

**DEPARTMENT OF ENVIRONMENT, FORESTRY AND FISHERIES****NOTICE 706 OF 2020****NATIONAL ENVIRONMENTAL MANAGEMENT: BIODIVERSITY ACT, 2004 (ACT NO. 10 OF 2004)****NATIONAL BOTANICAL GARDEN EXPANSION STRATEGY 2019-2030**

I, Barbara Dallas Creecy, the Minister of Forestry, Fisheries and the Environment, hereby in terms of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004), publish the South African National Botanical Garden Expansion Strategy 2019-2030 (Strategy), in the Schedule hereto, for implementation.

The Strategy provides a strategic approach for the establishment, expansion and maintenance of a network of botanical gardens across South Africa. The strategy is aligned with the National Development Plan, 2030 timeframe.



**BARBARA DALLAS CREECY, MP**  
**MINISTER OF FORESTRY, FISHERIES AND THE ENVIRONMENT**

**NATIONAL ENVIRONMENTAL MANAGEMENT: BIODIVERSITY ACT, 2004 (ACT NO. 10 OF 2004)****NATIONAL BOTANICAL GARDEN EXPANSION STRATEGY 2019-2030**

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## SCHEDULE



# National Botanical Garden Expansion Strategy 2019–2030



**environmental affairs**

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

**SANBI**

Biodiversity for Life

South African National Biodiversity Institute



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## Acronyms and abbreviations

<b>APP</b>	Annual Performance Plan
<b>BGCI</b>	Botanic Gardens Conservation International
<b>BRI</b>	Botanical Research Institute
<b>CBD</b>	Convention on Biological Diversity
<b>CSP</b>	Corporate Strategic Plan
<b>DEA</b>	Department of Environmental Affairs (former government department)
<b>DFFE</b>	Department of Forestry Fisheries and the Environment
<b>DRDLR</b>	Department of Rural Development and Land Reform (former government department)
<b>ECPTA</b>	Eastern Cape Parks and Tourism Agency
<b>EXCO</b>	Executive Committee
<b>GIS</b>	Geographic Information System
<b>ICT</b>	Information and Communication Technology
<b>IDP</b>	Integrated Development Plan
<b>KZN</b>	KwaZulu-Natal
<b>LEDET</b>	Limpopo Department of Economic Development, Environment and Tourism
<b>MoA</b>	Memorandum of Agreement
<b>MoU</b>	Memorandum of Understanding
<b>MSBP</b>	Millennium Seed Bank Partnership
<b>MTEF</b>	Medium Term Expenditure Framework
<b>MTSF</b>	Medium Term Strategic Framework
<b>NBF</b>	National Biodiversity Framework
<b>NBG</b>	National Botanical Garden
<b>NBI</b>	National Botanical Institute
<b>NBSAP</b>	National Biodiversity Strategy and Action Plan
<b>NDP</b>	National Development Plan
<b>NEMBA/NEM:BA</b>	National Environmental Management: Biodiversity Act
<b>NEMPAA/NEM:PAA</b>	National Environmental Management: Protected Areas Act
<b>NGO</b>	Non-Governmental Organisation
<b>SABONET</b>	Southern African Botanical Diversity Network
<b>SADC</b>	Southern African Development Community
<b>SANBI</b>	South African National Biodiversity Institute
<b>SANParks</b>	South African National Parks
<b>WWF-SA</b>	World Wide Fund for Nature South Africa



## 1 Introduction

The South African National Biodiversity Institute (SANBI) has a vital role to play in raising awareness about the importance of biodiversity and its status. South Africa's ten (10) national botanical gardens (NBGs), serving as windows and embassies of biodiversity and culture and heritage, play key roles in the conservation, research, enjoyment and education of the general public and learners through their displays, conservation and environmental education programmes (both within the gardens and in surrounding communities). These gardens serve as refugia for threatened plant species, and serve an important role in climate change adaptation. Horticultural research in national botanical gardens is conducted by SANBI's horticulturists all of whom participate in SANBI's Horticultural Career Ladder. More than two million people make use of SANBI's national botanical gardens each year, offering an opportunity for gardens to provide information to visitors about biodiversity, conservation and sustainable use, as well as to promote the beauty of South Africa's indigenous plants and use of the gardens for spiritual upliftment. The gardens together generate over R60 million income annually through garden-based activities, plant sales, rents and admission fees. This income assists in partially offsetting staff salaries and operational costs in the various national botanical gardens.

Botanical gardens are defined internationally as 'institutions holding documented collections of living plants for the purposes of scientific research, conservation, display and education' (Wyse Jackson 2000). Botanical gardens serve a unique role in conservation (see Annexure 1), and are defined by having the following characteristics:

- adequate labelling of the plants
- an underlying scientific basis for the collections
- communication of information to other gardens, institutions, organisations and the public
- exchange of seeds or other materials with other botanical gardens, arboreta or research stations
- long-term commitment to, and responsibility for, the maintenance of plant collections
- maintenance of research programmes in plant taxonomy in associated herbaria
- monitoring of the plants in the collection
- open to the public
- promoting conservation through extension and environmental education activities
- proper documentation of the collections, including those of wild origin
- undertaking scientific or technical research on plants in the collections.

## 2 Goal and strategic approaches

This document describes a Strategy for the establishment, expansion and maintenance of a network of botanical gardens across South Africa, up till 2030, being aligned with the time frame prescribed for South Africa's National Development Plan.

The goal of this Strategy is to raise awareness, contribute to education about biodiversity, and to support conservation by establishing, maintaining and expanding a representative network of botanical gardens with their associated biodiversity (plants and animals) and ecological interactions, across South Africa.

This goal will be achieved through:

- Establishing at least one national botanical garden in each province of South Africa

- Establishing a botanical/demonstration garden<sup>1</sup> representative of each biome in South Africa
- The use of opportunities to expand existing national botanical gardens, where considered feasible and appropriate
- Entering into agreements with other institutions that manage botanical gardens in South or southern Africa

### 3 Status Quo

SANBI's existing ten national botanical gardens and associated reserves (Edith Stephens Wetland Park (Cape Town) and Tinie Versfeld Wildflower Reserve (Darling), both managed by Kirstenbosch) are currently located mainly in, or close to, large urban centres in seven of nine South African provinces (see Figure 1), and include representative portions of South Africa's biomes as follows:

**Eastern Cape (East London): Kwelera National Botanical Garden**

Biome(s) represented: Forest, Grassland, Albany Thicket

**Free State (Bloemfontein): Free State National Botanical Garden**

Biome(s) represented: Grassland, Nama Karoo

**Gauteng (Pretoria): Pretoria National Botanical Garden**

Biome(s) represented: Grassland, Savanna

**Gauteng (Roodepoort/Mogale City): Walter Sisulu National Botanical Garden**

Biome(s) represented: Savanna

**KwaZulu-Natal (Pietermaritzburg): KwaZulu-Natal National Botanical Garden**

Biome(s) represented: Savanna

**Mpumalanga (Nelspruit): Lowveld National Botanical Garden**

Biome(s) represented: Savanna

**Northern Cape (Nieuwoudtville): Hantam National Botanical Garden**

Biome(s) represented: Succulent Karoo, Fynbos (Renosterveld)

