

Executive Authority Statement

SANBI CORPORATE STRATEGIC PLAN (CPS)

It is a pleasure to present the Corporate Strategic Plan for the South African National Biodiversity Institute (SANBI) for the five-year period 2020/21 to 2024/25.

As an entity of the Department of Environment, Forestry and Fisheries, SANBI was founded in terms of the National Environmental Management: Biodiversity Act of 2004, which provides for the management and conservation of South Africa's biodiversity. In this Strategic Plan, national priorities outlined in the National Development Plan's (NDF) Vision 2030 are addressed. SANBI is also guided by the 2020-2025 Medium Term Strategic Framework (MTSF) which provides a five-year building block towards the NDF's 2030 Vision.

The MTSF has five sub-outcomes, which include ensuring that ecosystems are sustained and natural resources are used efficiently; that the country has, and implements, an effective climate change mitigation and adaptation response; and that an environmentally sustainable, low-carbon economy results from a well-managed Just Transition. In addition, it requires enhanced governance systems and capacity, and the development of sustainable human communities.

I am pleased to present a plan that will ensure the management of South Africa's megadiverse biodiversity whilst contributing to national and global science and policy goals, delivering on world class research and providing solutions to complex societal challenges. I expect the SANBI Board to guide and provide leadership to address issues such as access to conservation gardens, climate change, the economic threat of alien and invasive species and habitat loss for equitable redress and economic growth.

This Strategic Plan outlines what SANBI aims to achieve over the next five years. Besides programmes being addressed through targets set in Annual Performance Plans, SANBI will, as in the past, ensure that public, external and donor funds are effectively utilised to achieve its mandate.

The strategic objectives will contribute to national, regional and international biodiversity needs. I trust that the Institute's Corporate Strategic Plan will be a unifying design for the institute, partners and stakeholders to contribute to the future envisioned by all.

SANBI will continue to work to promote and contribute to South Africa's research agenda and enhance conservation and tourism opportunities.



BARBARA CREECY, MP
MINISTER
ENVIRONMENT, FORESTRY AND FISHERIES

Accounting Authority Statement

SANBI was established in terms of the Constitution of the Republic of South Africa (Act No. 108 of 1996), section 24 to ensure everyone has a right to an environment that is not harmful to their health or well-being, and to have the environment protected for the benefit of present and future generations through reasonable legislative and other measures.

The Constitution led to the establishment of SANBI in terms of Section 10(1) of the National Biodiversity Management: Biodiversity Act (Act No. 10 of 2004). SANBI is a public entity in terms of Section 38(1) (m) of the Public Finance Management Act. It is classified as a schedule 3A entity, i.e. one that will receive substantial support from the National Revenue Fund. The mandate and core business of SANBI is underpinned by the Constitution.

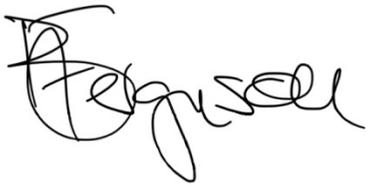
SANBI makes an important contribution to national development through ensuring that it is aligned with government priorities. It contributes to the National Development Plan 2030, which aims to eliminate poverty and reduce inequality. It achieves this by making a direct link between biodiversity and development. While SANBI contributes to a number of the critical actions outlined in the plan, it makes a direct contribution to Critical Action 7 regarding interventions to ensure environmental sustainability and resilience to future shocks. SANBI is also guided by the 2020-2025 Medium Term Strategic Framework (MTSF) which provides a five-year building block towards the 2030 vision of the National Development Plan.

The Board of SANBI has clearly set out the following priorities in that have guided the development of the Corporate Strategic Plan (CSP) and Annual Performance Plan. These key priorities are aligned to the mandate of SANBI and government's priorities.

- The network of National Botanical and Zoological Gardens is managed and conserved for conservation, recreation, education and awareness;

- The state of biodiversity is assessed, relevant knowledge and evidence is generated, and policy support provided to inform decision making on biodiversity conservation and catalyse benefits for people;
- A transformed and suitably skilled workforce and active citizenry is developed to strengthen the biodiversity sector;
- Financial sustainability and provide effective corporate services to achieve the mandate of SANBI.

The Board of SANBI hereby endorses the Corporate Strategic Plan and commits to continue to provide strategic direction to ensure the effective and efficient implementation thereof.

A handwritten signature in black ink, appearing to read 'Beryl Ferguson'. The signature is written in a cursive style with a large initial 'B'.

MRS BERYL FERGUSON
CHAIRPERSON: SANBI BOARD

Accounting Officer Statement

The South African National Biodiversity (SANBI) aims to have a positive impact on the conservation and sustainable use of South Africa's rich and unique biodiversity by managing botanical and zoological gardens, managing conservation collections, facilitating access to biodiversity data, generating information and knowledge to inform action, policy and decision making, and building human capacity.

The Institute has designed the following four broad and encompassing programmes in alignment with SANBI's mandate and national government priorities:

- **Programme 1: National Botanical Gardens and National Zoological Gardens**
 - **Purpose:** Promote the conservation and awareness of South Africa's biodiversity and manage the National Botanical and Zoological Gardens.
- **Programme 2: Biodiversity Science and Policy Advice**
 - **Purpose:** Facilitate the conservation, restoration and sustainable management of biodiversity assets and ecological infrastructure, and unlock nature's contribution to people through providing appropriate knowledge, evidence, and policy support and piloting innovative nature based solutions towards achieving National Development goals.
- **Programme 3: Human Capital Development and Transformation**
 - **Purpose:** Contribute towards the development of the next generation of black biodiversity professionals.
- **Programme 4: Administration**
 - **Purpose:** Promote sustainability through effective resource utilisation, income generation and good governance.

During the previous planning 2019/20 period a key highlight for SANBI was the release of a landmark scientific report, known as the National Biodiversity Assessment (NBA) during October 2019 by Minister of Environment, Forestry and Fishers Ms Barbara Creecy. The NBA was led by SANBI as part of its mandate to monitor the status of South Africa's biodiversity, and was undertaken between 2015 and 2019. It involved extensive collaboration from over 470 individuals representing about 90 institutions.

Ninety young scientist were involved and contributed towards its development. SANBI is deeply grateful for the role played by individual scientists and partner organisations, without which this comprehensive scientific assessment would not have been possible.

The NBA serves as the primary tool to report on the status of South Africa's ecosystems and biodiversity. It revealed major pressures our unique biodiversity is facing, the importance thereof to our everyday lives, its contribution to the country's economy and its richness as a source of natural heritage to society. The wealth of information produced by the NBA is being used by the SA government, civil society and the scientific community to assist in finding solutions to protect and promote the value of biodiversity.

I would like to express my sincere appreciation to the Minister of Environment, Forestry and Fisheries and her department's valuable support and hard work. I would also like to acknowledge our Board Chair and the entire Board for their dedication and commitment to the Institute. I would like to thank the Executive Committee along with the staff for their loyalty and steadfastness in working towards achieving the goals of the Institute amidst institutional constraints and challenges.

SANBI has a good track record of achieving its performance objectives and continues to strive towards meeting its annual targets. This will entail staying true to our SANBI values and harnessing our collective passion and expertise.



MS CARMEL MBIZVO
ACTING CHIEF EXECUTIVE OFFICER: SANBI

Official Sign-Off

It is hereby certified that this Strategic Plan:

- Was developed by the management of the SANBI under the guidance of SANBI BOARD
- Takes into account all the relevant policies, legislation and other mandates for which the SANBI is responsible.
- Accurately reflects the Impact, Outcomes and Outputs which the SANBI will endeavour to achieve over the period five years.

National Botanical Gardens and National Zoological Gardens

Human Capital Development and Transformation

Administration



Mr Elliot Mashile: _____

Chief Operations Officer

Biodiversity Science and Policy Advice



Dr Mandy Barnett: _____

Acting Head of Branch Biodiversity Science and Policy Advice



Ms Lorato Sithole: _____

Chief Financial Officer



Mr Elliot Mashile: _____

Head Official responsible for Planning



Ms Carmel Mbizvo: _____

Acting Chief Executive Officer



Approved by:
Mrs Beryl Ferguson: _____

Board Chairperson

Part A: Our Mandate

1. Constitutional Mandate

The South African National Biodiversity Institute (SANBI) is primarily charged with giving effect to Section 24 of the Constitution of the Republic of South Africa 1996. This section provides that everyone has a right:

(a) to an environment that is not harmful to health or well-being; and

(b) to have the environment protected for the benefit of present and future generations, through reasonable legislative and other measures that –

(i) prevent pollution and ecological degradation;

(ii) promote conservation; and

(iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

One of the legislative measures that have been taken to give effect to subsection (b) is the publication of the National Environmental Management Biodiversity Act (NEMBA). The chief purpose of NEMBA is to provide for the conservation and management of South Africa's biodiversity. NEMBA therefore not only gives effect to the Constitutional imperative to promote conservation, but also the obligations to prevent ecological degradation and to secure ecologically sustainable development and use of natural resources. Since South Africa's rich biodiversity also promotes well-being, it can be argued that NEMBA also promotes section 24(a) of the Constitution.

SANBI was established in terms of section 10(1) of NEMBA and derives its mandate from this Act. SANBI has been given various functions related to the conservation of biodiversity in terms of this Act.

2. Legislative and policy mandates

SANBI is a public entity in terms of section 38(1) (m) of the Public Finance Management Act. It is classified as a schedule 3A entity, i.e. one that will receive substantial support from the National Revenue Fund. The mandate and core business of SANBI is underpinned by the Constitution, as indicated above.

SANBI's general functions are set out in Section 11 of NEMBA (Act No. 10 of 2004), but specific functions are also provided for in other sections of NEMBA, as well as regulations published under NEMBA, i.e. the Threatened or Protected Species (TOPS) Regulations, 2007, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Regulations, 2010 and the Alien and Invasive Species (AIS) Regulations, 2014.

Key priorities are also derived from official sources that identify issues with a high relevance to policy, such as, the National Biodiversity Strategy and Action Plan (NBSAP), the National Biodiversity Framework (NBF), and specific mandates such as provided by the White Paper on the National Climate Change Response Policy.

Section 2 of NEMBA stipulates that SANBI's purpose is to assist in achieving the objectives of the Act. Section 2 sets the further objectives of the Act, i.e.:

(a) within the framework of the National Environmental Management Act, to provide for:

- (i) the management and conservation of biological diversity within the Republic and of the components of such biological diversity;*
- (ii) the use of indigenous biological resources in a sustainable manner; and*
- (iii) the fair and equitable sharing among stakeholders of benefits arising from bio-prospecting involving indigenous biological resources;*

(b) to give effect to ratified international agreements relating to biodiversity, which are binding on the Republic;

(c) to provide for co-operative governance in biodiversity management and conservation; and

(d) to provide for a South African National Biodiversity Institute.

