

# Environment Quarterly

Kwartaalike Omgewingsverslag

Tikologo ka Kotara

Mupo nga Kotara



**Battle to save the  
rhino continues**

**The climate pressure  
is getting worse**



forestry, fisheries  
& the environment

Department:  
Forestry, Fisheries and the Environment  
REPUBLIC OF SOUTH AFRICA



# 2022

# environment CALENDAR



## JANUARY

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02 February  
03 March  
21 March  
23 March  
22 April

**World Wetlands Day**  
**World Wildlife Day**  
**International Day of Forests**  
**World Meteorological Day**  
**Earth Day**

## MAY

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14 May  
22 May  
05 June  
08 June

**World Migratory Bird Day**  
**International Day for Biological Diversity**  
**World Environment Day**  
**World Oceans Day**

17 June  
18 July  
31 July  
September

**Desertification and Drought Day**  
**Nelson Mandela Day**  
**World Ranger Day**  
**National Arbor Month**

## SEPTEMBER

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## DECEMBER

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16 September  
19 September  
07 -11 September  
21 November

**International Day for the Preservation of the Ozone Layer**  
**International Coastal Clean-up Day**  
**South African National Parks Week**  
**World Fisheries Day**

## Cover story

6 Battle to save the rhino continues

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### About the back cover image:

The Debengeni Waterfalls (Tzaneen)

The Debengeni Waterfalls are among the most beautiful and scenic attractions in the Magoebaskloof and Tzaneen Area. Translated as "the place of the big pots" in Northern Sotho, the falls are in a protected nature reserve.

Set in the middle of hiking country, it's also renowned for some rare species of birds. One of these is the colourful Grey Wagtail and Bush Strike.



To use this QR code conveniently you must have a smartphone equipped with a camera and a QR code reader/scanner application feature.



# Editorial: The year that was



## Dear Valued Stakeholder,

Hello and welcome to the December edition of the Environment Quarterly. As usual, the holiday season brings with it many cheers for friends and families and also a chance to reflect on the year that was. This is also a time where givers bring out their treasures to help those in need and still keeping the environment healthy and sustainable for all.

Like with everything else, this year the environment also had its own challenges, victories, losses but also maintained strong wins. If we are to start with the bad news first, the floods that hit KwaZulu-Natal earlier this year were a dire devastation for our nation as we lost many of our people in the disaster

and many were left destitute because their homes and assets were swept away. This epidemic further signalled the urgency with which we all need to scale up our local and global response to climate change in order to protect our environment and the lives of our people.

Still on climate change, South Africa participated in the UN Climate Change Conference which kicked off from 6 – 18 November in Sharm el-Sheikh, Egypt during a 12-day meeting of world leaders, researchers, negotiators, activists and other stakeholders to take stock of the planet's future.

During a High-Level segment of the conference, President Cyril Ramaphosa said the country was in need of transformed funding institutions that would assist in funding climate-change related projects.

More highlights from 2022 on the environment include the launch of the first-ever botanical garden in Thohoyandou, Limpopo. Minister Creecy officially opened the garden estimated to create 200 temporary job opportunities with R20 million being secured from the Department's Environmental Programmes.

The Thohoyandou National Botanical Garden is the eleventh such garden in South Africa and will bring a wealth of benefits to biodiversity as well as the vast communities in the area and the Limpopo province as a whole.

More good news in the environment came from the handsome donation from Anglo Platinum of four Bat Hawk aircrafts to strengthen the fight against rhino poaching in the Kruger National Park.

In this edition, we discuss issues of coastal access where all South Africans have the right to access the coast as it is considered to be a national asset and it is defined as coastal public property to benefit all people.

This holiday season, when you visit parks, beaches and or any outdoor space, always use a bin to throw away litter. Litter can adversely affect the environment, as it can be blown or washed into rivers, forest lands, oceans and eventually pollutes the waterways, land, forest areas, soils or aquatic environments, which includes killing marine animals.