**Western Cape (Betty's Bay): Harold Porter National Botanical Garden**

Biome(s) represented: Fynbos, Forest

**Western Cape (Cape Town): Kirstenbosch National Botanical Garden**

Biome(s) represented: Fynbos, Forest

**Western Cape (Cape Town): Edith Stephens Wetland Park**

Biome(s) represented: Fynbos

**Western Cape (Darling): Tinie Versfeld Wildflower Reserve**

Biome(s) represented: Fynbos

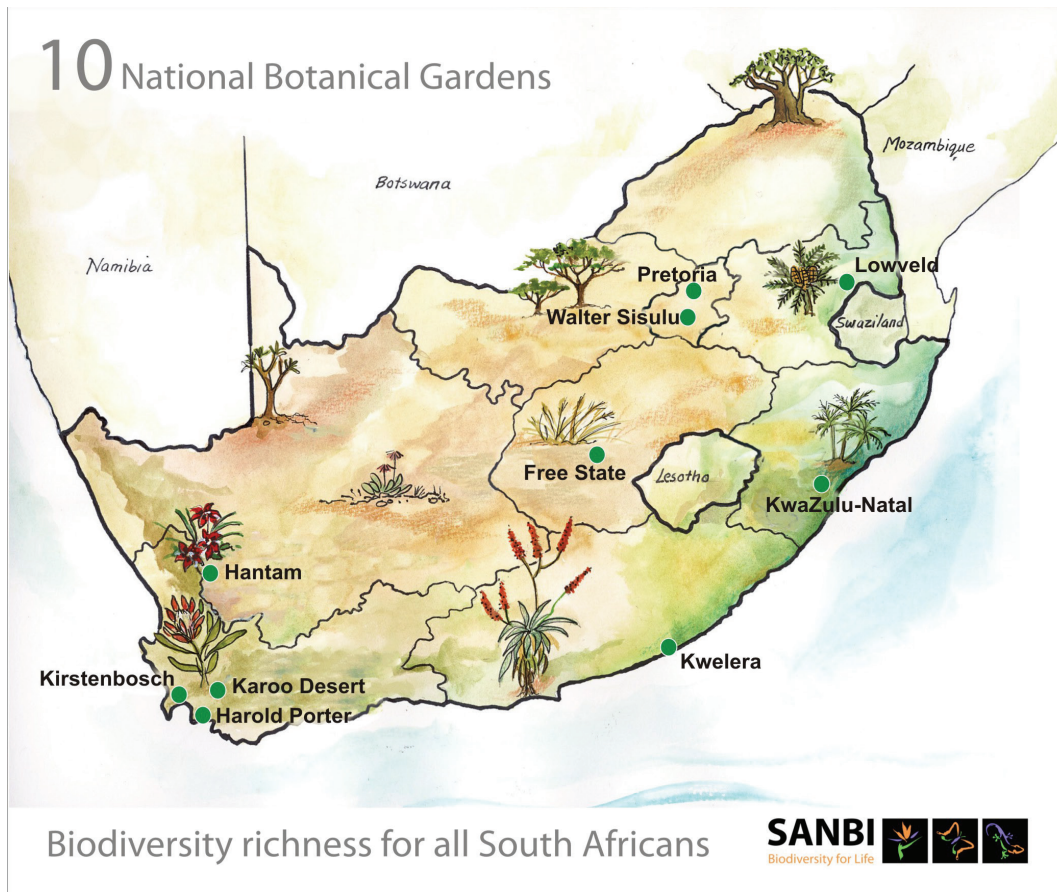
**Western Cape (Worcester): Karoo Desert National Botanical Garden**

Biome(s) represented: Succulent Karoo, Fynbos

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<sup>1</sup> In this Strategy, a **demonstration garden** is defined as an area of land within, or directly adjacent to, an existing protected conservation area where indigenous plants representative of the biome (in which the protected conservation area is located) are established, maintained, protected and showcased through relevant interpretive material.

Gaps in terms of which South African biomes are not included in existing national botanical gardens, and which provinces currently do not have national botanical gardens, are summarised in Table 1. A description of which vegetation types are included in SANBI's existing national botanical gardens is provided in Annexure 2, with an historical overview of the national botanical gardens provided in Annexure 3. Milestones in the establishment and management of SANBI and its national botanical gardens are included in Annexure 4.



**Figure 1.** Geographical location of South Africa's 10 national botanical gardens across seven provinces in 2019.



**Table 1.** Representation of existing proclaimed national botanical gardens (and associated satellite reserves) in South African provinces and biomes, showing gaps (shaded).

Biome	Province								
	Western Cape	Eastern Cape	Northern Cape	Free State	KwaZulu-Natal	Gauteng	Mpumalanga	Limpopo	North West
<b>Fynbos</b>	Kirstenbosch, Harold Porter, Karoo Desert, Edith Stephens Wetland Park, Tinie Versfeld Wildflower Reserve		Hantam						
<b>Forest</b>	Kirstenbosch, Harold Porter	Kwelera							
<b>Albany Thicket</b>		Kwelera							
<b>Grassland</b>		Kwelera		Free State		Pretoria			
<b>Savanna</b>					KwaZulu-Natal	Pretoria, Walter Sisulu	Lowveld		
<b>Nama Karoo</b>				Free State					
<b>Succulent Karoo</b>	Karoo Desert		Hantam						
<b>Indian Ocean Coastal Belt</b>									
<b>Desert</b>									

## 4 Policy Context

SANBI and its national botanical gardens, as windows on biodiversity, make an important contribution to national development through ensuring that it is aligned with government priorities. They contribute to the **National Development Plan 2030 (NDP 2030)**, which aims to eliminate poverty and reduce inequality. It achieves this by making a direct link between biodiversity, capacity building and development. The areas in the National Development Plan 2030 that the gardens specifically support are reflected in Annexure 5.

South Africa's 2nd **National Biodiversity Strategy and Action Plan (NBSAP): 2015 – 2025** (Government of South Africa 2015), sets the 10-year vision to "Conserve, manage and sustainably use biodiversity to ensure equitable benefits to the people of South Africa, now and in the future", with six supporting strategic objectives.

The strategic objective of the NBSAP that this core function addresses directly is Strategic Objective 1: Management of biodiversity assets and their contribution to the economy, rural development, job creation and social wellbeing is enhanced. Outcomes under the NBSAP's strategic objectives relevant to the national botanical gardens include the following:

- The network of protected areas and conservation areas includes a representative sample of ecosystems and species, and is coherent and effectively managed (1.1);
- Species of special concern are sustainably managed (1.2);

SANBI's botanical gardens play a lead role in achieving outcome 1.2 with a specific activity to:

- Ensure sufficient *ex situ* conservation of threatened and useful species to address impacts from climate change, habitat transformation and unsustainable use (1.2.2).

The *ex situ* target listed in the second edition of the NBSAP includes the following to be achieved by 2015:

- 60% of threatened plant species conserved *ex situ*, and
- 1% of species with *ex situ* collections active in restoration programmes.

Both of these targets are listed and stated as such in SANBI's **National Strategy for Plant Conservation**.

South Africa's **National Biodiversity Framework (NBF)** published by DEA in August 2009 stated under Strategic Objective 5 (Protected areas and conservation areas) that SANBI should develop a National Botanical Gardens Expansion Strategy (which will include a revision of the criteria for establishing national botanical gardens) and establish at least one new national botanical garden by 2013. SANBI and DEA are listed in the NBF as joint lead agents in this process.

South Africa's national botanical gardens have, and continue to, contribute to the formulation and implementation of the **Global Strategy for Plant Conservation** (2011-2020; adopted under the Convention of Biological Diversity, or CBD), **International Agenda for Botanic Gardens in Conservation (2nd edition, 2012)**, and South Africa's **National Strategy for Plant Conservation (2016)**.

## 5 Legal Mandate

SANBI is the only institution within South Africa mandated, through the **National Environmental Management: Biodiversity Act No. 10 of 2004 (NEMBA)**, to manage, maintain and develop national botanical gardens. According to Section 11 of NEMBA, SANBI:

- must manage, control and maintain all national botanical gardens;
- must establish facilities for horticulture display, environmental education, visitor amenities and research;
- must establish, maintain, protect and preserve collections of plants in national botanical gardens;
- must collect, generate, process, coordinate and disseminate information about biodiversity and the sustainable use of indigenous biological resources, and establish and maintain databases in this regard;
- may 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;
- may undertake and promote research on indigenous biodiversity and the sustainable use of indigenous biological resources.

Part 6 of NEMBA clearly outlines details regarding the declaration and amendment or withdrawal of national botanical gardens (Annexure 6).

## 6 Key Actions

### 6.1 Investigate the feasibility and location of new gardens

#### 6.1.1 At least one garden in each province

**By 2030 to have established at least one national botanical garden in every South African province**, conserving vegetation types, ecosystems and habitats representative of each province. Provinces where new national botanical gardens still need to be established include the Limpopo Province (Thohoyandou) and the North West Province. SANBI has developed criteria that will be used to review potential sites for the establishment of new national botanical gardens (Annexure 7).

Limiting factors include sourcing the necessary operational funding and ability to locate and secure the most appropriate site for a botanical garden in these provinces.