Functions

(1) The Institute:

- (a) must monitor and report regularly to the Minister on:
 - 1. the status of the Republic's biodiversity;
 - 2. the conservation status of all listed threatened or protected species and listed ecosystems; and
 - 3. the status of all listed invasive species;
- (b) must monitor and report regularly to the Minister on the impact of any genetically modified organism that has been released into the environment including the impact on non-target organisms and ecological processes, indigenous biological resources and the biological diversity of species used for agriculture;
- (c) must act as an advisory and consultative body on matters relating to biodiversity to organs of state and other biodiversity stakeholders;
- (d) must co-ordinate and promote the taxonomy of South Africa's biodiversity;
- (e) must manage, control and maintain all national botanical gardens;
- (f) must manage, control and maintain:
 - 1. herbaria; and
 - 2. collections of dead animals that may exist;
- (g) must establish facilities for horticulture display, environmental education, visitor amenities and research;
- (h) must establish, maintain, protect and preserve collections of plants in national botanical gardens and in herbaria;
- (i) may establish, maintain, protect and preserve collections of animals and micro-organisms in appropriate enclosures (e.g. National Zoological Garden);
- (j) must collect, generate, process, co-ordinate and disseminate information about biodiversity and the sustainable use of indigenous biological resources and establish and maintain databases in this regard;
- (k) must allow, regulate or prohibit access by the public to national botanical gardens, herbaria and other places under the control of the Institute and supply plants, information, meals or refreshments or render other services to visitors;
- (l) must undertake and promote research on indigenous biodiversity and the sustainable use of indigenous biological resources;

- (m) must coordinate and implement programmes for:
 - 1. the rehabilitation of ecosystems; and
 - 2. the prevention, control or eradication of listed invasive species;
- (n) must coordinate programmes to involve civil society in:
 - 1. the conservation and sustainable use of indigenous biological resources; and
 - 2. the rehabilitation of ecosystems;
- (o) on the Minister's request, must assist him or her in the performance of duties and the exercise of powers assigned to the Minister in terms of this Act;
- (p) on the Minister's request, must advise him or her on any matter regulated in terms of this Act, including:
 - 1. the implementation of this Act and any international agreements affecting biodiversity which are binding on the Republic;
 - 2. the identification of bioregions and the contents of any bioregional plans;
 - 3. other aspects of biodiversity planning;
 - 4. the management and conservation of biological diversity; and
 - 5. the sustainable use of indigenous biological resources;
- (q) on the Minister's request, must advise him or her on the declaration and the management of, and development in, national protected areas;
- (r) must perform any other duties:
 - 1. assigned to it in terms of this Act; or
 - 2. as may be prescribed.

(2) When the Institute in terms of subsection **(1)** gives advice on a scientific matter, it may consult any appropriate organ of state or other institution, which has expertise in that matter;

48. (3) The Institute must:

- (a) assist the Minister and others involved in the preparation of the National Biodiversity Framework, a bioregional plan or a biodiversity management plan to comply with subsection (1); and
- (b) make recommendations to organs of state or municipalities referred to in subsection (2); align their plans referred to in that subsection with the National Biodiversity Framework and any applicable bioregional plan.

60. (2) The Institute must provide logistical, administrative and financial support for the proper functioning of the Scientific Authority.

SANBI manages its human resources through the following legislation:

- Labour Relations Act No. 66 of 1995;
- Basic Conditions of Employment Act No. 75 of 1997;
- Employment Equity Act No. 55 of 1998;
- Skills Development Act No.97 of 1998;
- Skills Development Levies Act No.9 of 1999;
- Occupational Health and Safety Act No. 85 of 1993;
- Compensation for Occupational Injuries and Diseases Act No. 130 of 1993.

The Institute complies with the Public Finance Management Act and relevant Treasury regulations as well as the Public Service Administration Act and relevant Regulations.

3. Institutional Policies and Strategies over the five year planning period

SANBI's programmes of work contribute to government priorities by;

- Supporting **economic transformation and job creation** through coordinating research to support the biodiversity economy, leading the biodiversity human capital development programme of work for the sector and contributing to green jobs, and implementing biodiversity mainstreaming programmes to contribute to national and local development priorities. SANBI's National Botanical Gardens and National Zoological Gardens provide important centres of social cohesion for surrounding communities, as well as opportunities for unlocking economic potential and creating tourist destinations.
- Supporting **spatial integration, human settlements and local government** through sustainable management of biodiversity assets and ecological infrastructure. SANBI, as the national entity for the Adaptation Fund and the Green Climate Fund, guides the implementation of innovative nature-based solutions and adaptation responses to enhance the resilience of communities vulnerable to the impacts of climate change. SANBI is playing a lead role nationally and globally in Natural Capital Accounting which provides a framework for measuring and tracking the contribution of healthy ecosystems to social and economic goals. SANBI's mainstreaming programmes show how investing in ecological infrastructure ensure benefits to human wellbeing and improved economic prosperity; and that through incorporating spatial biodiversity priorities into other sectors plans and policies it allow for more streamlined decision-making.
- Contributing to **education, skills and health** through the national botanical and zoological gardens which serve as windows and embassies for biodiversity and culture. They play a key role in providing opportunities for learning and enjoying the countries biodiversity richness as well as providing open spaces for recreation.
- Aiming to be a **capable, ethical and developmental organisation** through securing adequate human resources to deliver its mandate and ensuring a transformed workforce. It is compliant with all applicable legislative requirements and supports and fosters a culture of zero tolerance to fraud and/or corruption in all its activities. SANBI also has focused interventions, for example, in terms of water governance which aims to secure Strategic Water Source Areas to ensure water security.

- Playing a leadership role in influencing the global environmental agenda and supporting African countries in terms of biodiversity information mobilisation and management, and biodiversity assessments and planning in order to support sustainable development initiatives and contribute to **a better Africa and world**.

The table below provides details on some of SANBI's contribution to government priorities.

Government priority 1: Economic transformation and job creation
SANBI's contribution
<ul style="list-style-type: none"> • SANBI provides technical and scientific support and services to DEFF on the wildlife economy; bioprospecting; wildlife under protection, as well as wildlife health; the impact of habitat fragmentation and degradation; and molecular tools to reduce the illegal trade in wildlife. • SANBI leads the development and implementation of the National Biodiversity Human Capital Development Strategy. Several programmes have been established e.g. Internships, Fellowships and Groen Sebenza all aimed at positioning young people for possible economic opportunities provided by the green economy. • SANBI's national botanical and zoological gardens provide opportunities for conservation, research, recreation, education and awareness to surrounding communities and tourists. • SANBI's Gardens Expansion Strategy: 2019 to 2030 guides the development of the gardens and identification of new gardens e.g. in the North West Province.
Government priority 2: Education, skills and health
SANBI's contribution
<ul style="list-style-type: none"> • SANBI has dedicated environmental centres at all of its botanical gardens and runs curriculum-based environmental education programmes • SANBI host Work-integrated Learning (WIL) horticulture and nature conservation students as well as young professionals through the Youth in Environmental Service (YES) programme. • SANBI hosts the 'Kids in Gardens' programme to attract children and learners to the national botanical gardens, and similar programmes are

implemented for learners at the National Zoological Garden.

Government priority 4: Spatial integration, human settlements and local government

SANBI's contribution

- SANBI supports the development and implementation of Adaptation Fund and Green Climate Fund projects. The emerging District Delivery Model is a central focus of the Green Climate Fund project proposal development processes, as well as for the development of SANBI's mainstreaming tools to support land use planning and decision making.
- SANBI partners with DEFF to coordinate and implement the National Strategy for Ecosystem-based Adaptation. As part of this strategy, priorities for Ecosystem-based Adaptation are being identified to delivering climate resilience benefits in vulnerable communities.
- SANBI is co-leading with Statistics South Africa a two-year project on Natural Capital Accounting & Valuation of Ecosystem Services, in which South Africa is one of five participating countries along with Brazil, China, India and Mexico. South Africa's experience in Natural Capital Accounting is informing the development of a global standard for ecosystem accounting.
- SANBI provides technical support and relevant biodiversity information to DEFF, as requested, to support the development of strategies and policies e.g. for the National Protected Area Expansion Strategy, on Marine Protected Area design and selection taking into account the production sectors and Marine Spatial Planning; and through the National Biodiversity Assessment and biological invasions and GMO assessments.
- SANBI provides technical and advisory support to DEFF on The Biodiversity Finance Initiative (BIOFIN).
- SANBI, in partnership with the Sustainable Finance Coalition, supports the implementation of biodiversity stewardship tax incentives.
- SANBI curates and provides foundational datasets to document South Africa's biodiversity e.g. e-Flora and e-Fauna, Red Lists (plants, animals and ecosystems) etc.; and leads the development of the NBA which assesses the state of South Africa's biodiversity.
- SANBI co-ordinates the Scientific Authority for South Africa and develops Non Detriment Findings for CITES and TOPS.
- SANBI provides technical information and advice on species under protection in protected areas and priority species and ecosystems identified for Protected Areas expansion; TOPs lists and list of threatened Ecosystems; Biodiversity Management Plans for Species and Ecosystems; National Sensitive Species List; and Risk Assessments for Biological Invasions

- SANBI develops mainstreaming tools for environmental management and land use planning e.g. support to DEFF on the development of minimum requirements for the development of SDFs; and the development of biodiversity protocols for DEFF's EIA Screening Tool in order to streamline the EIA process.
- SANBI supports the integration of biodiversity and ecological infrastructure considerations into land use planning through its programmes of work on ecological infrastructure, Ecosystem-based Adaptation and the Biodiversity and Land Use project.
- SANBI conducts research that contributes to a better understanding of species and ecosystems and appropriate management interventions as well as research to understand the impact of key drivers of biodiversity loss, such as land-use and climate change.
- SANBI provides technical support to provinces on the development of spatial biodiversity plans and convenes the biodiversity planning community of practice to assist in the identification of Critical Biodiversity Areas and Ecological Support Areas.
- SANBI conducts spatial analysis and provides biodiversity inputs for a number of Strategic Environmental Assessments at the request of DEFF.
- SANBI convenes, on behalf of DEFF and DWS, working groups to resolve legal and technical issues on the protection of Strategic Water Source Areas (SWSAs). SANBI is piloting restrictions that stem from NEMA 24 (2A) in three SWSAs.

Government priority 6: A capable, ethical and developmental state

SANBI contributions

- SANBI contributes to a transformed and capable workforce by complying with Employment Equity targets, and allocating budget to staff development. It also complies with governance requirements and implements mitigation actions when required.
- SANBI has focused interventions, for example, in terms of water governance which aims to support securing SWSAs to ensure water security in the country.

Government priority 7: A better Africa and world

SANBI's contribution

- SANBI conducts research to monitor and predict the impacts of climate change on birds and other animals and develop new physiological processes to conserve threatened species through the NZG/UP Research Chair in conservation physiology.
- In its efforts to mobilise climate finance through the direct access modality, SANBI is contributing to and informing international efforts to unlock this resourcing mechanism for developing countries.
- Through these engagements SANBI is developing south-south learning networks to better coordinate regional assessments and attract investment into ecosystem services, ecological infrastructure and Other Effective Conservation Measures (OECMs).
- In collaboration with departments, agencies and NGOs in 7 African countries as well as the UNEP-WCMC and the CBD Secretariat, SANBI is working to support the mobilisation of biodiversity data; and co-develop tools to inform national environmental and development policies with the aim of jointly working towards a more ecologically sustainable growth path as a continent.