Separate recyclable waste from the other waste that cannot be recycled in your household. This reduces pollution which could have resulted in the disposal of the material and saves landfill airspace, so that our landfill sites can last for longer and not need additional land which we can use for other things.

As you enjoy your holidays, remember to protect and keep the environment clean.

Till we meet again in the New Year!

*Albi Modise*

**Head of Communications & Advocacy**

## Meet our team

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Albi Modise

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Find more information on: [www.environment.gov.za](http://www.environment.gov.za) or call 086 111 2468

# Department of Forestry, Fisheries and the Environment

# 2023

## January

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## August

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## December

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### ENVIRONMENTAL DAYS

02 February	World Wetlands Day
03 March	World Wildlife Day
21 March	International Day of Forests
23 March	World Meteorological Day
22 April	Earth Day
14 May	World Migratory Bird Day
22 May	International Day for Biological Diversity
05 June	World Environment Day

08 June	World Oceans Day
17 June	Desertification and Drought Day
31 July	World Ranger Day
September	National Arbor Month
18 September	Ozone Day
19 September	International Coastal Clean-up Day
September	South African National Parks Week
21 November	World Fisheries Day

### PUBLIC HOLIDAYS

1 Jan	Sun	New Year's Day	16 Jun	Fri	Youth Day
2 Jan	Mon	New Year Holiday	9 Aug	Wed	National Women's Day
21 Mar	Tue	Human Rights Day	24 Sep	Sun	Heritage Day
7 Apr	Fri	Good Friday	25 Sep	Mon	Heritage Day Holiday
10 Apr	Mon	Family Day	16 Dec	Sat	Day of Reconciliation
27 Apr	Thu	Freedom Day	25 Dec	Mon	Christmas Day
1 May	Mon	Workers' Day	26 Dec	Tue	Day of Goodwill

[www.dffe.gov.za](http://www.dffe.gov.za) Call Centre: 086 111 2468



# As seen in pictures



Billy Bin encourages runners



**Above:** The Department of Forestry, Fisheries and the Environment did waste management awareness at the Makhonjwa-Barberton Mountain Marathon 4-IN-1 in Mpumalanga on 22 October 2022. Our waste mascot Billy Bin drew the attention of runners as he spread the message of Good Green Deeds. The Good Green Deeds campaign seeks to change people's attitudes, behaviours towards responsible management of waste, and keeping their neighbourhoods clean, green and safe. **By Veronica Mahlaba.**

## 10 million Tree Fund Raising



**Above:** The Green Development Foundation (GDF), a non-profit organisation hosted a 10 million Tree Fund Raising Gala Dinner in Sandton, Gauteng where the City of Johannesburg was awarded first prize in the prestigious Arbor Month. The money will be used for the City's greening programme. Furthermore, the GDF has signed a memorandum of understanding with the Gauteng Department of Agriculture and Rural Development (GDARD). The MoU mandates GDF to engage, mobilise, educate and coordinate the planting of 1 million trees by 2024. Of the 1m trees, 60% are fruit trees and the other 40% indigenous. **By Zibuse Ndlovu.**

## A tree for every home



**Above:** To wrap up Arbor Month, on 29 September 2022, the Department alongside teams from Working on Fire and the Free State Department of Economic, Small Business Development, Tourism and Environmental Affairs handed over 100 indigenous trees to be planted in the yard of each and every home in Matlwangtlwang Township in Steynsrus, under the Moqhaka Local Municipality. This was part of a way to mitigate global warming and to green the community and ensure that trees are planted as part of the Ten Million Trees Programme. **By Veronica Mahlaba.**

## Minister includes traditional councils



**Above:** In an effort to increase transformation and the barrier to entry in the biodiversity sector, Minister Barbara Creecy invited representatives of traditional leader councils, traditional healers and government entities to the Biodiversity and Conservation Transformation Workshop. Hosted at the Environment House in Pretoria on 14-15 October 2022, Minister Creecy worked with stakeholders to create a transformation plan and roadmap that they could all work on. **By Salome Tsoka.**