Various types of botanical gardens have been defined by Botanic Gardens Conservation International (BGCI) (Wyse Jackson & Sutherland 2000, see Annexure 8). Nine of SANBI's current ten national botanical gardens (Free State, Harold Porter, Karoo Desert, Kirstenbosch, KwaZulu-Natal, Kwelera, Lowveld, Pretoria and Walter Sisulu) are classified as '**conservation gardens**' that according to BGCI's definition contain, or have associated areas of, natural vegetation in addition to their cultivated collections. The ten current gardens are represented in seven of South Africa's nine provinces. SANBI's Garden in Nieuwoudtville (formally declared as the Hantam NBG by the DEA Minister on 12 December 2008), Northern Cape, is considered a '**natural or wild garden**' that contains an area of natural or semi-natural vegetation, which is protected and managed. Most natural or wild gardens are established to play conservation and public education roles and include areas where indigenous plants are grown. Garden-based biodiversity, through the ecosystem services they support, makes an important contribution to both climate-change mitigation and adaptation.

New gardens should represent unique vegetation types, and habitats that are typical of/unique to the particular area and province. As far as possible, as little duplication with existing gardens and the habitats/biomes/vegetation types they contain should be effected. When establishing new gardens, the potential for using the gardens as Long Term Ecological Research sites for the region should be investigated and considered.

In establishing new national botanical gardens, SANBI will investigate innovative ways of having joint partnerships, agreements and management arrangements with national and provincial conservation agencies, municipalities, and developing cost-effective stewardship and lease arrangements with private land owners. Attempts will at all times be made to minimize the necessity and requirement to purchase and acquire new private land on behalf of the State. It is imperative that SANBI's National Botanical Gardens Division consult with relevant SANBI research and biodiversity planning staff as well as other divisions within the organisation. The purpose of this interaction would be to identify potential and suitable sites for new gardens, benefit from fine-scale planning processes, determine *in situ* plant conservation and related biodiversity benefits and also to benefit from GIS expertise within other SANBI Divisions.

In establishing new gardens, one needs to be aware of the chance of benefiting from 'strategic opportunism', where potential areas and/or funding may unexpectedly become available. Opportunities should, however, always be thoroughly investigated and critically evaluated *before* making use of the opportunities to establish new national botanical gardens.

Feasibility studies should be a prerequisite before establishing new national botanical gardens. Feasibility studies, incorporating key stakeholder inputs, should be used to explore all aspects of a proposed project, including its purpose, structure and future funding requirements. These studies should inform future garden management plans and be used to determine potential costs and benefits to SANBI through the establishment of the new national botanical garden. Questions to include in new botanical garden feasibility studies are clearly articulated in Wyse Jackson (2003). Feasibility studies could conclude with a case either for or against a national botanical garden and/or the choice of possible locations for its establishment.

Location is an essential element for the establishment of a new Garden. The purpose and function of the new Garden will determine the desired location. The location should be sited to ensure that as much natural biodiversity is conserved within the boundaries of the new Garden, and that the land should ideally form a contiguous area. It is important that the gardens are included and acknowledged by local municipalities in their Integrated Development Plans (IDPs).

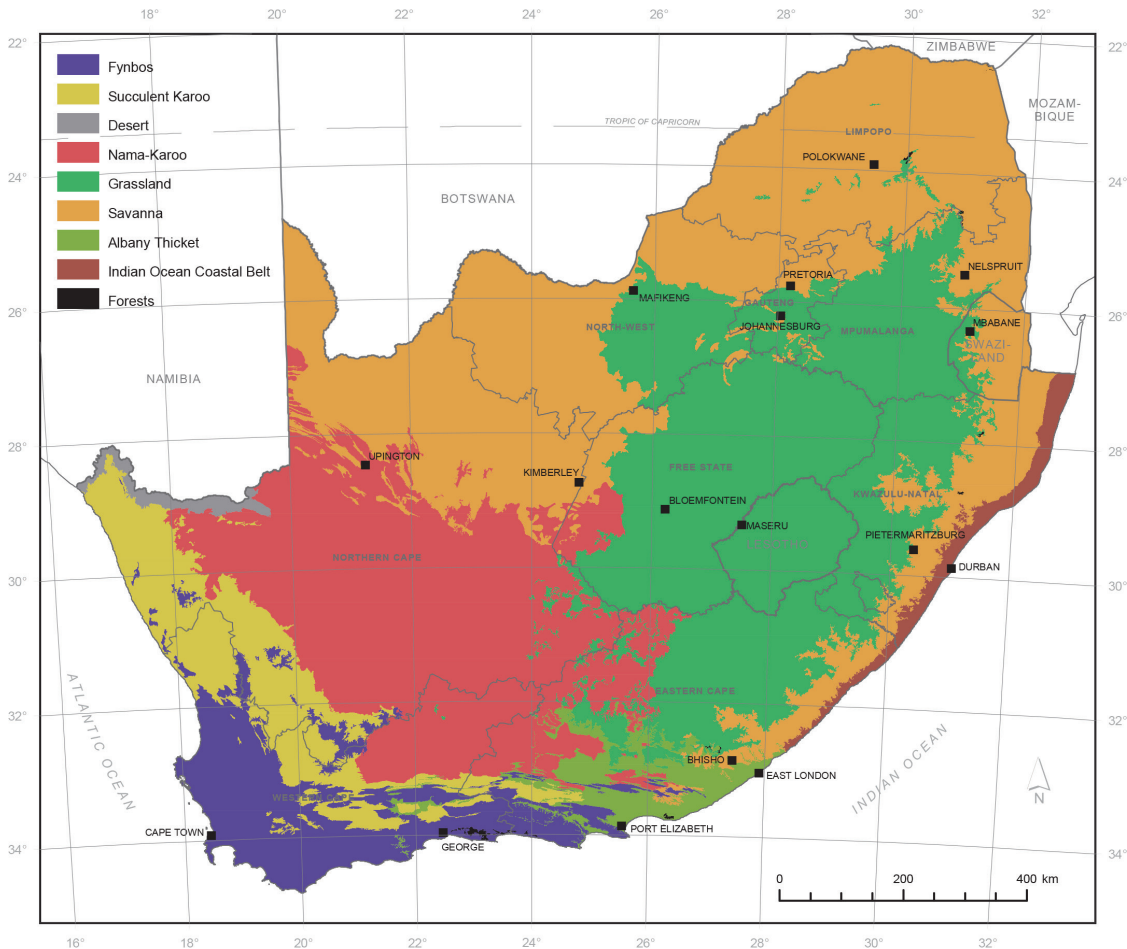
### 6.1.2 Demonstration gardens for specific biomes

South Africa's national botanical gardens, both current and proposed, are representative of seven of South Africa's nine biomes (after Mucina & Rutherford 2006, see Figure 2). These include Grassland, Savanna, Succulent Karoo, Nama Karoo, Forest, Fynbos and Albany Thicket (see Annexure 1).

Gardens are not represented in two of South Africa's nine biomes, namely:

- **Desert Biome** (south of South Africa's southern border with Namibia, which extends from Onseepkans and Pofadder in the east to Alexander Bay in the west, and includes parts of the Richtersveld National Park)
- **Indian Ocean Coastal Belt** (from the mouth of the Great Kei River northwards along the coastal belt to the South African border with Mozambique).

Instead of establishing new national botanical gardens in these two biomes, opportunities exist to partner and collaborate with existing government or parastatal agencies that manage protected conservation areas representative of these two biomes, more specifically SANParks that manages the Richtersveld National Park in the Desert Biome, and either eThekweni Municipality that manages the Durban Botanic Gardens, iSimangaliso Wetland Park, Eastern Cape Parks and Tourism Agency (ECPTA) or Ezemvelo KZN Wildlife, that all four manage representative conservation estates in the Indian Ocean Coastal Belt. Areas identified in these biomes would become botanical/demonstration gardens accessible to the public, but not be classified as national botanical gardens. SANBI would enter into a formal agreement with the institution hosting the area designated as a botanical/demonstration garden.



**Figure 2.** Map of South Africa showing the location of the country's nine biomes.

## 6.2 Expanding existing gardens

Opportunities exist to expand selected national botanical gardens into suitable adjacent natural habitats (e.g. Harold Porter, Lowveld and Walter Sisulu NBGs). The main purpose for such expansion would be for either:

- (a) **incorporation of additional unique and/or threatened species, vegetation types and habitats currently not represented into the Garden,**
- (b) **conserving adjacent habitats through integrated land use planning and/or available protection mechanisms in order to minimize impacts on the sense of place or conservation value of the Garden, or**
- (c) **incorporation of additional natural habitat that can serve as useful biodiversity and climate adaptation corridors for flora and fauna, both inside and outside the Garden** (e.g. SANBI approved in 2011 acceptance of an offer from Silverstar Casino to incorporate, under a 99-year lease agreement, a portion of 9.31 ha of land (Erf 645) into the Walter Sisulu NBG).