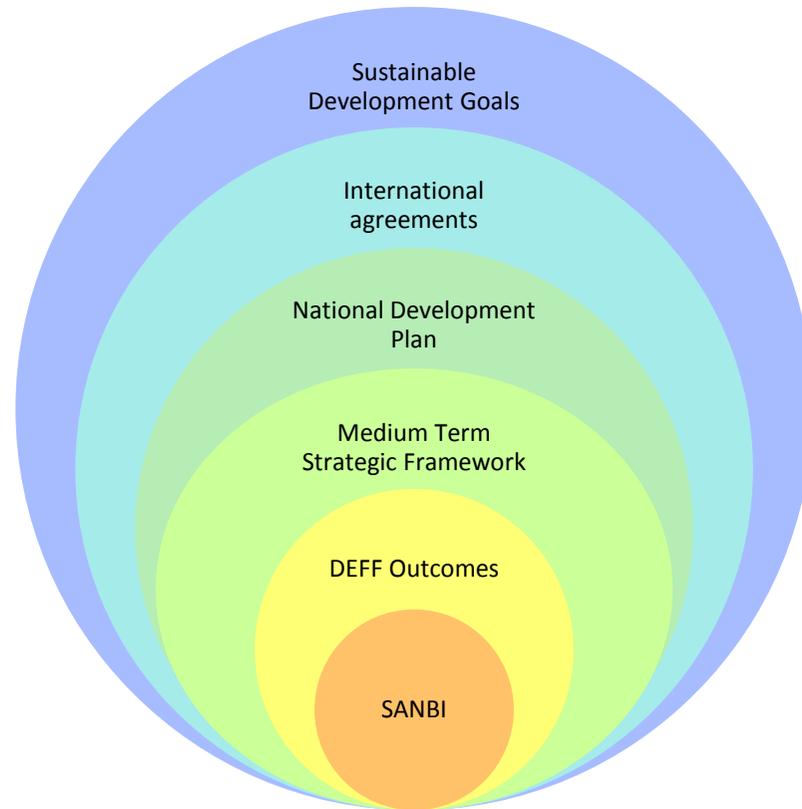
SANBI aligns its work with the NDP 2030, which aims to eliminate poverty and reduce inequality, through making a direct link between biodiversity and development. SANBI is guided by the MTSF cycle and contributes directly to indicators related to the *increased protection level of species* through providing and curating foundational information on South Africa's biodiversity, for example, eFlora and eFauna; assessing the state of biodiversity and leading the development of the National Biodiversity Assessment; coordinating the Scientific Authority and developing Non-Detriment findings on behalf of the Scientific Authority for CITES and TOPs; providing information on species under protection and spatial priorities for the protection of species; providing technical and scientific advice and support to DEFF on the development of legislative tools, for example, biodiversity Management Plans for Species and Ecosystems; and developing eradication plans and risk profiles for biological invasions.

SANBI also contributes indirectly to a number of other indicators through its programmes of work, for example, by establishing new botanical gardens to contribute to the land under conservation; leading the development and implementation of the National Biodiversity Human Capital Development Strategy, having dedicated environmental centres and curriculum-based environmental education programmes; developing decision-support tools and providing technical support and science-based advice for land under rehabilitation and restoration and for environmental decision-making and development planning; establishing cooperative research networks and communities of practice to

generate and share knowledge, for example on the biodiversity economy, biodiversity planning and ecological infrastructure for water security; and developing projects for implementation that mainstream nature-based solutions to climate change into development planning.

SANBI advises and informs DEFF with respect to the biodiversity elements of environment policy, based on best available science, and acts as DEFF's agent as stipulated in its mandate. SANBI aligns its research and knowledge generation to priority actions identified in the NBSAP and NBF. The Institute is a primary source of information and expertise, providing support to DEFF in this regard. SANBI's role with regards to the next planning cycle is to facilitate stronger collaboration with strategic partners and to ensure that the green economy contributes actively to creating the much needed jobs in the country. SANBI will contribute to improving the surge of high youth unemployment in South Africa through its various programmes of work. Mainstreaming biodiversity within the Water, Energy and Food nexus (WEF) will be a priority as energy, water and food security contribute to the country's development goals.

SANBI plays a role in providing expert and technical advice in support of several multilateral environmental agreements, international science bodies and international science initiatives that South Africa is party to or participates in. SANBI also co-operates with a number of international organisations and processes to share lessons learnt and ensure that its science and policy support are relevant globally. Some of these international obligations include the Convention on Biological Diversity (CBD); The United Nations Convention on Combating Desertification (UNCCD); the Convention on International Trade in Endangered Species (CITES); the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES); the United Nations Framework Convention on Climate Change (UNFCCC); the Sustainable Development Goals (SDGs); and Agenda 2063. The SDGs are a set of 17 goals adopted by the countries party to the United Nations that aim to end poverty, protect the planet, and ensure prosperity for all as part of a new global sustainable development agenda. The figure below reflects how SANBI's programmes contribute to national priorities and South Africa's international obligations.



SANBI's contribution to national priorities and international obligations

4. Relevant Court Rulings

4.1 Case Law that has the potential to impact on SANBI's Operations or service delivery

The South African National Biodiversity Institute (SANBI) is not charged with taking decisions that would constitute administrative action in terms of South African legislation. One implication of this is that SANBI's decisions are typically not subjected to judicial review and therefore there is relatively little case law that has direct implications for SANBI's operations.

Nevertheless, several judgements relating to the implementation of NEMBA have implications for SANBI's operations and service delivery. The one area where this is valid relates to SANBI's role in support of the Scientific Authority. Although the Scientific Authority is a separate organ of State, SANBI provides logistical and administrative support and serves as the technical support unit for the Scientific Authority. In this role, SANBI provides the institutional capacity to enable the Scientific Authority to do its work, including convening working groups, commissioning research, gathering and synthesizing evidence, and facilitating public consultation. As such, case law referring to decisions and actions of the Scientific Authority has implications for SANBI's operations and for service delivery where SANBI undertakes work on behalf of the Scientific Authority.

There have been three court judgements referring to the operations of the Scientific Authority. These are: SA Predator Breeders Association v the Minister of Environmental Affairs & Tourism¹; Kruger v Minister of Water and Environmental Affairs²; and National Council of the Society for the Prevention of Cruelty to Animals v Minister of Environmental Affairs³.

In addition, SANBI is affected by a judgement relating to the implementation of regulations for the control of alien and invasive species (Minister of Water and Environmental Affairs v Kloof Conservancy⁴). In this case the Court ordered the Minister to publish relevant regulations and lists and ordered all Organs of State to comply with section 76 of NEMBA.

¹ Case No. 72/10, Supreme Court of Appeal, November 2010

² Case No. 57221/12, High Court of the Republic of South Africa, Gauteng Division, Pretoria, decided on 28 November 2015

³ Case No. 86515/2017, High Court of the Republic of South Africa, Gauteng Division, Pretoria, decided on 6 August 2019

There are several implications of these judgements for SANBI's operations and its support for service delivery.

1. The Scientific Authority needs to consider the social and economic implications of their findings and recommendations. This substantially increases the scope of evidence required to inform decision making and SANBI will need to ensure that it has appropriate capacity to undertake this area of work.
2. The Court ruled that the Scientific Authority must consult industries that are affected by their decisions. This will need to be facilitated by SANBI and SANBI will need to commit staff and funding resources to ensure that this happens.
3. Similarly, the Court ruled that the public must be consulted for various decisions when public consultation is required. SANBI will need to facilitate this consultation process.
4. SANBI's procedures for determining possible quotas, in order to inform recommendations from the Scientific Authority, will need to be amended so that ecologically based quotas can be applied in the context of animal welfare considerations.
5. SANBI needs to provide robust and defensible evidence to support listing of alien and invasive species within prescribed timeframes.
6. SANBI must comply with regulations relating to control plans for invasive species on land under its control.

⁴ Case No. 106/2015. Supreme Court of Appeal, 27 November 2015

Part B: Our Strategic Focus

5. Vision

Biodiversity richness for all South Africans.

6. Mission

To champion the exploration, conservation, sustainable use, appreciation and enjoyment of South Africa's exceptionally rich biodiversity for all people.

7. Values

SANBI is guided by the following organisational values, which spell out: 'uGreat':

Ubuntu — Harnessing, caring, sharing and being in harmony with all of creation.

Growth — Nurturing and empowering teams and individuals to grow and reach their true potential.

Respect and tolerance — Creating open, honest relationships built on trust, mutual respect, dignity and fairness AND valuing and accepting individuals and diversity.

Excellence — Providing service excellence through passion and professionalism.

Accountability — Taking pride and responsibility in our work and caring for our environment and communities.

Togetherness — Through collaboration we change the world.

8. Situational Analysis

8.1 External Environment Analysis

South Africa is one of the most biodiverse countries in the world. It is counted among the 17 'megadiverse' countries that host the majority of the world's species and has large numbers of species found nowhere else. The variable landscapes, seascapes and extensive coastline provide habitats for a wide variety of plants and animals. The country's abundant ecological infrastructure including wetlands, mountain catchments and rivers provide services to people and underpin socio-economic development. South Africa includes three of the world's 36 global biodiversity hotspots. The Cape Floristic Region's extraordinary plant diversity has resulted in it being declared a World Heritage Site. The Succulent Karoo is the only arid biodiversity hotspot and has vast numbers of unusual unique succulent plants. The Maputaland-Pondoland-Albany hotspot on the eastern coast combines the diversity of six terrestrial biomes and six marine ecoregions. Such a wealth of biodiversity is a national asset that provides many benefits to human wellbeing and economic prosperity. Nature contributes to people in a wide variety of ways, from the cultural and spiritual connection with the natural world, to the health that comes from a clean and safe environment, the food that is grown from nature, water and climate protection that nature provides, as well as innovation and employment that arises from economies based on natural resources.

SANBI is a knowledge organisation and operates at the interface between research, policy and implementation, linking biodiversity science with government and with society. Its function is to ensure that the best available scientific evidence is used to inform policy and decision-making. SANBI plays a leadership role in generating, co-ordinating and interpreting the knowledge and evidence required to develop policies and decisions in support of better management and conservation of South Africa's biodiversity assets and ecological infrastructure. SANBI also connects biodiversity science with society by encouraging public involvement in science. Through citizen science and biodiversity education projects that are facilitated through the botanical and zoological gardens, SANBI brings biodiversity understanding to the broader public. To deliver on its mandate, SANBI has adopted a 'network of partners' institutional model, which consists of partner organisations, institutions and bodies with whom SANBI collaborates. The partnerships are focused on outputs, involving direction and leadership from SANBI, and

formalised by way of agreements, such as Memoranda of Understanding (MoUs). The network of partners includes broader knowledge networks and communities of practice, which SANBI leads and/or in which SANBI plays a highly influential role, and which contribute directly to the delivery of SANBI's mandate. The network of partners does not include knowledge networks where SANBI merely participates or advises.