## City of Cape Town awarded Ramsar Wetland City Accreditation



**Above:** Director of Spatial Planning and Environment from the City of Cape Town, Ms Lorraine Gerrans, received the certification from the Secretary General of the UN Ramsar Convention on Wetlands, Dr Musonda Mumba. The City of Cape Town is South Africa's first city to be accredited as a Ramsar Wetland City. The announcement was made at the 14<sup>th</sup> Conference of Parties to the UN Convention on Wetlands, known as the Ramsar Convention, held in Geneva, Switzerland on 05-13 November 2022. Because of the threats posed by urbanisation and the increased demand for land on wetlands, the Convention in 2015 introduced Wetland City Accreditation for cities that have recognised the importance of protecting urban or peri-urban wetlands. Over the past 20 years, the City of Cape Town has implemented several initiatives with the aim of rehabilitating wetlands and conserving these natural assets.



**Above:** Ms Lorraine Gerrans flanked by the DFFE's Chief Director: Protected Areas and Systems Management, Ms Skumsa Ntshanga, and Director: Water Sources and Wetlands Conservation, Mr Stanley Tshitwamulomon at the Ramsar Convention, held in Geneva, Switzerland

## Minister at climate talks



**Above:** Minister Barbara Creecy was having a bilateral meeting with the European Union Commission Executive Vice President, Mr Frans Timmermans in during the United Nations Framework Convention on Climate Change (UNFCCC) COP 27 in Egypt.



Minister Barbara Creecy also participated in a panel discussion during the launch of the World Bank Country Climate and Development Report (CCDR) at UNFCCC COP 27 in Sharm El-Sheikh, Egypt. According to UNFCCC, Parties meet with a view to build on previous successes and paving the way for future ambition to effectively tackle the global challenge of climate change.

# Battle to save the rhino continues

By Erica Mathye  
Images by Zibuse Ndlovu



**Above:** Minister Barbara Creecy, Chief pilot Mr David Simelane and Anglo Platinum Executive Mr Prakashim Moodliar during the Bat Hawk official handover in Skukuza.

The fight against rhino poaching has intensified with the introduction of four ultra-light aircraft in Kruger National Park (KNP). Minister Barbara Creecy received the ultra-light aircrafts on behalf of (SANParks), the aircrafts will assist SANParks with its conservation efforts.

The world-famous destination received the handsome donation from Anglo Platinum on 3 November 2022. The donation by Anglo Platinum to SANParks is worth R3.8 million and is part of the mining giant's commitment to environmental protection and sustainability.

The Executive Head for Anglo Platinum, Mr Prakashim Moodliar said the fight against rhino poaching is a serious one that requires both public and private sector partnership.

On the crime itself, SANParks Head Ranger, Ms Cathy Dreyer, said rhino poaching is a syndicate of the wealthy. "The biggest misconception out there is that rhino killings are driven by people who are poverty-stricken when it is a highly-organised crime orchestrated by very wealthy syndicates."



**Above:** SANParks spokesperson Mr Joe Phaahla, Head Ranger Ms Cathy Dreyer, Chief Pilot Mr David Simelane and Chief Vet Dr Peter Buss.

## Bat Hawks to fight rhino poaching

The ultra-light aircrafts were donated as an additional measure to fight rhino poaching within the KNP which has been hardest hit by rhino poaching in recent years. The Bat Hawk is a proudly South African "Light Sport Aircraft" designed and built for tough African conditions.

There is a big demand for this aircraft in surveillance and conservation industries and with the Bat Hawk's propeller up and out of the way, it reduces the risk of damage by grass, sticks, stones and sand. Making it a true "Bush Plane".

The Bat Hawk's cockpit is very similar to that of a helicopter with excellent forward visibility as well as to both sides.

## SA is home of the rhino

South Africa is the home of rhino and the overall trajectory for rhino poaching in South Africa remains on its downward trend but government and private organisations remain vigilant for criminal syndicates of rhino poaching.



### About the contributor: Erica Mathye

Ms Erica Mathye is the Deputy Director: Editorial Services in the Chief Directorate: Communications at the Department of Forestry, Fisheries and the Environment. Prior to joining the Department, she worked as a reporter and Chief Copy Editor for number of magazines.