Opportunities may exist to assist establish **satellite gardens** near existing botanical gardens in partnership with local communities. These satellite or outreach gardens are often established as a joint effort between SANBI's National Botanical Gardens Division and the Biodiversity Education and



Empowerment Directorate, and form an important part of SANBI's outreach programme contributing to both horticulture and education skills development.

### 6.3 Collaborative agreements with other gardens

SANBI has initiated the process of partnering with other existing municipal/university/private botanical gardens through signed Memoranda of Understanding. Gardens associated with SANBI through formal MoUs need to fulfil certain criteria (see Annexure 9) that are aligned with SANBI's NBGs.

By 2015, SANBI had signed formal MoUs with both the Garden Route Botanical Garden Trust (October 2013; George, Western Cape) and the University of Stellenbosch Botanical Garden (May 2014; Stellenbosch, Western Cape). Further MoUs may in future be established directly with other non-SANBI gardens as the need arises, or as deemed strategic and/or beneficial for SANBI and the associated garden involved. These MoUs do not imply any commitment from SANBI or expectation from the associated garden of financial support (from SANBI) or enhanced/national status of the garden concerned. SANBI's NBGs are also included as potential partners in the following SANBI MoUs: eThekweni (Durban Botanic Gardens) and University of Pretoria.

SANBI shall also consider entering into formal collaborative agreements with other botanical gardens in Africa, with special focus on botanical gardens located within southern Africa.

### 6.4 Schemes to raise funds

Finances required to establish new gardens include funds required to rent or purchase land, install necessary services and infrastructure, appointment of new staff as well as provision of necessary operational equipment for use in the new Garden. It should be realised that it may never be possible for a Garden to become self-sufficient in terms of funding, and that in considering the establishment of new gardens there needs to be a realisation that ongoing commitment towards the operation, maintenance and development of the gardens and their associated infrastructure and living collections, will be required from SANBI.

The main source of funds to establish, manage and maintain national botanical gardens is from the national Department of Forestry, Fisheries and the Environment (DFFE), both through dedicated annual MTEF grants to SANBI as well as **Expanded Public Works Programme** project allocations (under DEA's DFFE's Working for Water, Working for Wetlands, Working for the Coast and Environmental Monitor programmes).

Other funding sources that may assist in managing and maintaining NBGs include sourcing funds from SANBI's Invasive Species Programme, NGOs (such as the Botanical Society of South Africa, which has been SANBI's longest-serving strategic partner, since the establishment of Kirstenbosch in 1913), private bequests, sponsorships and donations. Partnering with programmes, such as the Millennium Seed Bank Partnership (MSBP), an international conservation project coordinated by the Royal Botanic Gardens, Kew, UK, provides opportunities for international collaboration, additional funding sources and mutual support.

Critical partners required for the successful implementation of this Strategy include the following: National Department of Forestry, Fisheries and the Environment, Botanic Gardens Conservation International, Botanical Society of South Africa, national (e.g. SANParks)/provincial conservation authorities, and local municipalities.

## 6.5 Implementation of the strategy

In summary, the National Botanical Garden Expansion Strategy 2019–2030 aims to raise awareness, contribute to education about biodiversity, and to support conservation by establishing, maintaining and expanding a representative network of botanical gardens, with their associated plants and animals, across South Africa. SANBI will achieve this Strategy using a range of pre-determined criteria, primarily biodiversity criteria, through (a) establishing at least one national botanical garden in each province of South Africa, (b) establishing a botanical/demonstration garden representative of each biome in South Africa, (c) using opportunities to expand existing national botanical gardens, where considered feasible and appropriate, and finally (d) by entering into agreements with other institutions that manage botanical gardens in South or southern Africa. The establishment and maintenance of strategic partnerships, with national and provincial conservation authorities in particular, will be critical to SANBI's successful implementation of this Strategy.

SANBI will ensure that the National Botanical Garden Expansion Strategy 2019–2030 is implemented by including specific actions in the organisation's formal planning processes, including being incorporated into SANBI's Corporate Strategic Plan (CSP) and Annual Performance Plan (APP).

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## **Annexure 1. Major activities of botanical gardens around the world.**

The list below demonstrates the unique potential resources, experience and skills of botanical gardens for conservation in a way that no other institution can (after Wyse Jackson & Sutherland 2000).

- arboriculture
- city and town planning, resource allocation and land use
- conservation biology
- cultivar conservation and maintenance
- dendrology
- empowering and building the capacity of local and rural communities for conservation
- environmental education programmes
- ethnobiological research
- field gene banks
- herbarium studies and plant taxonomy
- horticultural research
- horticultural training
- integrated pest control management
- laboratory research, including in vitro (tissue culture) plant cultivation
- library services and information centres
- ornamental horticulture and floriculture
- plant reintroductions and research in habitat restoration
- pollution abatement and monitoring programmes
- public recreation
- remedial training and therapy
- seed store and tissue banking
- conservation networks and community groups
- systematics
- teacher training
- tourism
- wild plant species research, conservation and management *ex situ* and *in situ*



## Annexure 2. Biome and vegetation type representation in South Africa's existing national botanical gardens and associated satellite reserves.

PROVINCE	NAME OF GARDEN	BIOME	VEGETATION TYPES REPRESENTED
<b>Eastern Cape</b>	Kwelera	Forest Grassland Albany Thicket	AT 9 Albany Coastal Belt FOz 6 Southern Coastal Forest
<b>Free State</b>	Free State	Grassland Nama Karoo	Gh 7 Winburg Grassy Shrubland Gh 8 Bloemfontein Karroid Shrubland Gh 5 Bloemfontein Dry Grassland
<b>Gauteng</b>	Pretoria	Grassland Savanna	SVcb 6 Marikana Thornveld
	Walter Sisulu	Savanna	SVcb 9 Gold Reef Mountain Bushveld
<b>KwaZulu-Natal</b>	KwaZulu-Natal	Savanna	SVs 4 Ngongoni Veld
<b>Limpopo</b>	<i>to be determined</i>	Savanna	SVcb21 Soutpansberg Mountain Bushveld
<b>Mpumalanga</b>	Lowveld	Savanna	SVI 9 Legogote Sour Bushveld SVI 10 Pretoriuskop Sour Bushveld
<b>Northern Cape</b>	Hantam	Succulent Karoo Fynbos	FRd 1 Nieuwoudtville-Roggeveld Dolerite Renosterveld FRs 2 Nieuwoudtville Shale Renosterveld SKt 2 Hantam Karoo
<b>Western Cape</b>	Harold Porter	Fynbos Forest	FFd 6 Hangklip Sand Fynbos FFs 11 Kogelberg Sandstone Fynbos FOz 1 Southern Afrotemperate Forest FS 7 Overberg Dune Strandveld
	Karoo Desert	Succulent Karoo Fynbos	FFh 4 Breede Shale Fynbos FRs 8 Breede Shale Renosterveld SKv 7 Robertson Karoo
	Kirstenbosch	Fynbos Forest	FFg 3 Peninsula Granite Fynbos FFh 5 Cape Winelands Shale Fynbos FFs 9 Peninsula Sandstone Fynbos FOz 1 Southern Afrotemperate Forest
	Edith Stephens Wetland Park (Kirstenbosch)	Fynbos	FFd 5 Cape Flats Sand Fynbos
	Tinie Versfeld Wildflower Reserve (Kirstenbosch)	Fynbos	FRg 2 Swartland Granite Renosterveld

### **Annexure 3. South Africa's national botanical gardens: history**

The establishment of NBGs in South Africa goes back to 1913 when Kirstenbosch and the National Botanic Gardens were formed on 1 July 1913. The late Prof. Harold Pearson, the first Director of the National Botanic Gardens, once said that owing to geographic considerations it would be necessary to have at least ten National Botanic Gardens in South Africa, one in each of the main climatic regions, and that one (he suggested it be based on the Cape Peninsula) should be the administrative centre for them all. The Karoo Desert National Botanical Garden was founded in 1921, and up until the 1950s, the National Botanic Gardens had only two gardens under its control, both in the Western Cape. Another garden in the Western Cape, the Harold Porter NBG, was founded in 1959. It was not until 1967 that the National Botanic Gardens of South Africa extended its activities outside the then Cape Province. The purpose of this programme of expansion was (a) to provide sites where eventually the entire South African flora could be cultivated, and (b) to make botanical gardens accessible to as many people in the country as possible. To provide the maximum contribution to science it was considered that the various botanical gardens would, as far as possible, be situated near large educational centres or near areas of dense population. The next gardens to be founded were the Drakensberg and Eastern Free State (Harrismith; officially opened on 18 May 1967), Free State (Bloemfontein; 30 June 1967), KwaZulu-Natal (Pietermaritzburg; 12 November 1969), Lowveld (Nelspruit; 19 November 1969), Walter Sisulu (Roodepoort/Mogale City; 11 March 1982) and Hantam (Nieuwoudtville; 12 December 2008) National Botanical Gardens. Lack of local support and remoteness unfortunately resulted in the Drakensberg and Eastern Free State Botanic Garden being handed back to the Harrismith Municipality in 1985.