The purpose of the network of partners is to allow SANBI to achieve its strategic goals and objectives, not through undertaking all the necessary functions in-house, but rather through developing a set of structured relationships with a range of strategic partners in the public and NGO sectors. In addition, the network of partners allows SANBI to harness and engage with the extensive range of biodiversity expertise in South Africa, as well as to draw on organisations who may not currently see themselves as directly involved in the biodiversity sector, but who have relevant knowledge, skills and experience to contribute to achieving biodiversity goals. The ultimate aim is to encourage greater efficiency in the use of scarce fiscal resources, to improve sharing of information and knowledge, and to harness South Africa's biodiversity capacity towards the goals of the Biodiversity Act, the NBSAP and the NBF.

As well as the network of partners, formalised through specific agreements, SANBI engages widely with a broad range of stakeholders. Stakeholder engagement is an integral part of developing SANBI's understanding and impact within the biodiversity and scientific arena. SANBI engages its stakeholders through regular communication and through involvement in forums, meetings and workshops on key biodiversity issues. The following are key stakeholders:

- i. Employees
- ii. Customers
- iii. Suppliers
- iv. Funders
- v. Government departments
- vi. Municipalities
- vii. Partners
- viii. Tertiary institutions
- ix. Civil society
- x. Media

SANBI collaborates with government departments, i.e. Department of Higher Education and Training; Department of Tourism; Department of Basic Education, Department of Agriculture, Land Reform and Rural Development; Department of Water and Sanitation; Department of Science and Technology; Department of Co-operative Governance and Traditional Affairs; Department of Health; Department of International Relations and Co-operation; public entities, for example the South African National Parks, South African Weather Services, South African Tourism, Council for Scientific and Industrial Research, Agricultural Research Council; and provincial and local government on a wide range of activities.

Co-operation with DEFF, SANParks, South African Weather Service, South African Tourism, and provincial departments is facilitated through the Working Groups, MINTECH and MINMEC and other such structures established by DEFF. Co-ordination with Science Councils is facilitated through Committee of Heads of Organisations of Research and Technology. Many other formal and informal links between SANBI, government departments, the private sector and NGOs and CBOs have been established.

8.2. Internal Environment Analysis

The South African National Biodiversity Institute (SANBI) leads and coordinates research, and monitors and reports on the state of biodiversity, Genetically Modified Organisms (GMOs) and alien invasive species in South Africa. The Institute provides knowledge and information, gives planning and policy advice and pilots best-practice management models in partnership with stakeholders. SANBI engages in ecosystem restoration and rehabilitation, leads the human capital development strategy of the sector and manages the National Botanical and Zoological Gardens as 'windows' to South Africa's biodiversity, for enjoyment and education.

SANBI currently manages 10 National Botanical Gardens (NBGs) spread across seven provinces in South Africa as well as the Thohoyandou Botanical Garden in Limpopo and the National Zoological Garden situated at Pretoria, with an associated campus in Mokopane. National Botanical and Zoological Gardens by their nature serve multiple roles, including conservation, scientific research, education, and public

awareness, and they provide national nature-based tourism facilities. The gardens are expected to generate their own income in an attempt to cover operational expenses as far as possible.

As a public-good organisation, SANBI also provides free access to biodiversity data, information and knowledge resources to inform policy and decision-making in a range of sectors. Making this data and information widely accessible supports transparency and inclusiveness of this decision-making and ensures that the best available science is used and easily accessible.

Financial sustainability and good corporate governance are key to ensuring that SANBI's mandate is effectively and efficiently executed. SANBI's core funding comes from its Medium Term Expenditure Framework (MTEF) grant from the national Department of Environment, Forestry & Fisheries (DEFF). The general trend over the past few years has been a real decline in MTEF funding and the medium-term outlook is for slow economic growth and continuing cuts to Government grants and expenditure, as Government faces challenges with substantial and growing debt, low economic growth, high unemployment, and embattled state-owned enterprises (SOEs). The implication is that for SANBI to be financially sustainable it will need to use its core grant more effectively, but it will also need to source funding from elsewhere for many of its activities. There is also pressure from government on SANBI to expand and develop new botanical gardens, as reflected in the recently-adopted National Botanical Garden Expansion Strategy (2019 to 2030). In addition, that the National Zoological Garden, which was transferred to SANBI on 1 April 2018, urgently requires significant capital investment to bring it up to a standard that would be commensurate with its status as the National Zoological Garden.

Whilst SANBI strives to increase its own income as much as possible, a large portion of the Institute is almost solely reliant on the MTEF and other donor grants to fulfil their functions. The main cost drivers for the organisation include personnel and personnel-related costs, information technology, security and cash collection fees, electricity, building repair and maintenance, and vehicle-related costs. SANBI continuously taps into new and alternative funding sources to enable the organisation to deliver on its mandate.

SANBI reports to the Minister of Environmental Affairs, Forestry and Fisheries through its Board who are responsible and accountable for all

SANBI activities. The Board provides leadership and is the Accounting Authority of SANBI. The Chief Executive Officer is a member of the Board and is responsible to the Board for executive management matters at SANBI. To put into effect its programmes of work, SANBI is structured into several Divisions and Directorates which all work closely with a wide range of relevant stakeholders.

The Divisions and Directorates which are focused on corporate, estate and financial management are grouped into the Corporate Services Branch, while those focused on scientific research and its application are grouped into a second Branch, the Biodiversity Science and Policy Advice Branch. This Branch conducts biodiversity data collection, information management, research, assessment, monitoring and policy advice.



Part C: Measuring Our Performance

9. Institutional Performance Information

a. Measuring the Impact

Impact statement	SANBI will have a positive impact on the conservation and sustainable use of South Africa's rich and unique biodiversity by managing botanical and zoological gardens, managing conservation collections, facilitating access to biodiversity data, generating information and knowledge to inform action, policy and decision making, and building human capacity.
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b. Measuring Outcomes

Outcome	Outcome Indicator	Baseline	Five year target
Outcome 1: The network of National Botanical and Zoological Gardens are managed and maintained for conservation, research, recreation, education and awareness	Facilities in National Botanical and Zoological Gardens are established and maintained to ensure they are fit for purpose and attractive to visitors.	44 maintenance/development projects and 2 SANBI capital infrastructure projects completed in 2018/19 NBGs: 16% annual increase in visitor numbers (1,413,974) from 2017/18 baseline	225 maintenance/development projects and 10 SANBI capital infrastructure projects completed 25% cumulative increase in visitor numbers across NBGs and NZG combined from 2019/20 baseline

Outcome	Outcome Indicator	Baseline	Five year target
		NZG: 412,000 general visitors to the NZG from 2017/18 baseline	
	New NBGs in Eastern Cape and Limpopo established and contributing towards conservation, research, recreation, education and awareness	<p>Basic Assessment Report (BAR) prepared for planned infrastructural developments in the Kwelera National Botanical Garden</p> <p>Site Development Plan developed for the Thohoyandou Botanical Garden</p> <p>Cultural heritage survey completed for the Thohoyandou Botanical Garden</p>	Landscape design implemented for the cultivated portions of the Kwelera National Botanical Garden and Thohoyandou Botanical Garden
	Programmes to promote biodiversity education and awareness implemented in NBGs and NZG	55,341 beneficiaries participated in 'Kids in Gardens' Programme in NBGs	300,000 beneficiaries participating in the 'Kids in Gardens' Programme in NBGs
		138,642 learners reached through NZG visits	720,000 learners visiting the NZG and/or participating in science engagement opportunities
		New Indicator	An External Review will be conducted which will focus on the quality, relevance and

Outcome	Outcome Indicator	Baseline	Five year target
			impact of the NZG in raising awareness and educating the public on biodiversity and conservation.
Outcome 1: The network of National Botanical and Zoological Gardens are managed and maintained for conservation, research, recreation, education and awareness	Number of fauna conservation programmes in the NZG.	NZG: 5 faunal conservation programmes which NZG is involved in partnership with identified key stakeholder.	NZG: 5 faunal conservation programmes which NZG is involved in partnership with identified key stakeholder on an annual basis.
	Number of studbooks published under regional and international associations of zoos and aquaria	NZG: 5 studbooks published	NZG: 30 studbooks published (5 international studbooks and 25 Local stud books published) 5 regional studbooks published)
Outcome 2: The state of biodiversity is assessed, relevant knowledge and evidence is generated, and this informs implementation and the provision of policy support and advice	Number of records for foundational information on species and ecosystems	4,422 South African plant and 1,040 animal species; 56 000 biodiversity collection records; 58 000 biodiversity records; zero checklist releases, zero botanical artwork and slides, and zero biobank materials	e-Flora updated with 60 families and 150 genera; animal species pages compiled for e-fauna; 280 000 biodiversity records added to database; 297 biodiversity records published; 30 000 botanical artwork and collections slides digitized; 10 versions releases of biodiversity checklists; and 5000 wildlife biomaterials added to biobank
	Number of state of biodiversity	NBA 2018; Status report on	4 state of biodiversity reports for

Outcome	Outcome Indicator	Baseline	Five year target
	reports and portfolios of evidence that inform policy and decision making	Invasives 2017; zero syntheses of evidence; 120 publications per year.	the NBA, invasives and GMOs; 4 syntheses of evidence for emerging invasives, biodiversity economy; adaptation to climate change, and land degradation; 600 papers in DHET accredited publications
Outcome 2: The state of biodiversity is assessed, relevant knowledge and evidence is generated, and this informs implementation and the provision of policy support and advice	Number of mechanisms for providing nature based solutions and science based policy support and advice	2 decision support tools per year; 100% of relevant written requests from DEFF and other organs of state responded to within timeframe stipulated; 6 coordination or learning events per year; 2 Adaptation Fund projects with a value of USD 10 million approved for implementation	10 decision support tools developed; 100% of relevant written requests from DEFF and other organs of state responded to within timeframe stipulated; 30 coordination or learning events convened; and 3 GCF projects with a value of at least USD 30 million approved for implementation
Outcome 3: A transformed and suitably skilled workforce and active citizenry is developed to strengthen the biodiversity sector	HCD interventions contribute towards strengthening and transforming the biodiversity sector	100 black biodiversity professionals participated	249 WIL student placements 374 interns and Groen Sebenza pioneer placements 67 postgraduate degrees completed 91 postgraduate student bursaries awarded
	Number of teacher and teacher educators trained in developing	New indicator	160 teachers

Outcome	Outcome Indicator	Baseline	Five year target
	curriculum aligned climate change education project		
	Number of seminars/symposium conducted to address climate change education challenges	New indicator	10
	Number of research reports produced tracking professional development process of teachers in understanding climate change	New indicator	1
Outcome 3: A transformed and suitably skilled workforce and active citizenry is developed to strengthen the biodiversity sector	Number of HEIs participating in Biodiversity Careers Programme	15 universities	26 HEIs participating in Biodiversity Careers Programme
	Number of citizen science platforms in which the public is actively participating	3 active platforms, CREW, iNaturalist, SABAP2	3 active platforms with increased participation by the youth and rural communities
Outcome 4: Financial sustainability is improved and effective corporate services provided to achieve the mandate of SANBI	ICT Systems contribute toward an improvement in business operations	90% of ICT uptime for internal and external customers	95% of ICT uptime for internal and external customers
	Strategic risks mitigated to a tolerable level as per SANBI Risk Management Framework and Policy	100% of risk mitigation plans implemented	100% of risk mitigation plans implemented
	Corporate Governance strengthened through compliance with key governance requirements	100% compliance as per the SANBI compliance schedule.	100% compliance as per the SANBI compliance schedule