The rhino poaching epidemic dates back to the 1970s with increasing numbers of rhino killed for their horn throughout Africa until 2015. In some countries, the rhino horn is used as traditional medicine and display as a symbol of wealth. There is also a circulating belief in Western countries that rhino horn is used as an aphrodisiac and sexual stimulant, but this is not true.

The Kruger National Park measures up to 2 million hectares and is home to a massive expanse of over 147 species of mammals, 114 reptile species, 51 snake species, 49 fish species and a massive 508 species of birds, a number unrivalled anyway else in South Africa.

### Another measure to fight poaching

Minister Barbara Creecy said government works closely with the private sector and non-governmental organisations through the Integrated Strategic Management of Rhinoceros approach and the draft National Integrated Strategy to Combat Wildlife Trafficking (NISCWT) to address rhino poaching.

"This donation today adds another means into our toolbox to prevent poaching and to monitor our ecosystems. The fight against poachers requires a concerted effort. Key to this is partnerships between the public and private sector, which remain central to combating wildlife trafficking.

"As we all know, we have been dealing with a serious challenge in the Kruger National Park and other conservation areas across the country for more than a decade to halt the onslaught on our natural heritage, especially on our rhino and elephant. The demand for rhino horn remains a constant threat to our rhino populations as international criminal syndicates continue to operate within our borders.



**Above:** A female rhino has been spotted and darted for dehorning. A helicopter circles the crash of rhinos.



**Above:** SANParks Chief Vet, Dr Peter Buss has removed the rhino's horn and is now completing the process before the sedated rhino can wake up any minute now.

"These ultra-light aircraft, the Bat Hawk, will assist us in monitoring and effectively managing the environment and in carrying out aerial patrols. It is important for us to get on top of the situation and the support from Anglo Platinum will go a long way towards helping the cause," she said.

### Dehorning to save the rhino

On the morning of 4 November 2022, DFFE joined forces with a team of veterinarians, pilots and researchers from SANParks as well as executives from Anglo Platinum and members of the media for the dehorning of a rhino in the Skukuza area. Dehorning a rhino basically involves sedating it to carefully remove its horn and therefore, making it less appealing to poachers.

Strategic dehorning of rhino in certain core areas of the SANParks is one of the Kruger National Parks' management actions to minimise the impact of rhino poaching.

The helicopter piloted by SANParks Chief Vet, Dr Peter Buss took off at 07:00 to a concentrated area in Skukuza where a crash of five rhinos were spotted. A pregnant female rhino, about 7 years old was darted from the helicopted. When the drugs had set in, after about 15 minutes, the gently went down with the team of experts waiting closely around her.

Once the rhino was down on the ground, it was time for the second phase where the dart was carefully removed and they started marking the horn. The animal is given oxygen throughout the process to prevent cardiovascular attacks. The vets and researchers start working on the marked horn using a saw, cutting as short as possible to prevent a quick regrowth. The animal gets up from the ground after about 20 minutes when the process is done and starts enjoying the wild and her environment again.

Any chips from the horn are not allowed to be transported anywhere from the site. The horns are kept off property in a secure facility. This particular female rhino had been shot before on her right front foot by poachers but luckily the damage from the bullet wasn't too extensive and she recovered well. According to Buss, the dehorning does not hurt the animal.

"It is a stressful event for the animal but much less traumatic than being shot and hurt by criminals looking for it's horn," he said.



**Above:** Another rhino saved from poachers by having its horn removed which makes it less appealing to poachers.

# Green tips for the festive season

By Yvonne Mashishi

I consider myself a self-proclaimed custodian and ambassador of the environment, and this festive I would like to share with you some green tips to consider.

## Saving water

As much as I love gardening, I have accepted that the days for lush and manicured gardens are over because low water levels are a constant threat in Gauteng.