By 1954, when Prof. Brian Rycroft succeeded Prof. Harold Compton as the third Director of the National Botanic Gardens, only Kirstenbosch and the Karoo National Botanical Garden had been established. During his term as Director, Prof. Rycroft was responsible for establishing the following five National Botanical Gardens that still exist today, namely Harold Porter, Free State, KwaZulu-Natal, Lowveld and the Walter Sisulu NBG.

Two pieces of land were donated to SANBI in 1957, a 3.4 ha piece of land on the Cape Flats donated by Edith Stephens, and the 20 ha Tinie Versfeld Wildflower Reserve near Darling in the Western Cape. The Edith Stephens Wetland Park (which incorporates SANBI's portion and a larger portion of land owned by the City of Cape Town) is jointly managed by SANBI and the City of Cape Town, whereas the Tinie Versfeld Wildflower Reserve is managed by Kirstenbosch staff, with the support of local BotSoc members.

The Pretoria National Botanical Garden, officially opened in 1958, was managed by the former Botanical Research Institute (BRI) until amalgamation in 1989, when it was brought under the control of the newly formed National Botanical Institute (NBI), as South Africa's eighth national botanical garden.

#### **Site location**

Experience has shown that while most of the existing NBGs are well located, some are not. Most of the gardens were developed on property that became available either by personal bequest or donation from municipalities, for the purpose of the establishment of a botanical garden, and in several cases were not established on optimal sites.

NBGs with perennial water running through the properties include Harold Porter, Kirstenbosch, Lowveld, KwaZulu-Natal and Walter Sisulu. Free State NBG has water flowing through the garden only occasionally during the summer rainy season from November to March/April. Pretoria and Karoo Desert NBGs neither have perennial water sources in their gardens and this is a major limiting factor in

both cases as municipal (additional expense) or borehole water has to be used for irrigation purposes. Moving a botanical garden from one site to another is often not a viable option due mainly to the expense involved. It has, however, been done twice before in the history of the national botanical gardens. The Karoo Desert NBG was moved from its original position at Whitehill near Matjiesfontein to Worcester in 1946, 25 years after the garden had been established. A combination of drought, a new national road and little public support, especially during the Second World War, forced the National Botanic Gardens in 1946 to vacate the Whitehill site and re-establish the Karoo Garden in Worcester, where it was officially opened on 25 September 1948. Three years after its inception, the Drakensberg and Eastern Free State Botanic Garden near Harrismith was moved 29 km from its original site in Major's Drift to Waterworks Valley at the foot of the Platberg to ensure a reliable water supply (Hawkins 1970).

### Gardens expansion

Although Prof. Rycroft was successful in establishing NBGs in each of the then four provinces of South Africa (Cape Province, Orange Free State, Transvaal and Natal) at the time, he continued to explore the options of establishing other 'regional gardens'. In the National Botanic Garden's Annual Report of 1971/2, Prof. Rycroft indicated having had various discussions concerning new regional botanical gardens. These included the following:

- Zululand Botanic Garden (at the mouth of the Umlalazi River)
- Eastern Cape Botanic Garden (in the Baakens River Valley)
- Northern Cape Botanic Garden (on the banks of the Vaal River at Riverton)
- Vaal River Catchment Botanic Garden (Woody Island and surrounding islands in the Vaal River near Parys)
- Highveld Botanic Garden (close to Krugersdorp; now the Walter Sisulu NBG)
- Oudtshoorn Botanic Garden (created to house succulents from the Swartberg and Outeniqua Mountains).

In an Addendum to the minutes of the National Botanic Gardens EXCO Meeting held on 7 August 1974, Prof. Rycroft said the following:

*"It would be unwise to try to give the ultimate number of regional gardens; as the population increases the need for more gardens will expand. To supplement the existing gardens, at least another eight to ten are required to satisfy the need to have gardens where there are large concentrations of people, or in important centres.*

*Negotiations have already commenced and may be in an advanced stage for the following gardens:*

- |                     |  |
|---------------------|--|
| • Port Elizabeth:   | <i>Eastern Cape Botanic Garden</i>       |
| • Krugersdorp:      | <i>Transvaal Botanic Garden</i>          |
| • East London:      | <i>Kaffrarian Botanic Garden</i>         |
| • Kimberley:        | <i>Griqualand West Botanic Garden</i>    |
| • Pietermaritzburg: | <i>Natal Forest Botanic Garden</i>       |
| • Durban:           | <i>Mangrove and Coast Botanic Garden</i> |
| • Oudtshoorn:       | <i>Southern Cape Botanic Garden</i>      |
| • Phalaborwa:       | <i>Bushveld Botanic Garden</i>           |
| • Graskop:          | <i>Transvaal Forest Botanic Garden</i>   |
| • Vryheid:          | <i>Northern Natal Botanic Garden.</i>    |

*In addition, negotiations are taking place for the establishment of a KwaZulu Botanic Garden on the northern banks of the Umlalazi River at Mtunzini. Although negotiations have not been commenced, it*

*is desirable that botanic gardens should be established also in the Northern Transvaal [now Limpopo Province], the Knysna Forest Region, the Cape West Coast and one, or possibly two, in South West Africa [now Namibia].*

*It is impossible at this stage to provide a final list of possible new gardens. Our policy in the future could be largely dictated by township development schemes and generous offers of suitable sites.”*

Of the possible gardens listed by Prof. Rycroft in 1974, apart from the Transvaal Botanic Garden (that shortly after its official opening in 1982 was renamed the Witwatersrand NBG and on 16 March 2004 renamed the Walter Sisulu NBG), the only option that was pursued into the 1980s and early 1990s was that of a botanical garden in the Eastern Cape. In the NBG's Annual Report of 1982, two gardens were listed as being possible in the Eastern Cape: one in Port Elizabeth (Baakens River Valley) and the other in East London. Both the Port Elizabeth and East London City Councils agreed to make an annual financial contribution (which would be subject to review from time to time) towards the establishment and maintenance of the respective gardens (Note: the practice of local municipalities each making direct annual financial contributions to support South Africa's national botanical gardens ceased after South Africa's first democratic elections were held in 1994). During the second half of the 1980s, when Prof. Kobus Eloff succeeded Prof. Rycroft as the organisation's fourth Director, the following statement, published in the June 1988 edition of *Veld & Flora*, was made by the Board: "The NBG should grow in usefulness and not necessarily in size, e.g. by developing fewer gardens more intensively rather than more gardens at a lower level" (Eloff 1988).

The 1991/1992 edition of the NBI's Annual Review had the following to say about the establishment of a National Botanical Garden in the Eastern Cape:

*"The NBI has been approached on many occasions over the past 20 years concerning the establishment of another National Botanical Garden in Port Elizabeth – specifically at Settlers' Park – for which detailed plans and proposals were submitted by a team of our senior horticultural staff. However, the combined factors of continued controversy, both from various organisations and the Port Elizabeth public, and severe financial constraints, make it impossible for the NBI to accept this undertaking. The matter may be reconsidered at a later date, should all factors involved appear more favourable."*

The matter of an additional garden being added to the network of National Botanical Gardens was last listed in the 1992/1993 Annual Review, where it states: "A further NBG has been proposed for Port Elizabeth, but despite several top level meetings, funding is unlikely to be forthcoming in the foreseeable future."

