells the story of life in South Africa from the Stone Age to the Nuclear Age and beyond.

The Market Theatre complex comprises three theatres, an art gallery, restaurants and pubs. A bronze statue of the champion of passive resistance, Mahatma Gandhi, can be seen in the city centre.

Gold Reef City is a theme park based on Johannesburg during the gold rush era.

The Apartheid Museum in Johannesburg is a state-of-the-art tribute to the rise and fall of apartheid, with 22 exhibition areas that take the visitor on an emotional journey through the state-sanctioned system of apartheid.

Constitution Hill features the impressive building housing South Africa's Constitutional Court, which offers visitors the chance to view the fort, the so-called native gaol, the women's gaol and the awaiting-trial block.

A large, well-established park surrounds Zoo Lake, which breeding bird colonies frequent. Other attractions include jazz concerts, rowing boats for hire, a tea garden and a restaurant.

The James Hall Museum of Transport was founded in 1964 and houses an historical collection of various modes of land transport used in South Africa, dating back 400 years.

The South African Museum of Military History holds an impressive collection of weaponry and uniforms from the two world wars.

The two-bedroom house where Mandela lived before his incarceration has been declared a national monument and converted into a museum.

The Walter Sisulu Square in Kliptown, Soweto, is the place where the Freedom Charter was signed in 1955. The Kliptown Project comprises a hotel, the Kliptown Museum, retail outlets, restaurants and offices.

Soweto is a popular tourist destination. No tour of Soweto would be complete without a visit to the Hector Pieterson Museum, which commemorates the people who died during the Soweto Uprising of 16 June 1976.

The Nelson Mandela Foundation's Centre of Memory is open to the public as a place of memory-sharing and reflection on the life and times of former President Mandela.

At the Lesedi Cultural Village in the Swartkops hills north of Johannesburg, visitors can families of different cultural groupings. It features four traditional homesteads where visitors can spend the night with a family of their choice. The Phumangena Zulu Kraal is home to traditional Zulu people living and working there.

The Melville Koppies in Johannesburg was once the site of a Stone Age African village and iron-smelting works. Flora include 80% of the species recorded on the Witwatersrand. It is open to the public from September to April.

Pretoria

A variety of historical buildings is found in the city, such as the Union Buildings, which celebrated its centenary in 2013. Designed by Sir Herbert Baker, construction started in 1910 and was completed in 1913.

It is the setting of many national celebrations, including Women's Day and Freedom Day. In December 2013, a bronze statue of former President Mandela was unveiled at the Union Buildings.

Church Square is built around a statue of the former President of the Zuid-Afrikaansche Republiek, Paul Kruger, and includes buildings such as the Old Raadsaal and the Palace of Justice.

Ten minutes' drive from Church Square is Freedom Park,

which commemorates the country's political history. The 35-ha site comprises a garden of remembrance, a museum, and statues and sculptures to honour South Africans who contributed to the country's freedom and development.

The Kruger House Museum contains the personal belongings of President Kruger.

Melrose House is a beautiful example of Victorian architecture. The Peace Treaty of Vereeniging, which ended the Anglo-Boer War/South African War, was signed there in 1902.

Demonstrations at the Pioneer Open-Air Museum include milking, butter- and candle-making, bread-baking and coffeebean grinding.

Other museums include the South African Air Force Museum, Police Museum, Coert Steynberg Museum and the Transvaal Museum of Natural History.

The Voortrekker Monument commemorates the Great Trek. Some 260 steps lead to the dome, where spectacular views of the city can be enjoyed.

Fort Schanskop has been refurbished and has a 375-seat amphitheatre.

The Sammy Marks Museum near Pretoria dates from 1885. Rooms in the house are filled with Victorian paintings, furniture, silverware and porcelain.

Visitors can relax at the tea garden and restaurant on the premises.

The General Smuts House Museum in Irene in the south-east of Pretoria, contains the original furnishings of the Smuts family home.

The Rietvlei Nature Reserve is notable for its grass types, herbs, large number of game, including rhino, hippo and many bird species.

The Mapoch Ndebele Village, north of Pretoria, is the first living cultural village in South Africa owned and managed by its residents.

Mamelodi is about 20 km from the city centre and features Solomon Mahlangu Square, which is dedicated to this freedom fighter.