Outcome	Outcome Indicator	Baseline	Five year target
	Marketing and brand communication platforms and initiatives are utilised to increase brand awareness and thereby contributing to a growth in own revenue.	102 marketing activities	20 marketing platforms
Outcome 4: Financial sustainability is improved and effective corporate services provided to achieve the mandate of SANBI	Marketing and commercialisation lead to an increase in own income	41% increase on own income in plant sales, rental, admissions and other income	10% (R16 mil) increase in income generated
	Financially compliant administration of the institution	Qualified external audit opinion	Unqualified external audit findings opinion (Clean Audit)
	Transformed and empowered service providers through increased procurement to BBBEE enterprises	New indicator	90% procurement to BBBEE
		New indicator	65% procurement to BBBEE with over 50% Black ownership.
Outcome 4: Financial sustainability is improved and effective corporate services provided to achieve the mandate of SANBI	Staff developed through allocated financial resources	1% of payroll spent on staff development.	1% of payroll spent on staff development
	Increase representativity of staff profile that is more reflective of South African demographics	45% of staff on permanent and contract employment are female.	49% of staff in full time employment are female.
		50% of staff in top and senior management are female	50% of staff in top and senior management are female.
		87% of staff on permanent and contract employment are black	90% of staff in full time employment are black.
		3% People with disabilities in permanent and contract employment	2% People with disabilities in full-time employment

10. Explanation of Planned Performance over the Five Year Planning Period

Outcome 1: The network of National Botanical and Zoological Gardens are managed and maintained for conservation, research, recreation, education and awareness

SANBI's National Botanical Gardens and National Zoological Gardens provide important centres of social cohesion for surrounding communities. Planned performance over the medium term period is aimed at improving the management, maintenance and relevance of all the National Botanical Gardens and National Zoological Garden (including the centre in Mokopane, Limpopo) to surrounding communities and tourists for the purposes of conservation, research, recreation, education and awareness. 'Kids in Gardens' is an important programme managed in SANBI's NBGs to attract and support children and learners to the National Botanical Gardens, with similar programmes for learners implemented in the NZG. In addition, the implementation of the National Botanical Garden Expansion Strategy (2019 to 2030) will be facilitated through the infrastructural developments planned for the Kwelera NBG in the Eastern Cape and the Thohoyandou BG in the Limpopo Province.

SANBI will conduct an external review which will focus on the quality, relevance and impact of the National Zoological Garden in raising awareness and educating the public on biodiversity and conservation.

Performance over the Five Year Planning Period will be enabled through adequate resources being available and support from government departments and strategic partners.

Outcome 2: The state of biodiversity is assessed, relevant knowledge and evidence is generated, and this informs implementation and the provision of policy support and advice

SANBI's work on collating foundational science on ecosystems and species, together with state of biodiversity reporting and providing portfolios of evidence, and the provision of science-based advice, informs policy and decision making on biodiversity conservation and climate change adaptation; and in turn contributes to unlocking benefits to people for a just transition and sustainable economy. This work is especially relevant to Chapter 5 of the NDP which emphasises the need to conserve and rehabilitate ecosystems and biodiversity assets to maintain their integrity and the vital services they provide, in order to contribute to the country's development goals.

Outcome 2 contributes, directly, to the MTSF indicator on *increasing species protection level*. Outcome 2 also supports a number of other MTSF indicators through providing technical support and science-based advice, establishing cooperative research networks and communities of practice to generate and share knowledge, developing decision-support tools to support mainstreaming of biodiversity assets and ecological infrastructure, and developing Adaptation Fund and Green Climate Fund projects for implementation.

The three outcome indicators show how SANBI works to provide a foundation of basic scientific information through surveying, classifying and mapping South Africa's ecosystems and species. Building on this foundation of basic biodiversity data, assessments and portfolios of evidence are used to answer questions about the status of our species and ecosystems, and the best ways to manage and conserve them.

This biodiversity science is then translated into policy and action through developing tools; providing information and science-based advice; and implementing nature-based solutions to assist decision-makers at national, provincial and municipal level to consider biodiversity properly in their planning and actions. This in turn helps to harness the value of biodiversity for society.

In order to achieve the five-year targets, the following enablers are required: sufficient technically skilled capacity and associated resources; adequate funding from the MTEF allocation to convene committees, forums and networks as well as ring-fenced funding for work on, for example biological invasions and the wildlife trade; participation from stakeholders and partners and the provision of relevant data from partner institutions; and support from the Green Climate Fund in terms of resources and timeous approvals.

Outcome 2 underpins the successful implementation of SANBI's mandate, providing scientific evidence to support policy and decision making related to the conservation and management of biodiversity and the impacts of and adaptation to climate change.

Outcome 3: A transformed and suitably skilled workforce and active citizenry is developed to strengthen the biodiversity sector

The programme is cross cutting in that it is implemented through all SANBI's programmes, with the intention to ensure that a skilled workforce exists to facilitate transformation. It seeks to develop rare skills, especially amongst the youth and to up-skill those already in the biodiversity sector so as to address not only historical legacies of a bottom heavy sector but also chronic capacity shortages of leadership especially by black South Africans.

Citizen science fulfills two objectives by enabling the public to participate in the generation of scientific knowledge. First it empowers citizens and provides an opportunity for training and capacity building; and second, it provides data for research and monitoring at a scale and cost that cannot be achieved through more conventional approaches such as employing scientists or students.

With youth unemployment rates rising significantly and the need to develop science capacity, a number of internships and studentships are made available annually. Planned performance over the medium term is aimed at providing work experience to a number of unemployed graduates and to enable access to higher education, thereby contributing towards postgraduate development of young science professionals.

Outcome 4: Financial sustainability is improved and effective corporate services provided to achieve the mandate of SANBI

In order to enable SANBI to achieve its mandate and supporting other Divisions and Directorate to achieve their strategic objectives, the Human Resources ensures that suitably qualified and skilled staff are attracted, developed and retained. A Human Resources Management Strategy is being developed in order to achieve and support this objective.

11. Key Risks

Outcome	Key Risk	Risk Mitigation
<p>The network of National Botanical and Zoological Gardens are managed and maintained for conservation, recreation, education and awareness</p>	<p>Loss of diversity in living collections due to impact of climate change, invasive alien species or over utilisation of National Botanical and Zoological Gardens for commercial uses/events, resulting in landscape degradation and impact on animal health.</p>	<p>Monitor living collections; source support from strategic partners (local municipalities, FPAs, FABI, Working for Water, Working for Wetlands, Working on Fire; international botanical garden associations) for maintenance and conservation of living collections; dedicated and functional Garden Records Database to be developed for use by gardens to monitor living collections</p>
	<p>Inability to meet utilisation numbers / visitor numbers in National Botanical and Zoological Gardens due to failure to attract more visitors resulting in reduced footfall into the facilities and loss of income.</p>	<p>Adopt the existing SANBI Business Model in the NZG Regular engagement with law enforcement agencies to promote security Identify opportunities for infrastructure funding Leverage of partnerships to enhance the animal collection Implementation of the tourism monitors programme in the NBGs and NZG</p>
	<p>Under-utilisation of existing Garden based infrastructure which weakens SANBI's potential to generate income resulting in poor visitor experience/ attraction.</p>	<p>Consider need for additional internal commercialisation capacity in SANBI to manage tenants and source additional own income through commercial operations; improved SCM systems and processes to enable implementation of planned building maintenance projects;</p>
<p>The state of biodiversity is assessed, relevant knowledge and evidence is generated, and this informs implementation and the provision of</p>	<p>Inability to attract and retain critical research skills, for the generation of knowledge.</p>	<p>Identify funding opportunities within DEFF and DST. Develop an internal HCD Strategy to enhance the talent and skills pipeline within the Institute. Enhance the talent and skills pipeline within the Institute.</p>

Outcome	Key Risk	Risk Mitigation
<p>policy support and advice</p>		<p>Establish partnership with higher education institutions. Implement the Biodiversity Human Capital Development Strategy.</p>
	<p>Unprotected intellectual property which may lead to loss of opportunities for long term income generation</p>	<p>Assessment of existing Intellectual Property.</p>
	<p>Hazards to reference collections (herbaria, museums, biobanks) in house and with partners resulting in loss of biodiversity assets and related information</p>	<p>Installation of climate control systems where these do not exist; improved physical security measures; controlled access to collections; improved signage on handling of collections; develop and implement maintenance plan for collections.</p>
<p>A transformed and suitably skilled workforce and active citizenry is developed to strengthen the biodiversity sector</p>	<p>Lack of coherent approach to career development in the sector.</p>	<p>Revise a HCD strategy for the sector and ensure adequate Funding for implementation</p>
<p>Financial sustainability is improved and effective corporate services provided to achieve the mandate of SANBI</p>	<p>Revenue growth lagging behind costs growth and limited initiatives to grow own revenue resulting in inability to meet all operational requirements.</p>	<p>Quarterly monitoring of the implementation of the financial sustainability plan; monthly review of budgeted own income against actuals</p>
	<p>Ineffective Disaster Recovery Plan (DRP) resulting in inability to implement Business Continuity Plan for critical business systems.</p>	<p>Ensure alignment between DRP and BCP and continually implement backup processes</p>
	<p>Cyber Security</p>	<p>Review and implement the internal patching and lifecycle policy, and perform a penetration tests.</p>
	<p>Ineffective information and Knowledge Management System resulting in data insecurity and challenges in accessing information</p>	<p>Procure IT infrastructure, Expand scope of terms of reference for IT support service provider, Make use of Cloud services for back-up and storage</p>

Outcome	Key Risk	Risk Mitigation
	Inability to attract and retain critical skills and to deliver on SANBI's Strategic Plan and mandate.	Implement the Research and Horticultural career ladders Develop Career pathing for all relevant staff. Develop an internal HCD Strategy to enhance the talent and skills pipeline within the Institute. Enhance the talent and skills pipeline within the Institute Establish partnership with higher education institutions. Implement the Biodiversity Human Capital Development Strategy.
	Low staff morale and negative employment relations as a result of Implementation of Department of Environmental, Fisheries and Forestry (DEFF) Pay Scale	Engage the DEFF Minister on the implementation of the DEFF pay scales
	Loss of assets due to ineffective asset management system resulting in poor return on investment. Loss of animals in the NZG through natural ageing processes.	Implementation of the ARC approved asset management turnaround plan. Animal Acquisition Plan developed and implemented by the NZG.
	Ineffective and inefficient procurement management system and inadequate human capacity resulting in failure to execute operational requirements	Improve communication between SCM officials and gardens administrative personnel, improve response time for RfQs and Tenders, more frequent BSC and BAC meetings.
	Non-compliance with procurement legislation requirements	Monthly review of compliance of all procurement activities; revised effective and efficient procurement (iQual) system; SCM work-study to determine required human capacity; compliance review of demand management and procurement plans; risk management review of procurement activities.
	Inadequate information control which may lead to ineffective Integrated Marketing, Corporate	Monitor implementation of Integrated Marketing and Corporate Communication Strategy.