### **New gardens: 2007 to 2015**

The 10 national botanical gardens managed by SANBI are currently located in seven of South Africa's nine provinces, namely Northern Cape (one; Nieuwoudtville), Western Cape (three; Cape Town, Betty's Bay and Worcester), Free State (Bloemfontein), KwaZulu-Natal (Pietermaritzburg), Mpumalanga (Nelspruit), Gauteng (two; Pretoria and Roodepoort/Mogale City) and Eastern Cape (East London; co-managed with the Eastern Cape Parks & Tourism Agency).

The farm Glenlyon Estates (see Willis (2007) and Willis, Marinus & Rust 2010) was purchased by SANBI in October 2007 in order to establish SANBI's ninth national botanical garden, the Hantam National Botanical Garden, near Nieuwoudtville in the Northern Cape Province. This Garden was formally gazetted on 12 December 2008. Due to the incredible diversity and density of indigenous bulbs, Nieuwoudtville's biodiversity is of international significance and it is often referred to as 'the bulb capital of the world'. The new national botanical garden comprises large natural patches of renosterveld fynbos and succulent karoo vegetation, including many range-restricted or endemic species. The

national botanical garden in Nieuwoudtville in the Northern Cape provides an important conservation area which should be used by SANBI to promote nature-based tourism, the conservation of the area's unique biodiversity, environmental education opportunities and long term ecological research in this botanical hotspot of global significance.

On 25 July 2014 the 160 ha Kwelera Nature Reserve was declared in East London, Eastern Cape, by the DEA Minister, as the Kwelera National Botanical Garden in terms of NEMBA. Prior to the garden being declared, SANBI had signed a Memorandum of Agreement (MoA) with the Eastern Cape Parks & Tourism Agency (ECPTA) to co-manage the 160 ha natural coastal dune forest and grassland with ECPTA as the natural portion of the garden. In March 2016, SANBI completed the acquisition of an additional 10.48 ha of adjacent land (Farm 1505) to serve as the landscaped/cultivated portion of the garden. This land portion was formally declared by the DEA Minister as an extension to the existing Kwelera NBG in July 2018.

**Table 1. Summary of establishment and expansion of South Africa's existing national botanical gardens, spanning a period of more than 100 years.**

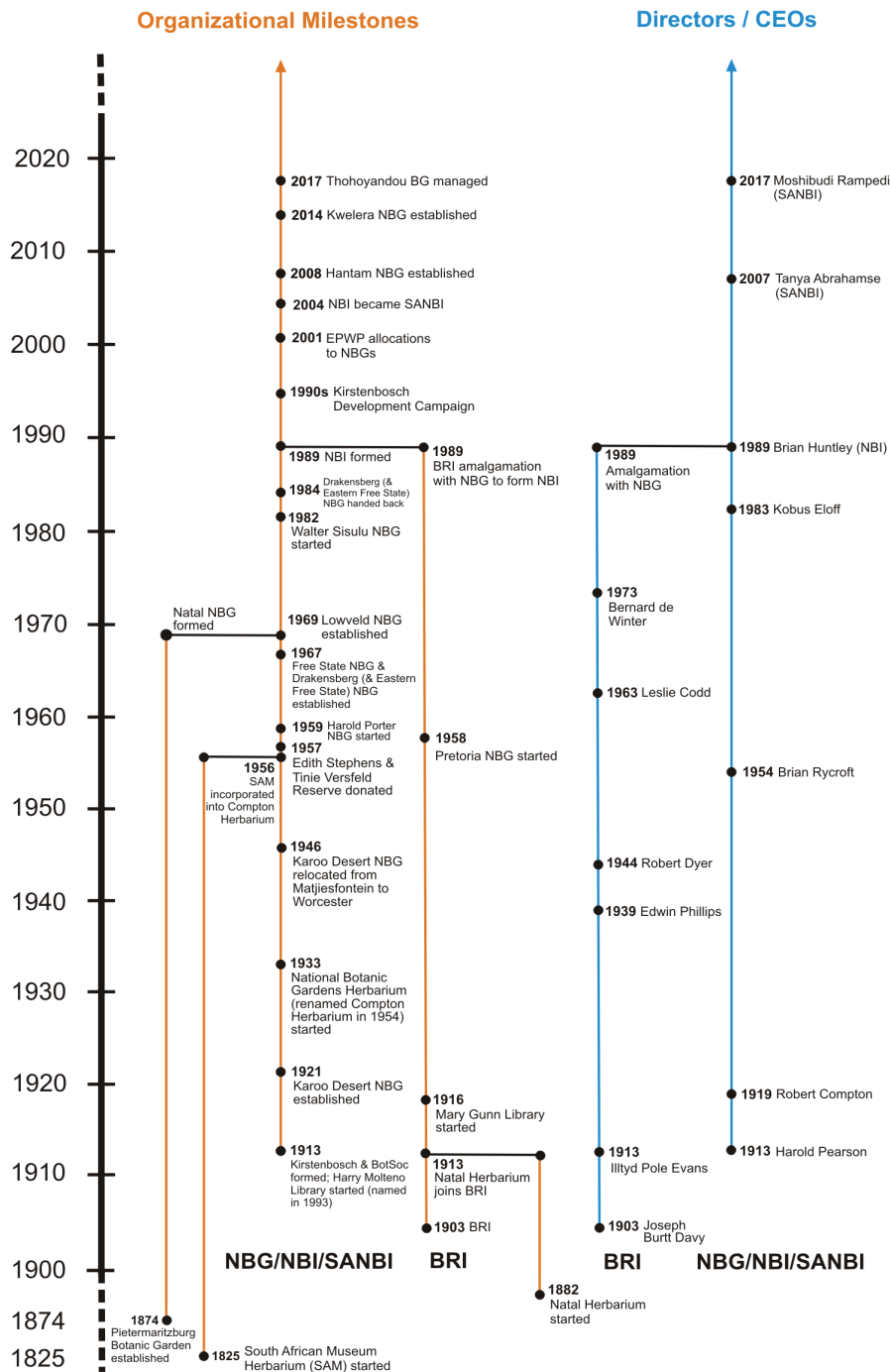
National Botanical Garden	Year established	Notes
Kirstenbosch (WC)	1913	
Karoo Desert (WC)	1921	garden moved from Whitehill (Matjiesfontein) to Worcester in 1946
Pretoria (GP)	1958	managed by the Botanical Research Institute (BRI), separately from the other national botanical gardens, from 1958 to 1989 (when the National Botanic Gardens (NBG) and BRI amalgamated to form the National Botanical Institute (NBI) on 1 April 1989)
Harold Porter (WC)	1959	
Free State (FS)*	1967	
KwaZulu-Natal (KZN)*	1969	managed by the Natal Botanic Society from 1874 to 1969
Lowveld (MP)*	1969	
Walter Sisulu (GP)	1982	
Hantam (NC)	2008	
Kwelera (EC)	2014	
Harold Porter (WC) extension	2017	adjacent erf 5562 (1.3616 ha) declared as an extension to the existing Garden
Kwelera (EC) extension	2018	adjacent Farm 1505 (10.48 ha) declared as an extension to the existing Garden

\*The sequence of four new national botanical gardens (Drakensberg and Eastern Free State (no longer a national botanical garden), Free State, KwaZulu-Natal and Lowveld) being established within a period of three years in the late 1960s was a direct result of the increased interest shown countrywide as a result of the Kirstenbosch National Botanical Garden's golden jubilee (50-years; 1913 to 1963) celebrations and activities championed by Prof. Brian Rycroft during 1963.