The Willem Prinsloo Agricultural Museum outside Pretoria features a farmstead dating from 1880. Traditional farming activities are demonstrated, and annual events include a prickly

pear festival, a mampoer festival and the Agricultural Museum Show.

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

KwaZulu-Natal

The garden province of South Africa, KwaZulu-Natal, is a subtropical region of lush and well-watered valleys, washed by the warm Indian Ocean. One of the country's most popular tourist destinations, the province stretches from Port Edward in the south to the borders of Eswatini and Mozambique to the north. History-filled towns lead to adventure sports and game viewing, along with outlets for unique arts and crafts.

Durban and surroundings

The city of Durban, overlooking Africa's busiest seaport, is warm and inviting. It is not only South Africa's domestic tourism leader, but is also popular among visitors from throughout Africa and the rest of the world who seek a unique blend of vibrancy, sophistication, cultural diversity and excitement in a beautiful setting.

The Golden Mile skirts the main beaches of the Indian Ocean. Attractions include an amusement centre, paddling pools, paved walkways and fountains.

The uShaka Marine World has a theme park, oceanarium, dolphinarium and oceanographic research institute. It is home to a wide variety of sea life, including sharks, dolphins and seals. One of its main attractions is the long lane of shops and the multitude of restaurants, especially those in the old wreck (a replica of a ship wreck in the centre of the park), and a tourism information office at its entrance.

The Durban area has more than 50 reserves, developed parks and specialised gardens, the most renowned being the Municipal Botanical Garden. Besides the botanical gardens, Mitchell Park is one of the most popular green spaces and includes an outdoor restaurant and a zoo, plus a sizeable playground for children.

MiniTown is a model city depicting Durban's best-known buildings.

Museums include the Natural History Museum, the Natural Science Museum, the Old House Museum and the Old Fort. One of the most intriguing museums is the Maritime Museum, complete with two floating ships in the harbour.

The Shree Ambalavaanar Alayam Temple (the Second River Temple) in Cato Manor was the first Hindu temple in Africa. It is a national monument.

The Juma Musjid Mosque is the largest mosque in the southern hemisphere.

Annual events in and around the city include the popular Comrades Marathon between Durban and Pietermaritzburg, an international surfing competition, the Duzi canoe marathon, the Midmar Mile and Dolphin Mile open-water swimming events, the July Handicap horserace and the Amashova-shova cycle tour.

Umhlanga Rocks, just north of Durban, is notable for its skiboating facilities and the Ski-Boat Festival held every April.

The KwaZulu-Natal Sharks Board offers shark dissections and interesting displays. Guided tours of the Hawaan Forest are also on offer. Hawaan is the last relic of coastal forest in the region and has rare indigenous trees.

The Umgeni River Bird Park overlooks the Umgeni River and ranks among the world's best bird sanctuaries. Walk-in aviaries hold many varieties of indigenous and exotic birds.

The maritime offices, which control the entry of ships into and out of the busiest port in Africa, are in the Millennium Town at the end of the Bluff.

North Coast

Throughout the year, frolicking dolphins and impressive seasonal whale migrations make the coastline between the Umdloti and the Thukela rivers aptly called the "Dolphin Coast". The rarely seen larger humpback dolphins are also found here.

Many of the first Indian immigrants settled here, and the area's markets, mosques and temples give it an authentic Eastern flavour.

Tongaat is an area where sugar was first planted in 1854. The town's Indian ambience is accentuated by two prominent Hindu temples – the Juggernath Puri and Vishwaroop temples.

Other towns along the Dolphin Coast include Shaka's Rock, Salt Rock, Ballito, Verulam, KwaDukuza, Darnall and Umdloti.

Zululand and the Elephant Coast

Zululand's north-east quadrant, between Mozambique, Eswatini and the warm Indian Ocean, has its own unique tale to tell. This is the Elephant Coast or Maputaland, named after the mid-17th-century king who established dominion here some 200 years before King Shaka consolidated his Zulu empire to the south.

The Tembe Elephant Park in the far north is home to herds of the massive African elephant.

The Hluhluwe-Imfolozi Park is one of South Africa's largest game parks. Visitors should look out for the Big Five as well as the elusive cheetah and wild dog.