- I have done away with 80% of lawn for artificial turf. The remaining 20% lawn is only there to ensure that the birds and goggas keep visiting. Artificial turf is just as beautiful, green and maintenance free.
- Plants in flowerbeds are drought resistant, with beds full of succulents.
- I water when I absolutely have to, using municipal water. When I do, it is very early in the morning, or late in the evening, when the ground is cool and can absorb enough for the plants and this is mostly for the vegetable patch.
- Any plants or flowers that require lots of water are planted in pots, or window boxes.
- Use grey water, and capture rain water for plants.
- Take short showers. Stand inside a basin when showering, all water captured is then used when I need to flush the toilet.



**Above:** Artificial turf is just as beautiful, but much more maintenance free.



**Above:** Succulents, teamed up with artificial turf has significantly reduced my water bill.



**Above:** Plants that require lots of water are placed in pots and window boxes.

## How-to avoid food waste



- Make an inventory of food you have in the fridge and pantry, and only replenish what you need.
  - Store food properly, e.g. meat in its compartment and milk at the back of the fridge.
  - Use all parts of vegetables, including leaves. Compost what cannot be used for return back to the soil.
    - Find recipes to use left-overs, like using overripe bananas for banana bread or stale bread for croutons etc.
- When in abundance, preserve fruit and vegetables for rainy days.
- If all else fails, compost. (I use the Bokashi way of recycling food waste, and it keeps pests away from my kitchen and garden. For more information please visit: ([www.earthprobiotic.com](http://www.earthprobiotic.com)).

## Go green this festive season

It is very impressive that the DFFE community is healthy and active. A lot of colleagues are regulars at trail, hiking and road races. The following green tips goes to all athletic enthusiasts:

- Please remember to run green, always. Never leave your footprints on roads, mountains and trails, lest they end up in our rivers, streams and ultimately to the sea.
- When offered refreshments in plastic sachets, dispose of them properly into waste bins provided along the running route. If you miss a waste bin hang on to the plastic sachets until the next refreshment station.
- Alternatively, carry your own container to fill up tap water and drinks that are provided.
- Be exemplary, pick up waste left by fellow runners, who are less environment conscious.



### About the contributor: Yvonne Mashishi

Yvonne Mashishi is the Deputy Director: Internal Communications and Events, within the Directorate Corporate Communications. In life and literally she lives by the moto: "Don't wait for someone to bring you flowers. Plant your own garden and decorate your own soul".

# The climate pressure is getting worse

No time to waste as life as we know it begins to change irrevocably

As we all know and hear about constantly, climate change is a threat to humanity's wellbeing and the health of our planet. Any further delay in concerted global action will miss the brief, rapidly closing window to secure a liveable future. Now, more than ever, we need to gear up and take a firm stand against climate change. Though it might be a global phenomenon, the impact is experienced locally where people's lives and livelihoods are directly affected.

Communities around the Western Cape and KwaZulu-Natal have in recent months, experienced its destructive force first-hand with floods and severe storms, bringing home to all of us that climate change-related disasters are now part of our daily lives. Now is not the time to turn a blind eye to this issue. SA's long-term adaptation scenarios and the fifth and sixth assessment reports of the Intergovernmental Panel on Climate Change suggest that by 2100, global warming is projected to reach an average increase of between 3°C and 4°C along the coast and between 6°C and 7°C in the interior. With such temperature increases, life as we know it will change completely. The western part of the country will be much drier and increased evaporation will ensure a decrease in water availability.

The eastern part of the country will experience increased rainfall with more storms and other severe weather events. Coastal communities will be at risk from storm surges and rising sea levels. Climate change poses the single most serious threat to Africa's development and prosperity.

As a cross-sectoral challenge, steps need to be taken by all levels of government and society to address the effects of climate change and ensure we are able to adapt to our new climate reality. Some of the steps that the government has taken in the fight against climate change include:

- The National Climate Change Adaptation Strategy, which was approved by cabinet in 2020 and sets out national priorities for building climate resilience to provide guidance to the government, society and the economy. The objectives of this strategy include building climate resilience and adaptive capacity to respond to climate change risk and vulnerability; promoting the integration of climate change adaptation responses into development objectives; improving understanding of climate change effects and capacity to respond to them; and ensuring that resources and systems are in place to enable implementation of climate change responses, including early warning system technology and infrastructure.
- The adoption of the Climate Change Bill which, once passed by parliament, will make it mandatory for all levels of government to develop and implement climate response strategies.
- The Presidential Climate Commission, which seeks to develop a common framework for a just transition to a low carbon and climate-resilient society that leaves no-one behind.