# Annexure 4. Milestones in the establishment and management of SANBI and its national botanical gardens.

## SANBI HISTORY – Graphic presentation



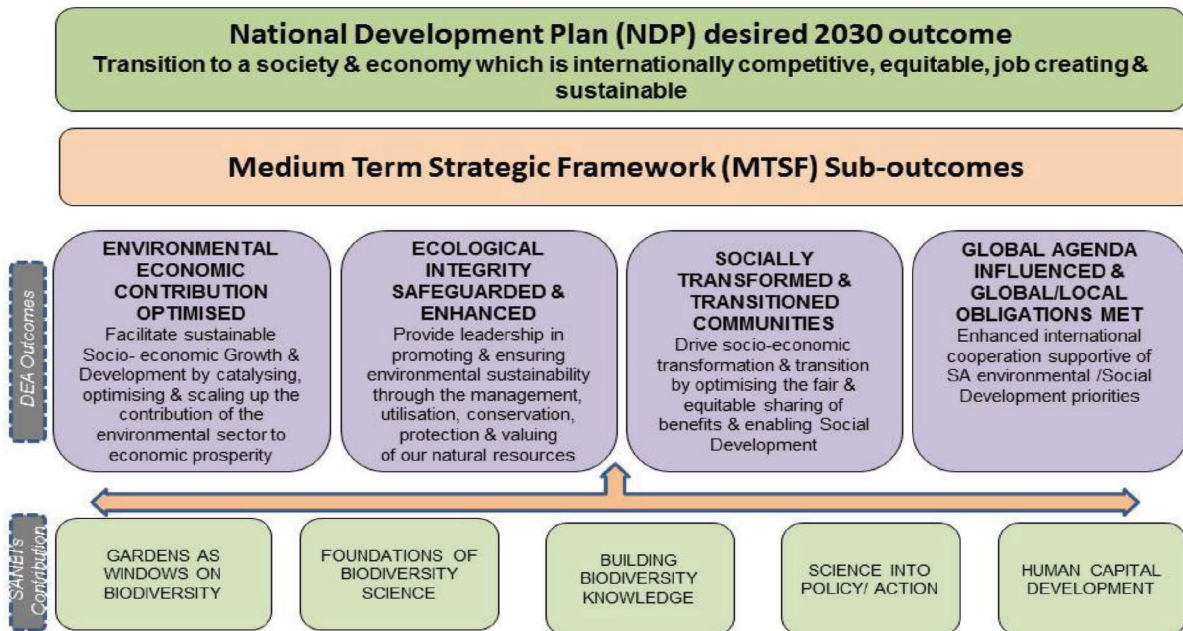
## Annexure 5. Areas of South Africa's National Development Plan 2030 that the national botanical gardens support.

- Supporting job creation through use of local businesses and SMMEs
- Being supported by DFFE through infrastructure budget allocations and grants via the expanded public works programme and other national labour-intensive programmes
- Employing staff to manage, develop and maintain the gardens
- Improving the local tourism product offering to visitors
- Maintaining and expanding the garden-based tourism infrastructure
- Expanding tourism partnerships
- Improving the energy-efficiency of buildings (as set out in the South African National Standard 204) and promoting energy saving
- Aiming for a zero-carbon building standard by 2030
- Infrastructure investment should give priority to ICT and "green infrastructure"
- Gardens supporting municipalities in promoting local arts, culture and heritage
- Supporting education, training and innovation
- Improving the transition to a low-carbon economy and the use of renewable energy
- Supporting and promoting local and regional economic development
- Maintaining, expanding and developing public-private partnerships
- Providing opportunities to support environmental education of learners and teachers
- Avoiding maintenance and refurbishment backlogs
- Promoting the gardens as green urban spaces
- Improving the quality of office and staff accommodation
- Investing in information and communication technology (ICT) infrastructure
- Providing opportunities to support tertiary horticultural and nature conservation students
- Promoting active lifestyles and health awareness
- Building safer communities
- Investing in continuous skills training for workers and managers
- Assisting in transforming society and promoting a united, prosperous, non-racial, non-sexist and democratic South Africa
- Supporting the cooperation with, development and management of, other botanical gardens in the Southern African Development Community (SADC) region and across Africa
- Supporting South Africa's employment equity plan
- Supporting social integration.

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 2014-2019 Medium Term Strategic Framework (MTSF) which provides a 5-year building block towards the 2030 vision of the National Development Plan. The MTSF sub-outcomes include:

- **Sub-outcome 1:** Ecosystems are sustained and natural resources are used efficiently
- **Sub-outcome 2:** An effective climate change mitigation and adaptation response
- **Sub-outcome 3:** An environmentally sustainable, low-carbon economy resulting from a well-managed just transition
- **Sub-outcome 4:** Enhanced governance systems and capacity
- **Sub-outcome 5:** Sustainable human communities

Outlined below is a summary of SANBI’s contribution to DFFE outcomes and government priorities:



## **Annexure 6. Extract from NEMBA (2004) that clearly specifies details regarding the declaration and amendment or withdrawal of national botanical gardens.**

### **NATIONAL BOTANICAL GARDENS**

#### **Declaration**

33. (1) The Minister, acting with the approval of the Cabinet member responsible for the administration of the land in question may, by notice in the Gazette, declare any state land described in the notice as a—

- (a) national botanical garden; or
- (b) part of an existing national botanical garden.

(2) The Minister, acting in accordance with an agreement with the owner of the land described in that agreement may, by notice in the Gazette declare that land as a—

- (a) national botanical garden; or
- (b) part of an existing national botanical garden.

(3) A notice in terms of subsection (1)(a) or (2)(a) must assign a name to the national botanical garden.

(4) The sites described in Schedule 1 to the Forest Act, 1984 (Act No.122 of 1984), must be regarded as having been declared as national botanical gardens in terms of this section.

#### **Amendment or withdrawal of declarations**

34. (1) The Minister may, by notice in the Gazette—

- (a) amend or withdraw a notice referred to in section 33, subject to subsection (2); or
- (b) amend the name assigned to a national botanical garden.

(2) The declaration of state land as a national botanical garden, or part of an existing national botanical garden, may not be withdrawn and a part of a national botanical garden on state land may not be excluded from it except by resolution of each House of Parliament.

## **Annexure 7. SANBI criteria used for establishing new national botanical gardens**

Based on the experience of the SANBI, national botanical gardens should ideally be strategically positioned according to most of the following criteria (see Willis & Huntley 2004):

### **Community support**

- linked to an active local branch of the Botanical Society of South Africa
- supported by the local community and civil society

### **Services**

- with a perennial river(s) flowing through the property
- with a suitable water supply
- with a reliable supply of electricity and sewerage lines

### **Horticultural potential**

- with suitable areas of arable soil for the landscaped portion of the garden

### **Landscape**

- includes varying topography, slopes, environmental conditions and microclimates

### **Accessibility**

- SANBI may allow, regulate or prohibit access by the public to the national botanical garden
- close to (within 20 km of) a major urban centre
- within a 30 km catchment area of at least 250,000 people
- easily accessible to staff and potential visitors from major road routes

### **Biodiversity**

- includes a large area of relatively undisturbed natural habitats/vegetation representative of at least some of the main vegetation type(s) of the province, with the area's associated indigenous biodiversity (plants and animals) and ecological interactions

### **Land**

- land should be available on a 99-year lease to SANBI, sold or transferred to SANBI
- current land owners are willing to lease, sell or transfer the land
- existing botanical gardens (in provinces where there are no national botanical gardens) or nature reserves under either private, university or state ownership, as well as other protected areas, will be reviewed as potential sites for the establishment of new national botanical gardens
- state land under the provincial Department of Public Works must be transferred to the national Department of Public Works (as national functions cannot be performed on provincial land) and the management vested in SANBI
- land should not comprise geographically separated areas but should form a single portion of land
- if land portions comprising a garden are owned by different entities (e.g. SANBI/Department of Public Works), they should be adjacent to one another.

### **Education and Research**

- easily accessible to educational and research institutions.

Size and potential room for expansion in the future should be additional factors to consider in assessing possible sites.