Outcome	Key Risk	Risk Mitigation
	Communication and Stakeholder Relations Strategy	<p>Monitor implementation of Communication Policy.</p> <p>Distribute of CEO staff letter, Staff Newsletter, Intranet and Website Update.</p> <p>Enforce and monitor application of the logo.</p> <p>Implement and monitor use of Social Media Policy.</p>
	Poor engagement with stakeholder due to lack of a communication protocol between SANBI and stakeholders resulting in stakeholder interest and expectations not being met	<p>Implement the Stakeholder Engagement Framework, Implement SANBI Communication Strategy; Engage and conclude contracts, MoUs, agreements etc. with identified key stakeholders, Develop and implement key Stakeholder Engagement Matrix Monitor implementation of Integrated Marketing and Corporate Communication Strategy and monitor implementation of Stakeholder Engagement Plan.</p>

12. Public entities

Not applicable

Part D: Technical Indicator Description (TID)

Programme 1: National Botanical Gardens and National Zoological Gardens

Outcome: The network of National Botanical and Zoological Gardens are managed and maintained for conservation, research, recreation, education and awareness

Indicator Title	<ul style="list-style-type: none"> Facilities in National Botanical and Zoological Gardens are established and maintained to ensure they are fit for purpose and attractive to visitors
Definition	<ul style="list-style-type: none"> Infrastructure projects
Source of data	<ul style="list-style-type: none"> List of maintenance and capital infrastructure projects and completion status, photographs. The list of projects identified at the beginning of each financial year may be amended for any specific NBG Curator during the course of the financial year depending on the circumstances or challenges that specific gardens may have be facing with specific projects (funding, resources, regulatory approvals, authorisations, surveys, assessments etc.).
Method of Calculation / Assessment	<ul style="list-style-type: none"> 225 maintenance/ development projects and 10 SANBI capital infrastructure projects completed. 45 maintenance/development projects will be allocated as 5 individual projects in each of the following national botanical gardens per annum: Free State, Hantam, Harold Porter, Karoo Desert, Kirstenbosch, KwaZulu-Natal, Lowveld, Pretoria and Walter Sisulu NBG. For projects managed by professional teams, a project will be considered as 100% achieved when practical completion has been achieved and a practical completion certificate has been issued and signed by the responsible principal agent (usually architect or engineer).
Assumptions	<ul style="list-style-type: none"> Required resources and skills are available to ensure development, maintenance and management of garden's associated infrastructure
Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> Not applicable
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> Improved conservation estates and ecological infrastructure

Reporting Cycle	<ul style="list-style-type: none"> Annual report on progress towards the five year target
Desired performance	<ul style="list-style-type: none"> 225 maintenance/ development projects and 10 SANBI capital infrastructure projects completed across SANBI's combined network of NBGs (see method of calculation/assessment above for specific gardens that will be included)
Indicator Responsibility	<ul style="list-style-type: none"> Chief Director: Conservation Gardens & Tourism

Programme 1: National Botanical Gardens and National Zoological Gardens (Continued)

Outcome: The network of National Botanical and Zoological Gardens are managed and maintained for conservation, research, recreation, education and awareness

Indicator Title	<ul style="list-style-type: none"> New NBGs in Eastern Cape and Limpopo established and contributing towards conservation, research, recreation, education and awareness
Definition	<ul style="list-style-type: none"> Management and development of the Thohoyandou Botanical Garden in the Limpopo Province and Kwelera NBG in East London, Eastern Cape.
Source of data	<ul style="list-style-type: none"> NEMBA, National Biodiversity Framework, National Botanical Garden Expansion Strategy: 2019 to 2030, NBSAP, Outcome 10 deliverables. Memorandum of Agreement (MoA) between SANBI and LEDET signed in March 2016, Services Agreement between SANBI and LEDET signed in June 2017, Addenda to the MoA and Services Agreement.
Method of Calculation / Assessment	<ul style="list-style-type: none"> Qualitative
Assumptions	<ul style="list-style-type: none"> Support from DEFF, LEDET, Thulamela Local Municipality and the Vhembe District Municipality
Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> Not applicable
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> Improved conservation estates and ecological infrastructure
Reporting Cycle	<ul style="list-style-type: none"> Annual report on progress towards the five year target
Desired performance	<ul style="list-style-type: none"> Landscape design implemented for the cultivated portions of the Kwelera National Botanical Garden and Thohoyandou Botanical Garden

Indicator Responsibility	<ul style="list-style-type: none"> Chief Director: Conservation Gardens & Tourism
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Programme 1: National Botanical Gardens and National Zoological Gardens (Continued)

Outcome: The network of National Botanical and Zoological Gardens are managed and maintained for conservation, research, recreation, education and awareness

Indicator Title	<ul style="list-style-type: none"> Programmes to promote biodiversity education and awareness implemented in NBGs and NZG
Definition	<ul style="list-style-type: none"> Beneficiaries of 'Kids in Gardens' Programme in the NBGs and learning/science engagement programmes at the NZG
Source of data	<ul style="list-style-type: none"> Statistical Tables, Cash Sale Invoices, Ticketing sales report, Class Lists and signed Confirmation Forms
Method of Calculation / Assessment	<ul style="list-style-type: none"> Quantitative
Assumptions	<ul style="list-style-type: none"> Human resources exist. Functional national botanical gardens and NZG (Pretoria and Mokopane) are able to accommodate the needs of school based programmes. Adequate capacity and resources within the directorate exist to cater for the number of users/beneficiaries Customers are able to meet cost and compliance obligations to attend the programme Social and political stability
Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> NBGs offering 'Kids in Gardens' Programme are: Harold Potter, Kirstenbosch, Karoo, KwaZulu-Natal, Free State, Walter Sisulu, Pretoria and Lowveld.
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> Transformed and empowered communities
Reporting Cycle	<ul style="list-style-type: none"> Annual report on progress towards the five year target
Desired performance	<ul style="list-style-type: none"> 300,000 beneficiaries participating in 'Kids in Gardens' programme in NBGs and 720,000 learners visiting the NZG and/or participating in science engagement opportunities
Indicator Responsibility	<ul style="list-style-type: none"> Director: Biodiversity Education and Empowerment

Indicator Title	<ul style="list-style-type: none"> An External Review conducted which will focus on the quality, relevance and impact of the NZG in raising awareness and educating the public on biodiversity and conservation.
Definition	An External Review report on the quality, relevance and impact of the NZG in raising awareness and educating the public on biodiversity and conservation.
Source of data	Reports; interviews and literature review
Method of Calculation / Assessment	<ul style="list-style-type: none"> Quantitative and qualitative
Assumptions	<ul style="list-style-type: none"> Human and financial resources exist to conduct the review.
Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> Not applicable
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> Not applicable
Reporting Cycle	<ul style="list-style-type: none"> Annual report on progress towards the five year target
Desired performance	<ul style="list-style-type: none"> A quality report with recommendations which will inform strategic direction for NZG
Indicator Responsibility	<ul style="list-style-type: none"> Chief Director NZG

Programme 1: National Botanical Gardens and National Zoological Gardens (Continued)

Outcome: The network of National Botanical and Zoological Gardens are managed and maintained for conservation, research, recreation, education and awareness

Indicator Title	<ul style="list-style-type: none"> Programmes to promote biodiversity education and awareness implemented in NBGs and NZG
Definition	<ul style="list-style-type: none"> Undertake faunal conservation projects that could benefit both in situ and ex situ.
Source of data	<ul style="list-style-type: none"> Own data and data from partners who are involved in the particular project.
Method of Calculation / Assessment	<ul style="list-style-type: none"> A Number of projects/MOU/Agreements signed with partners.
Assumptions	<ul style="list-style-type: none"> Required resources and skills are available to ensure the implementation of identified

	conservation projects. Available research data also essential.
Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> Based on identified species reintroduction areas, the beneficiaries may vary.
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> Improved information sharing on ex situ animal population.
Reporting Cycle	<ul style="list-style-type: none"> Quarterly updated on each project.
Desired performance	<ul style="list-style-type: none"> 5 Faunal conservation projects per annum formalised.
Indicator Responsibility	<ul style="list-style-type: none"> Chief Director: National Zoological Gardens

Programme 1: National Botanical Gardens and National Zoological Gardens (Continued)

Outcome: The network of National Botanical and Zoological Gardens are managed and maintained for conservation, research, recreation, education and awareness

Indicator Title	<ul style="list-style-type: none"> Number of conservation programmes in the NZG.
Definition	<ul style="list-style-type: none"> Undertake faunal conservation projects that could benefit both in situ and ex situ. NZG intends to work with key stakeholders such as Animal Working groups, Animal and wildlife management groups, Scientific and Research groups, Animal Health and Diseases management Groups.
Source of data	<ul style="list-style-type: none"> Own data and data from partners who are involved in the particular project.
Method of Calculation / Assessment	<ul style="list-style-type: none"> A Number of projects/MOU/Agreements signed with partners or identified stakeholders. Stakeholder/partnership identification will be done according to specific needs for species protection etc.
Assumptions	<ul style="list-style-type: none"> Required resources and skills are available to ensure the implementation of identified conservation projects. Available research data also essential.
Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> Based on identified species reintroduction areas, the beneficiaries may vary.
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> Improved information sharing on ex situ animal population.

Reporting Cycle	<ul style="list-style-type: none"> Quarterly updated on each project.
Desired performance	<ul style="list-style-type: none"> At least 5 formalised arrangements in the form of Agreements/MOU etc, where NZG/SANBI is a partner in Faunal Conservation programmes.
Indicator Responsibility	<ul style="list-style-type: none"> Executive Director: National Zoological Garden

Programme 1: National Botanical Gardens and National Zoological Gardens (Continued)

Outcome: The network of National Botanical and Zoological Gardens are managed and maintained for conservation, research, recreation, education and awareness

Indicator Title	<ul style="list-style-type: none"> Number of conservation programmes in the NZG.
Definition	<ul style="list-style-type: none"> Publication of <i>ex situ</i> animal population, inventory, demographic and genetics analysis
Source of data	<ul style="list-style-type: none"> Local and global <i>ex situ</i> facilities for specific animals which the stud books are to be published
Method of Calculation / Assessment	<ul style="list-style-type: none"> A Number of PAAZA publication numbers issued. Once documents ready for publication, a review is done and a publication number is issued.
Assumptions	<ul style="list-style-type: none"> Required resources and skills are available to ensure the development, data analysis and review process is conducted prior to publication.
Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> Not applicable
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> Improved information sharing on <i>ex situ</i> animal population.
Reporting Cycle	<ul style="list-style-type: none"> Annual publications.
Desired performance	<ul style="list-style-type: none"> 5 published Studbooks per annum.
Indicator Responsibility	<ul style="list-style-type: none"> Director: Animal Conservations and Collection

Programme 2: Biodiversity Science and Policy Advice (Continued)

Outcome: The state of biodiversity is assessed, relevant knowledge and evidence is generated, and this informs implementation and the provision of policy support and advice