# What can I do about climate change?

## START A HOME GARDEN

YOU CAN PLANT YOUR OWN FRUIT AND VEGGIES IN A HOME GARDEN. YOU WILL BE HELPING THE ENVIRONMENT AND SAVING MONEY AT THE SAME TIME!



## MAKE YOUR OWN COMPOST

PUT LEFTOVER FOOD IN A COMPOST HEAP. YOU CAN USE COMPOST TO GROW NEW PLANTS. MAKING COMPOST ALSO REDUCES SPACE USED FOR LANDFILLS AND CREATES HEALTHY SOIL.



## PLANT INDIGENOUS

PLANT INDIGENOUS SPECIES OF PLANTS. THEY USE LESS WATER AND PROVIDE FOOD AND HABITAT FOR ANIMALS.

## DON'T USE PLASTIC

PLASTIC BAGS HARM ANIMALS AND THE ENVIRONMENT AND TAKE YEARS TO BREAK DOWN. USE YOUR OWN CANVAS BAG INSTEAD OF PLASTIC BAGS.





## REUSE

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# SA Welcomes COP 27 Final outcomes

By Veronica Mahlaba



**Above:** President Cyril Ramaphosa was joined by Minister Barbara Creecy and Minister of International Relations and Cooperation, Ms Naledi Pandor at the South Africa Pavilion whilst attending the Climate Implementation Summit in Sharm El-Sheikh.



**Above:** Ministers of Brazil, South Africa, India and China representing the BASIC Group met on 15 November 2022 at the UNFCCC COP 27 in Sharm el-Sheikh, Egypt. The meeting was chaired by Minister Barbara Creecy.

South Africa has welcomed the key milestone agreed to at Twenty Seventh Session Conference of Parties (COP 27) of the United Nations Framework Convention on Climate Change (UNFCCC) on financial arrangements to address loss and damage due to climate change. COP 27 agreed to set up a Fund on loss and damage. The UNFCCC COP 27 was successfully hosted in Sharm el-Sheikh, Egypt from 06 – 20 November 2022.

This historic decision to establish a Fund to assist developing countries to respond to loss and damage caused by climate change was taken during a Climate Implementation Summit attended by over a hundred world leaders. COP 27 established a Transitional Committee to work on the modalities of this Fund with a view of taking a decision at COP 28 in 2023.

President Cyril Ramaphosa attended the Summit and stressed the need for a fundamental transformation and modernisation of the global financial architecture and reform of the multilateral development banks to make them fit-for-purpose in supporting Sustainable Development and Just Transitions in 2023.

Minister of Forestry, Fisheries and the Environment, Ms Barbara Creecy stated that the final COP 27 outcome reflects the urgency of the climate crisis, and the need to

keep the 1.5-degree temperature target alive during what the International Panel on Climate Change (IPCC) calls the “Critical Decade”, including by providing a clear programme to advance the mitigation agenda from now to 2026.

“This agreement on a four-year work programme, consists of at least two global dialogues, and a review at the end of the four years on whether to continue the programme (after 2026). The Mitigation Work Program will cover the IPCC 2006 key emissions sectors and the IPCC WGIII report. There will be an annual decision by the Conference of the Parties to the Paris Agreement (CMA) for the four years. The agreed text in the all-important Cover Document frames the climate crisis and its solutions in terms of the sustainable development goals and Just Transitions, leaving no one left behind, and the need for broader financial sector reform to achieve these,” Minister Creecy explained.

The call for multilateral consensus on making financial flows consistent with pathways towards low emissions and climate resilient development could open new investment opportunities in Africa for clean energy investments, critical for addressing energy poverty on the continent.