## **Annexure 8. Types of botanical gardens as defined by Botanic Gardens Conservation International (BGCI)(Wyse Jackson & Sutherland 2000).**

### **1. 'Classic' multi-purpose gardens**

*Institutions with a broad range of activities in horticulture and horticultural training; research, particularly in taxonomy with associated herbaria and laboratories and public education and amenity. They are generally state supported.*

### **2. Ornamental gardens**

*Often very beautiful establishments with diverse plant collections that are documented. Some are privately owned and many municipal gardens fall into this category.*

### **3. Historical gardens**

*Include the earliest gardens developed for the teaching of medicine; some were established for religious purposes.*

### **4. Conservation gardens**

*Developed in response to local needs for plant conservation. Contain, or have associated areas of, natural vegetation in addition to their cultivated collections. Included in this category are indigenous plant gardens, which only cultivate plants from their surrounding region or national flora. Most conservation gardens play a role in public education.*

### **5. University gardens**

*Many universities maintain botanic gardens for teaching and research. Many are open to the public.*

### **6. Combined botanical and zoological gardens**

*Are currently reassessing the roles of their botanical collections. Plant collections are being researched and developed that provide habitats for the displayed fauna, and interpretation of these habitats to the general public is an important element.*

### **7. Agro-botanical and germplasm gardens**

*Function as an ex situ collection of plants of economic value or potential for conservation, research, plant breeding and agriculture. Several are experimental stations associated with agricultural or forestry institutes and contain associated laboratory, plant breeding and seed testing facilities but many are not open to the public.*

### **8. Alpine or mountain gardens**

*Are most frequently found in mountainous regions of Europe and some tropical countries. They are specifically designed for the cultivation of mountain and alpine flora. Some alpine and mountain gardens are satellite gardens of larger lowland botanic gardens.*

### **9. Natural or wild gardens**

*Contain an area of natural or semi-natural vegetation, which is protected and managed. Most are established to play conservation and public education roles and includes areas where native plants are grown.*

**10. Horticultural gardens**

*Are often owned and maintained by horticultural societies and open to the public. They exist primarily to foster the development of horticulture through the training of professional gardeners, plant breeding, registration and conservation of garden plant varieties.*

**11. Thematic gardens**

*These specialise in growing a limited range of related or morphologically similar plants or plants grown to illustrate a particular theme generally in support of education, science, conservation and public display. These include orchid, rose, Rhododendron, bamboo and succulent gardens or gardens established on such themes as ethnobotany, medicine, bonsai, topiary, butterfly gardens, carnivorous plants and aquatics.*

**12. Community gardens**

*Are generally small gardens with limited resources, developed for, and by, a local community to fulfil its particular needs, such as recreation, education, conservation, horticultural training, and the growth of medicinal and other economic plants.*

## **Annexure 9. Criteria developed by SANBI for partnering with other botanical gardens.**

Gardens partnering and being associated with SANBI's national botanical gardens should fulfil at least most of the following criteria:

- Promote biodiversity research
- Promote plant conservation/restoration programs
- Promote environmental education/awareness programs
- Be accessible and open to the public
- Make biodiversity information available to visitors through interpretation (labels, brochures, publications, display boards)
- Promote biodiversity awareness
- Promote local heritage/cultural awareness
- Have a Vision/Mission/and Business Plan/Model compatible with SANBI's mandate
- Promote the cultivation, display and long-term maintenance of local/regional indigenous South African plants and collections
- Promote plant collections of wild origin
- Be committed to staff development, training and capacity development
- Be committed to eradication of alien invasive plants on their estates
- Be committed to generating new biodiversity knowledge through research and strategic partnerships
- Be committed to promoting sustainable development practices
- Have an association with, but not necessarily supported financially by, the Botanical Society of South Africa and other relevant environmental NGOs
- Be committed to promoting the conservation and awareness of wildlife on the estate
- Encourage and support the inclusion of historically disadvantaged stakeholders/communities.

## Annexure 10. Key targets and risks associated with the National Botanical Gardens Expansion Strategy 2019-2030.

PROVINCE	2030-TARGET	ACTIONS	ASSUMPTIONS
<b>Eastern Cape</b>	10.48 ha of SANBI land adjacent to the Kwelera NR/NBG declared as an extension to the existing Kwelera National Botanical Garden and to be used as the landscaped/cultivated area of the garden. <b>Farm 1505 (10.48 ha) of SANBI land was declared as an extension to the existing Kwelera NBG by the DEA Minister on 13 July 2018 (notice no.705 was published in the Government Gazette No. 41766).</b>	Kwelera NBG is in the process of being developed.  Continue collaboration with Eastern Cape Parks & Tourism Agency (ECPTA)  Site for a botanical/demonstration garden representing the flora of the <b>Indian Ocean Coastal Belt Biome</b> should be sought in either the Eastern Cape or KwaZulu-Natal Provinces.	Sufficient funds are provided by DFFE for the establishment and operations of the Kwelera NBG
<b>Free State</b>	No immediate priority for expansion		
<b>Gauteng</b>	Expanded network of associated botanical gardens	<b>Consider expanding the Walter Sisulu NBG to incorporate populations of the threatened Albertina Sisulu Orchid, <i>Brachycorythis conica</i> subsp. <i>transvaalensis</i>.</b>  Consider establishing MoUs with existing botanical gardens in the province (e.g. University of Pretoria, Johannesburg Botanical Garden)	Other gardens in the province are willing and interested to become associated gardens
<b>North West</b>	Establish new national botanical garden and associated botanical gardens in the province	In consultation with provincial authorities and SANBI's biodiversity planning units, establish a preferred site for new national botanical garden  Determine funding source(s) for the new garden  Support sought from national, provincial and local authorities and conservation agencies  Consider establishing MoU with North-West University Botanical Garden (Potchefstroom) and other gardens in the province (e.g. Lost City Botanical Garden, Sun City)	Suitable site for the new garden can be found  Funds are available for establishing and managing new garden  Other gardens in the province are willing and interested to become associated gardens

<b>KwaZulu-Natal</b>	Establish a botanical/demonstration garden in Indian Ocean Coastal Belt Biome	Establish linkages with iSimangaliso Wetland Park and/or Ezemvelo KZN Wildlife  Find a suitable site for a botanical/demonstration garden representative of the <b>Indian Ocean Coastal Belt Biome</b> in either the Eastern Cape or KwaZulu-Natal.  Formal agreement established with the organisation responsible for managing the conservation area	A mutually agreeable management arrangement can be established between SANBI and either ECPTA, iSimangaliso Wetland Park or Ezemvelo KZN Wildlife  A suitable site can be found to establish a botanical/demonstration garden that can display living collections of plants indigenous and endemic to the Indian Ocean Coastal Belt Biome
<b>Limpopo</b>	Establish new national botanical garden in Thohoyandou  Services Agreement signed between SANBI and LEDET in 2017. SANBI took over responsibility for management of the Thohoyandou Botanical Garden in July 2017.  New SANBI staff appointed to manage the garden.	Resolution by the DRDLR of the Mphaphuli Land Claim  Finalise management arrangements with the Mphaphuli Community linked to land claim  Formal name agreed for the national botanical garden and national botanical declared by the DFFE Minister	A mutually agreeable management arrangement can be established between SANBI and the Mphaphuli land claimants  Suitable funding is available for appointing new SANBI personnel, and developing and improving the existing Thohoyandou Botanical Garden
<b>Mpumalanga</b>	No immediate priority for expansion		
<b>Northern Cape</b>	Establish a botanical/demonstration garden in the Desert Biome  <b>Collaboration established through a formal Memorandum of Understanding (MoU) signed in May 2018 between SANBI and SANParks for the establishment of the Richtersveld Desert Botanical Garden at Senderlingsdrift Camp in the Richtersveld National Park</b>	Develop and sign a <b>Collaboration Agreement</b> with SANParks for the joint management of the proposed <b>Richtersveld Desert Botanical Garden</b> at Senderlingsdrift Camp in the Richtersveld National Park	SANParks supports the establishment of the <b>Richtersveld Desert Botanical Garden</b> in the Richtersveld National Park  A mutually agreeable Collaboration Agreement can be formalised between SANBI and SANParks
<b>Western Cape</b>	Expansion of Harold Porter NBG to the coastal high water mark. <b>The Intention to Declare this land portion as part of the Harold Porter NBG was published by the Minister on 20 November 2015. The DEA Minister declared, on 9 June 2017</b>	<b>Develop a Management Agreement with WWF-SA for incorporation of erf 3007 (1.15 ha) into the natural estate portion (conservation estate) of the Garden.</b>  Request DFFE to have the DFFE Minister formally	Support from local municipality (Overstrand Municipality), Kogelberg Branch of the Botanical Society of SA and local residents



	<p><b>(Government Gazette No. 40898, no. 541), under section 33(1)(b), erf 5562 (1,3616 ha in size) as an extension to the existing Harold Porter National Botanical Garden, Betty's Bay, Overstrand Municipality. The total area of the Harold Porter NBG is now 201.86 ha.</b></p> <p>Additional contract workers sourced to manage and maintain the Dawidskraal River catchment area above and below Clarence Drive.</p>	<p>declare erf 3007 as an extension to the existing Harold Porter NBG.</p>	
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