Indicator Title	<ul style="list-style-type: none"> Number of records for foundational information on ecosystems and species
Definition	<ul style="list-style-type: none"> Species (plants and animals) descriptions and major ecosystems classifications to support and facilitate science-based decision-making and biodiversity assessments and planning.
Source of data	<ul style="list-style-type: none"> Online databases of species descriptions, and reports of expert reference committees and the National Checklists Committees provide the required data for ecosystems classifications and species checklists.
Method of Calculation / Assessment	<ul style="list-style-type: none"> Quantitative and cumulative. The National Checklists Committees and Expert Committees verify and approve the release of checklists and ecosystems classifications. A version release refers to a classification for a particular realm (e.g. terrestrial) that has been reviewed by a reference committee and the classification version is agreed so that it can be used to map the spatial extent of these ecosystems.
Means of verification	<ul style="list-style-type: none"> Databases of species (plants and animals) descriptions. Formal releases for 2 ecosystems and 2 species checklists versions
Assumptions	<ul style="list-style-type: none"> Information on species descriptions and specimen's occurrence records is generated by SANBI staff and partner institutions, and is quality controlled and loaded unto databases. The version releases assumes that where new information is obtained, a revised ecosystem classification and species checklists will be approved and released by the relevant committee.
Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> Target for women: N/A

	<ul style="list-style-type: none"> • Target for youth: N/A • Target for people with disabilities: N/A
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> • Reflect on contribution to spatial transformation priorities: N/A • Reflect on the spatial impact area: N/A
Calculation Type	<ul style="list-style-type: none"> • Numerical
Reporting Cycle	<ul style="list-style-type: none"> • Annual
Desired performance	<ul style="list-style-type: none"> • e-Flora and e-fauna are updated with taxonomic information annually. 1 version of ecosystem classification and 2 versions of species checklists
Indicator Responsibility	<ul style="list-style-type: none"> • Chief Director: Biosystematics and Collections

Programme 2: Biodiversity Science and Policy Advice

Outcome: The state of biodiversity is assessed, relevant knowledge and evidence is generated, and this informs implementation and the provision of policy support and advice

Indicator Title	<ul style="list-style-type: none"> • Number of state of biodiversity reports and portfolios of evidence that inform policy and decision making
Definition	<ul style="list-style-type: none"> • State of biodiversity reports are official reports that SANBI is mandated to provide in terms of NEMBA, specifically for (i) the overall assessment of biodiversity; (ii) the status of biological invasions; and (iii) the environmental impact of GMOs. Portfolios of evidence are based on priorities in the SANBI research strategy and refer to (i) syntheses of critical evidence and (ii) the scientific publications underpinning advice for decision making
Source of data	<ul style="list-style-type: none"> • Published state of biodiversity reports and papers published in journals accredited by the Dept of Higher Education and Training (DHET)
Method of Calculation / Assessment	<ul style="list-style-type: none"> • SOB reports are counted based on formal submissions to the Minister. Publications are calculated based on publications released by approved journals
Means of verification	<ul style="list-style-type: none"> • All publications are loaded on OPUS where the data can be verified
Assumptions	<ul style="list-style-type: none"> •

Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> • Target for women: N/A • Target for youth: N/A • Target for people with disabilities: N/A
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> • Reflect on contribution to spatial transformation priorities: N/A • Reflect on the spatial impact area: N/A
Calculation Type	<ul style="list-style-type: none"> • Numerical
Reporting Cycle	<ul style="list-style-type: none"> • Annual
Desired performance	<ul style="list-style-type: none"> • 4 state of biodiversity reports; 4 syntheses of evidence; 600 publications in DHET accredited journals
Indicator Responsibility	<ul style="list-style-type: none"> • Chief Director: Biodiversity Assessment and Knowledge Generation

Programme 2: Biodiversity Science and Policy Advice (Continued)

Outcome: The state of biodiversity is assessed, relevant knowledge and evidence is generated, and this informs implementation and the provision of policy support and advice

Indicator Title	<ul style="list-style-type: none"> • Number of mechanisms for providing nature based solutions and science based policy support and advice
Definition	<ul style="list-style-type: none"> • Mechanisms include: <ul style="list-style-type: none"> • Decision support tools that support the mainstreaming of nature-based solutions; • Green Climate Fund (GCF) projects approved for implementation that support the mainstreaming of nature-based solutions; and • Hosting of forums and learning exchanges that provide opportunities for sharing lessons and building collaboration; and • Providing science-based advice through national and international policy requests.
Source of data	<ul style="list-style-type: none"> • Project staff, partners and SANBI's managed network; information from reports, scientific literature and through relevant research; correspondence with GCF Secretariat; and register of policy requests received.
Method of Calculation / Assessment	<ul style="list-style-type: none"> • Numerical, based on number of tools developed, GCF projects approved for

	implementation, forums and learning exchanges held, and policy requests responded to.
Means of verification	<ul style="list-style-type: none"> • Reports and links to online tools, correspondence with the GCF Secretariat, forum and learning exchange documentation, and policy comments.
Assumptions	<ul style="list-style-type: none"> • SANBI has the capacity and resources to undertake the development of tools; development of GCF projects for implementation; host forums and learning exchanges; and provide policy advice as requested.
Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> • Target for women: To be determined • Target for youth: To be determined • Target for people with disabilities: To be determined
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> • Reflect on contribution to spatial transformation priorities: To be determined • Reflect on the spatial impact area: to be determined
Calculation Type	<ul style="list-style-type: none"> • Cumulative
Reporting Cycle	<ul style="list-style-type: none"> • Annually
Desired performance	<ul style="list-style-type: none"> • 10 decision support tools developed; 3 GCF projects with a value of at least USD 30 million approved for implementation; 30 coordination or learning events convened; and 100% of relevant written requests from DEFF and other organs of state responded to within timeframe stipulated.
Indicator Responsibility	<ul style="list-style-type: none"> • Chief Director: Biodiversity Information and Policy Advice and Chief Director: Adaptation Policy and Resourcing

Programme 3: Human Capital Development Transformation

Outcome: A transformed and suitably skilled workforce and active citizenry is developed to strengthen the biodiversity sector

Indicator Title	<ul style="list-style-type: none"> HCD interventions contribute towards strengthening and transforming the biodiversity sector
Definition	<ul style="list-style-type: none"> WIL students, interns and GS pioneers and postgraduate students trained
Source of data	<ul style="list-style-type: none"> WIL and intern contracts, bursary award letters and agreements, thesis
Method of Calculation / Assessment	<ul style="list-style-type: none"> Quantitative and Qualitative
Means of verification	<ul style="list-style-type: none"> Excel spreadsheet, contracts, agreements, thesis
Assumptions	<ul style="list-style-type: none"> Adequate supply of applications Financial resources Mentoring capacity
Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> Target for WIL students Target for interns and Groen Sebenza pioneers Target for degrees completed Target for student bursaries awarded
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> Not applicable
Calculation Type	<ul style="list-style-type: none"> Cumulative
Reporting Cycle	<ul style="list-style-type: none"> Quarterly
Desired performance	<ul style="list-style-type: none"> 75 WIL student placements; 113 interns and GS pioneer placements; 18 postgraduate degrees completed; 22 postgraduate student bursaries awarded
Indicator Responsibility	<ul style="list-style-type: none"> Chief Director: Human Resources

Programme 3: Human Capital Development Transformation (Continued)

Outcome: A transformed and suitably skilled workforce and active citizenry is developed to strengthen the biodiversity sector

Indicator Title	<ul style="list-style-type: none"> Number of teacher educators trained in developing curriculum aligned climate change education project
Definition	<ul style="list-style-type: none"> Teacher and teacher educators are trained in biodiversity foundational knowledge
Source of data	<ul style="list-style-type: none"> Invitations to or from teachers and teacher educators, their formations, training providers, funders, etc
Method of Calculation / Assessment	<ul style="list-style-type: none"> Number of teachers and teacher educators trained
Means of verification	<ul style="list-style-type: none"> Attendance registers, training programme
Assumptions	<ul style="list-style-type: none"> Stability in education sector. Commitment to booked dates by teachers, departments
Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> Not Applicable
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> Not Applicable
Calculation Type	<ul style="list-style-type: none"> Number of teachers and teacher educators
Reporting Cycle	<ul style="list-style-type: none"> Quarterly
Desired performance	<ul style="list-style-type: none"> 40 teachers
Indicator Responsibility	<ul style="list-style-type: none"> Director: Biodiversity Education & Public Engagement

Programme 3: Human Capital Development Transformation

Outcome: A transformed and suitably skilled workforce and active citizenry is developed to strengthen the biodiversity sector

Indicator Title	<ul style="list-style-type: none"> Number of seminars/symposium conducted to address climate change education challenges
Definition	<ul style="list-style-type: none"> Number of national symposium/provincial seminars conducted to address climate change education challenges
Source of data	<ul style="list-style-type: none"> Invitations to seminar and symposium attendants

Method of Calculation / Assessment	<ul style="list-style-type: none"> Number of symposium and seminar held
Means of verification	<ul style="list-style-type: none"> Attendance registers, seminar/symposium programme
Assumptions	<ul style="list-style-type: none"> Stability in education sector. Interest in the symposium and seminar and ability to attend by stakeholders
Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> Not Applicable
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> Not Applicable
Calculation Type	<ul style="list-style-type: none"> Number of symposium and seminar
Reporting Cycle	<ul style="list-style-type: none"> Quarterly
Desired performance	<ul style="list-style-type: none"> 1 symposium and 1 seminar
Indicator Responsibility	<ul style="list-style-type: none"> Director: Biodiversity Education & Public Engagement

Programme 3: Human Capital Development Transformation (Continued)

Outcome: A transformed and suitably skilled workforce and active citizenry is developed to strengthen the biodiversity sector

Indicator Title	<ul style="list-style-type: none"> Number of research reports produced tracking professional development process of teachers in understanding climate change
Definition	<ul style="list-style-type: none"> Research conducted to track teacher development process in climate change
Source of data	<ul style="list-style-type: none"> Research proposal, draft research report, final research report
Method of Calculation / Assessment	<ul style="list-style-type: none"> Number of research reports produced to track teacher professional development in climate change
Means of verification	<ul style="list-style-type: none"> Research proposal, draft research report, final research report
Assumptions	<ul style="list-style-type: none"> Stability in education sector. Appointed research student's ability to conduct the research, willingness and cooperation of the research subjects for data to be generated and collected within the stipulated timeframes
Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> Not Applicable
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> Not Applicable
Calculation Type	<ul style="list-style-type: none"> Number of research reports
Reporting Cycle	<ul style="list-style-type: none"> Quarterly
Desired performance	<ul style="list-style-type: none"> One research report

Indicator Responsibility	<ul style="list-style-type: none"> • Director: Biodiversity Education & Public Engagement
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Programme 3: Human Capital Development Transformation (Continued)

Outcome: A transformed and suitably skilled workforce and active citizenry is developed to strengthen the biodiversity sector