The eMakhosini Valley, birthplace of King Shaka, is known as "The Valley of Zulu Kings". A joint public-private sector project aims to preserve the culture and history of the Zulu people. This heritage park is near a nature reserve that supports the Big Five of the animal kingdom. At the eMakhosini Memorial Site, seven Zulu kings are buried.

Umgungundlovu was once the royal capital of King Dingaan and was reconstructed. The beehive huts and the layout of the original Zulu village have been reproduced. Authentic Zulu villages such as Shakaland, Kwabhekithunga Kraal, Damazulu and Stewart's Farm offer accommodation and the opportunity to experience traditional Zulu culture.

St Lucia and its surroundings comprise a globally important wetland and have five separate ecosystems. It is a fishing and birdwatching paradise, and boat trips on the lake offer opportunities for crocodile and hippo sightings. St Lucia is the only town in the world that is surrounded by a natural world heritage area.

The Kosi Bay Nature Reserve is part of the Coastal Forest Reserve between Mozambique and Sodwana Bay. The adjacent Indian Ocean provides exciting snorkelling and fishing opportunities. On offer is a four-day guided walking trail around the estuarine system.

uMkhuze is a small trade and transport centre. The Mkuze River cuts through the Ubombo Mountains before serving as a natural boundary for Zululand's popular Mkuzi Game Reserve.

The Border Cave, a site of immense archaeological interest on the border of Eswatini, now also has an interpretation centre. Lake Sibaya is South Africa's largest natural freshwater lake, covering some 77 km². Sibaya Lake Lodge is the first South African ecotourism development jointly owned by private enterprise and the local community.

The coral reef in the Sodwana Bay National Park attracts hundreds of scuba divers throughout the year, and in summer, power boaters arrive for some of the best marlin fishing in the world.

South Coast

Amanzimtoti is popular for its safe swimming beaches and a variety of fun activities and attractions for the whole family.

The Hibiscus Coast stretches between Umkomaas and the Wild Coast. Margate is the largest resort town along this coast, and is very popular during the holidays. The Hibiscus Festival is held there in July.

The Oribi Gorge Nature Reserve encompasses forest, rivers, rapids and ravines. Birdlife, including five kingfisher species and seven eagle species, is prolific. There is also a variety of mammals and a 140-m abseil and gorge swing for adrenalin junkies.

Port Edward offers safe swimming and good fishing opportunities. Nearby, the Umthamvuna Nature Reserve is noted for its beautiful scenery, birdlife and many rare plant species.

The Shell Museum at Shelly Beach is well worth a visit. Other popular coastal towns include Port Shepstone, Ramsgate, St Michael's-on-Sea, Uvongo and Scottburgh. Nature's annual extravaganza, the unforgettable sardine run, strikes the South Coast around the end of June every year, when people flock to the beaches and anglers await the arrival of the game fish following the sardines.

Pietermaritzburg and the Midlands

Pietermaritzburg has various museums, including the Msunduzi Museum that depicts the heritage of different cultural groups of KwaZulu-Natal, a replica Hindu Shiva temple and a beautiful herb garden, the Natal Museum and the Natal Steam Railway Museum, which offers steam-train rides on the second Sunday of every month. The Tatham Art Gallery is also extremely popular.

The Albert Falls Public Resort Nature Reserve and the Albert Falls Dam provide opportunities for sailing, canoeing and fishing. Birdwatching, horse riding and hiking are also popular activities.

The Howick Falls are in the Nature Valley Reserve, where the river tumbles 100 m in a single fall. There are several climbing routes.

The Midlands Meander is a scenic drive between Hilton and Mooi River, with some 430 ports of call en route, ranging from art studios, potters and painters, to herb gardens and cheese makers.

Midmar Dam is zoned for yachting and powerboating. The 1 000-ha Midmar Game Park is inhabited by rhino, zebra, a wide variety of antelope species and waterfowl. The popular yearly Midmar Mile attracted 18 000 swimmers in 2013.

Drakensberg

The mountainous "Barrier of Spears" uKhahlamba-Drakensberg Park World Heritage Site, adorned with Stone Age cave paintings, forms the north-western border of KwaZulu-Natal. The entire area is a bird sanctuary, featuring, among other species, the endangered bearded vulture. The highest concentration of walks and trails in South Africa is found here.