Indicator Title	<ul style="list-style-type: none"> • Number of HEIs participating in Biodiversity Careers Programme
Definition	<ul style="list-style-type: none"> • Universities and universities of technologies participating in Biodiversity Careers Programme
Source of data	<ul style="list-style-type: none"> • Invitations to or from higher education institutions,
Method of Calculation / Assessment	<ul style="list-style-type: none"> • Number of HEIs
Means of verification	<ul style="list-style-type: none"> • Invitations to or from higher education institutions, confirmations of bookings to or from HEIs
Assumptions	<ul style="list-style-type: none"> • Invitations done in writing. Stability in HEI sector. In an event of cancellations HEIs do so in advance for SANBI to replace the cancelled HEI
Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> • Not Applicable
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> • Not Applicable
Calculation Type	<ul style="list-style-type: none"> • Cumulative
Reporting Cycle	<ul style="list-style-type: none"> • Quarterly
Desired performance	<ul style="list-style-type: none"> • 20 HEIs participating in Biodiversity Careers Programme
Indicator Responsibility	<ul style="list-style-type: none"> • Director: Biodiversity Education & Public Engagement

Programme 3: Human Capital Development Transformation

Outcome: A transformed and suitably skilled workforce and active citizenry is developed to strengthen the biodiversity sector

Indicator Title	<ul style="list-style-type: none"> • Number of citizen science platforms in which the public are actively participating
Definition	<ul style="list-style-type: none"> • The indicator reflects on the citizen platforms that facilitate public participation in citizen science. These platforms may be either managed through a coordinated programme of field trips and data collection or provide an online platform to capture

	entries.
Source of data	<ul style="list-style-type: none"> The data is sourced from the project plan or the online data records for the platform
Method of Calculation / Assessment	<ul style="list-style-type: none"> The indicator counts platforms where citizen scientists are actively participating either in field trips or through online submissions
Means of verification	<ul style="list-style-type: none"> Annual reports, data collection records
Assumptions	<ul style="list-style-type: none"> none
Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> The intention is to increase participation by the youth in citizen science programmes
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> The intention is to increase activities in rural areas across the country
Calculation Type	<ul style="list-style-type: none"> Number
Reporting Cycle	<ul style="list-style-type: none"> Annual
Desired performance	<ul style="list-style-type: none"> 3 active platforms
Indicator Responsibility	<ul style="list-style-type: none"> Chief Director: Biodiversity Assessment and Knowledge Generation

Programme 4: Administration (Information Technology)

Output: Financial sustainability is improved and effective corporate services provided to achieve the mandate of SANBI

Indicator Title	<ul style="list-style-type: none"> ICT Systems contribute toward an improvement in business operations
Definition	<ul style="list-style-type: none"> Systems Performance
Source of data	<ul style="list-style-type: none"> Systems availability report
Method of Calculation / Assessment	<ul style="list-style-type: none"> System metrics
Means of verification	<ul style="list-style-type: none"> Systems availability report
Assumptions	<ul style="list-style-type: none"> Available Funding
Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> N/A
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> N/A
Calculation Type	<ul style="list-style-type: none"> Non-cumulative on a quarterly basis and cumulative on a quarterly basis
Reporting Cycle	<ul style="list-style-type: none"> Quarterly
Desired performance	<ul style="list-style-type: none"> 90% systems available

Indicator Responsibility	<ul style="list-style-type: none"> • Chief Operations Officer • Director: Information Technology
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Programme 4: Administration (Risk Management) (Continued)

Output: Financial sustainability is improved and effective corporate services provided to achieve the mandate of SANBI

Indicator Title	<ul style="list-style-type: none"> • Strategic risks mitigated to a tolerable level as per SANBI Risk Management Framework and Policy
Definition	<ul style="list-style-type: none"> • The indicator refers to strategic risks mitigation plans implemented as planned by the risk owners
Source of data	<ul style="list-style-type: none"> • Quarterly risk reports
Method of Calculation / Assessment	<ul style="list-style-type: none"> • Not applicable
Means of verification	<ul style="list-style-type: none"> • Risk register with progress reports
Assumptions	<ul style="list-style-type: none"> • Accurate information submitted by Risk Owners (Management)
Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> • Not Applicable
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> • Not Applicable
Calculation Type	<ul style="list-style-type: none"> • Not Applicable
Reporting Cycle	<ul style="list-style-type: none"> • Quarterly
Desired performance	<ul style="list-style-type: none"> • Risks mitigated to a tolerable level
Indicator Responsibility	<ul style="list-style-type: none"> • Chief Operations Officer and Director: Governance, Risk, Compliance and Ethics

Programme 4 Administration (Compliance)

Outcome: Financial sustainability is improved and effective corporate services provided to achieve the mandate of SANBI

Indicator Title	<ul style="list-style-type: none"> • Corporate Governance strengthened through compliance with key Governance requirements
Definition	<ul style="list-style-type: none"> • The indicator refers to compilation and submission of reports to DEFF as per SANBI

	Compliance Schedule
Source of data	<ul style="list-style-type: none"> • Compliance Schedule
Method of Calculation / Assessment	<ul style="list-style-type: none"> • Not applicable
Means of verification	<ul style="list-style-type: none"> • Records for submission (Emails)
Assumptions	<ul style="list-style-type: none"> • Inputs received on time and reports submitted as per the requirement
Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> • Not Applicable
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> • Not Applicable
Calculation Type	<ul style="list-style-type: none"> • Not Applicable
Reporting Cycle	<ul style="list-style-type: none"> • Quarterly
Desired performance	<ul style="list-style-type: none"> • Timely submission of reports
Indicator Responsibility	<ul style="list-style-type: none"> • Chief Operations Officer and Director: Governance, Risk, Compliance and Ethics

Programme 4 Administration (Finance) (Continued)

Outcome: Financial sustainability is improved and effective corporate services provided to achieve the mandate of SANBI

Indicator Title	<ul style="list-style-type: none"> • Marketing and commercialisation lead to an increase in own income
Definition	<ul style="list-style-type: none"> • Own income
Source of data	<ul style="list-style-type: none"> • Quarterly: Management accounts • Annually: Annual financial statements
Method of Calculation / Assessment	<ul style="list-style-type: none"> • Non-cumulative on a quarterly basis and cumulatively on an annual basis <p>Quarterly: Numerator: Current year's quarterly interest received, , admission fees and other income less previous year's quarterly interest received admission fees, rent received and other income Denominator: Previous year's quarterly interest received admission fees, rent received and other income</p> <p>Annually: Numerator: Current year exchange revenue less previous year's exchange revenue Denominator: Previous year's exchange revenue</p>
Means of verification	<ul style="list-style-type: none"> • Management accounts and AFS
Assumptions	<ul style="list-style-type: none"> • Monthly data provided by gardens and SANBI Finance Division are accurate and

	reliable; business skills training provided to Curators will result in an increase in visitors and own income.
Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> • Not Applicable
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> • Not Applicable
Calculation Type	<ul style="list-style-type: none"> • Non-cumulative on a quarterly basis and cumulatively on an annual basis
Reporting Cycle	<ul style="list-style-type: none"> • Quarterly and Annual
Desired performance	<ul style="list-style-type: none"> • 2% year-on-year increase on own income generated
Indicator Responsibility	<ul style="list-style-type: none"> • Chief Financial Officer

Programme 4 Administration (Finance) (Continued)

Outcome: Financial sustainability is improved and effective corporate services provided to achieve the mandate of SANBI

Indicator Title	<ul style="list-style-type: none"> • Financially compliant administration of the institution
Definition	<ul style="list-style-type: none"> • AFS
Source of data	<ul style="list-style-type: none"> • Auditor-General's report
Method of Calculation / Assessment	<ul style="list-style-type: none"> • None
Means of verification	<ul style="list-style-type: none"> • Not Applicable
Assumptions	<ul style="list-style-type: none"> • No changes to the statutory requirements. No changes to audit standards and methodology.
Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> • Not Applicable
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> • Not Applicable
Calculation Type	<ul style="list-style-type: none"> • Narrative/qualitative
Reporting Cycle	<ul style="list-style-type: none"> • Annually
Desired performance	<ul style="list-style-type: none"> • Unqualified audit report
Indicator Responsibility	<ul style="list-style-type: none"> • Director: Financial Management and Director: SCM and Assets Management. Chief Financial Officer

Programme 4 Administration (Finance and Supply Chain Management) (Continued)

Outcome: Financial sustainability is improved and effective corporate services provided to achieve the mandate of SANBI

Indicator Title	<ul style="list-style-type: none"> Transformed and empowered service providers through increased procurement to BBBEE enterprises
Definition	<ul style="list-style-type: none"> AFS
Source of data	<ul style="list-style-type: none"> Procurement report
Method of Calculation / Assessment	<ul style="list-style-type: none"> Percentage Numerator: Procurement to BBBEE suppliers with over 50% Black ownership Denominator: Total procurement of SANBI
Means of verification	<ul style="list-style-type: none"> Procurement report
Assumptions	<ul style="list-style-type: none"> No changes to BBBEE legislation.
Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> Not Applicable
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> Not Applicable
Calculation Type	<ul style="list-style-type: none"> Non-cumulative on a quarterly basis and cumulative on a quarterly basis
Reporting Cycle	<ul style="list-style-type: none"> Quarterly and Annually
Desired performance	<ul style="list-style-type: none"> 80% procurement to BBBEE suppliers
Indicator Responsibility	<ul style="list-style-type: none"> Chief Financial Officer Director: SCM and Assets Management

Programme 4 Administration (Human Resources)

Outcome: Financial sustainability is improved and effective corporate services provided to achieve the mandate of SANBI

Indicator Title	<ul style="list-style-type: none"> Percentage of payroll spent on staff development
Definition	<ul style="list-style-type: none"> Financial resources towards staff development
Source of data	<ul style="list-style-type: none"> High-level budget, GL reports
Method of Calculation / Assessment	<ul style="list-style-type: none"> Quantitative

Means of verification	<ul style="list-style-type: none"> • GL reports, payroll budget
Assumptions	<ul style="list-style-type: none"> • Financial resources
Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> • Not applicable
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> • Not applicable
Calculation Type	<ul style="list-style-type: none"> • Cumulative
Reporting Cycle	<ul style="list-style-type: none"> • Quarterly
Desired performance	<ul style="list-style-type: none"> • 1% of payroll spent on staff development
Indicator Responsibility	<ul style="list-style-type: none"> • Chief Director: Human Resources

Programme 4 Administration (Human Resources) (Continued)

Outcome: Financial sustainability is improved and effective corporate services provided to achieve the mandate of SANBI

Indicator Title	<ul style="list-style-type: none"> • Staff profile that is more reflective of South African demographics
Definition	<ul style="list-style-type: none"> • Progress against Employment Equity Plan
Source of data	<ul style="list-style-type: none"> • PERSAL reports
Method of Calculation / Assessment	<ul style="list-style-type: none"> • Quantitative
Means of verification	<ul style="list-style-type: none"> • PERSAL exception reports
Assumptions	<ul style="list-style-type: none"> • EE priorities
Disaggregation of Beneficiaries (where applicable)	<ul style="list-style-type: none"> • Target female staff • Target females in senior managers • Target black staff • Target people with disabilities
Spatial Transformation (where applicable)	<ul style="list-style-type: none"> • Not applicable
Calculation Type	<ul style="list-style-type: none"> • Cumulative
Reporting Cycle	<ul style="list-style-type: none"> • Quarterly
Desired performance	<ul style="list-style-type: none"> • 49% female staff; 50% females in senior management; 90% black staff; 2 % people with disabilities
Indicator Responsibility	<ul style="list-style-type: none"> • Chief Director: Human Resources

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