The uKhahlamba-Drakensberg Park consists of almost the entire Drakensberg mountain range from Bushman's Neck in the south to the Royal KwaZulu-Natal National Park in the north.

Peaks soar to over 3 000 m and are often snow-covered in winter. There are trout hatcheries in the Kamberg Reserve area and at Cathedral Peak.

Lotheni Nature Reserve is notable for its trout-fishing facilities (angling permits are required). Relics of the area's history have been preserved in the Settler Museum.

The Himeville Nature Reserve has two lakes stocked with trout. The nearby Swamp Nature Reserve attracts a variety of waterfowl, including the rare wattled crane.

The Ndedema Gorge in the Mdedelelo Wilderness Area near Cathedral Peak has examples of Khoi and San art.

Sani Pass is the only road across the high escarpment between KwaZulu-Natal and the Kingdom of Lesotho. The top section is only passable in 4x4 vehicles. The Giant's Cup Hiking Trail, starting at the foot of the pass, is described as one of South Africa's finest.

Giant's Castle Game Reserve is especially known for its more than 5 000 San paintings. The Bushman Site Museum is worth a visit.

Royal Natal National Park offers many scenic highlights, including the Amphitheatre, Mont-aux-Sources and the Thukela Falls.

Battlefields

The KwaZulu-Natal Battlefields Route has the highest concentration of battlefields and related military sites in South Africa.

The Battlefields Route starts at Estcourt, winding north through Colenso and Ladysmith to Newcastle and Volksrust, and eastwards to Utrecht, Glencoe, Dundee, Nqutu, Paulpietersburg, Vryheid, Babanango and Ulundi.

All the towns along the route have their own unique charm and range of attractions: arts and crafts, scenic hiking trails, farm resorts, Zulu culture and roadside stalls. Game viewing, natural hot springs, horse trails and water sports can also be enjoyed.

The Chelmsford Nature Reserve near Newcastle is a birdwatcher's paradise. Powerboating and carp fishing are added attractions. Game includes springbok, zebra, rhino and blesbok. Majuba Hill and O'Neill's Cottage are other interesting places to visit.

The Ladysmith Siege Museum provides insight into the battles of Colenso, Spioenkop, Vaalkrans and Tugela Heights. Museum staff arrange guided tours to nearby battlefields such as Wagon Hill. Other attractions include the statue of Gandhi, the All Saints Church, the Soofi Mosque and the Spioenkop Dam and Nature Reserve.

Near Dundee, tourists can visit various battlefields, including the Ncome-Blood River, Isandlwana, Rorke's Drift and Talana. The Talana Museum depicts various facets of the coal industry, and local Zulu, Boer and British history. Rorke's Drift was the setting for one of the most famous battles of the war. The main attraction is the Rorke's Drift Battle Museum.

Top 10 reasons to visit South Africa:

- Affordable In South Africa, you can even afford luxury and have spending money for shopping and other treats.
- Natural beauty South Africa's scenic wonders are legendary.
 From Table Mountain to God's Window, the mountains, forests, coasts and deserts will sooth your soul and delight you.
- World-class facilities You will find it easy to get around, find a comfortable place to stay and have a great meal.
- Adventure South Africa is the adventure capital of the world.
 With over 130 adventures, there is something for everyone from mountain walks to shark-cage diving.
- Good weather In sunny South Africa, with great weather, you can enjoy the outdoors, play golf year-round and take advantage of the nearly 3 000 km of coastline.
- Rainbow Nation The Rainbow Nation celebrates all its African and immigrant cultures. South Africans are known for their friendliness and hospitality.
- Diverse experiences Go almost anywhere in South Africa and experience the ultimate combination of nature, wildlife, culture, adventure, heritage and good vibe.
- Wildlife The abundant and diverse wildlife include the Big Five (African lion, African elephant, Cape buffalo, African leopard and black rhinoceros).
- Freedom Struggle Discover a nation's struggle for freedom whilst following the footsteps of Nelson Mandela, Hector Pieterson and many other celebrated revolutionaries.
- Responsible tourism In South Africa, you can travel with care as you explore protected areas, contribute to social and conservation projects, and collect arts and crafts.