## About the contributor: Veronica Mahlaba

Ms Veronica Mahlaba is a Senior Communication Officer in the Chief Directorate: Communications at the Department of Forestry, Fisheries and the Environment.



# Jacaranda Trees: The invasive species with a difference

By Salome Tsoka

**H**undreds of Jacaranda trees line the streets of Pretoria, transforming the city into "Jacaranda City".

Every year, around late September and early October, Gauteng transforms into a magnificent display of purple from the hundreds of Jacaranda trees lining the streets of Pretoria and Johannesburg. Such is the beauty of these trees that have become a prominent part of these two cities with Pretoria becoming known as "Jacaranda City" because of the thousands of jacaranda trees planted along its streets, parks and gardens.

However, despite their beauty these trees are alien invasive species. These are species that have been introduced into an area, and unfortunately often displace indigenous or useful alien species. Alien invasive species can be plants, animals or microbes and are highly regarded as threats to land resources, water resources, the ecological functioning of natural systems, to health and also to the economy of the country.

In an effort to combat these species, the 2020 regulations on Alien and Invasive Species in terms of the National Environmental Management: Biodiversity Act listed a total of 568 alien species as invasive. Each of these species is categorised into four categories.

**Category 1a:** Invasive species require compulsory control. These need to be removed and destroyed. Any specimens of Category 1a listed species need, by law, to be eradicated from the environment. No permits will be issued.

**Category 1b:** Invasive species require compulsory control. These need to be removed and destroyed. These plants are deemed to have a high invasive potential which could lead to infestations that qualify them to be placed under an invasive species management programme. No permits will be issued.

**Category 2:** Invasive species are regulated by area. A demarcation permit is required to import, possess, grow, breed, move, sell, buy or accept as a gift any plants listed as Category 2 plants. No permits will be issued for plants in this category to exist in riparian zones.

**Category 3:** Invasive species are regulated by activity. An individual plant permit is required to undertake any of the following restricted activities (import, possess, grow, breed, move, sell, buy or accept as a gift) involving a Category 3 species. No permits will be issued for plants in this category to exist in riparian zones.

Introduced to the cities of Pretoria and Johannesburg in the 1800s, the Jacaranda tree scientifically known as the *Jacaranda mimosifolia* is one of these nonproblematic invasive species which have value and fall under category 2. The tree is invasive in parts of the country however, it is not listed as an invasive species in urban areas with large specimens being allowed to thrive within 50 metres of farm homesteads.

People can assist the Department in combating alien invasive species by becoming more informed about the different invasives species and their impact on the environment. They need to also report sightings of these species on invasives so that action can be taken to control the spread of these species. These can be reported on the Environmental Crimes Hotline: 0800 205 005.

Any dreams of having your own purple tree in your yard will, unfortunately, never come true because it is illegal to plant new Jacaranda trees. Even if you were to secure the necessary seeds, you wouldn't be able to plant your tree because the Jacaranda plant is an alien plant that is harmful to the South African environment. So beautiful, yet so contentious: that's the Jacaranda for you.



## About the contributor: Salome Tsoka

Ms Salome Tsoka holds a BA Degree in Journalism from the University of Johannesburg and has been writing for as long as she can remember. She is a Senior Communication Officer in the Chief Directorate: Communications at the Department of Environment, Forestry and Fisheries.

# What is coastal access?

By Tshepiso Monnakgotla



**C**oastal access refers to the rights of all South Africans to access the coast, which includes beaches, coastal waters and estuaries. It entails the right to use and derive a variety of benefits from coastal resources in a manner that does not compromise the ecological integrity of those resources. Coastal access is premised within the National Environmental Management: Integrated Coastal Management Act which provides for mandatory and discretionary roles and responsibilities for all spheres of government, that is the National and Provincial Departments as well as Municipalities.

## Why is it important?

In the past, coastal access was exclusive and marginalised some parts of society from enjoying and benefiting from the coastal space. Within the current constitution and legislative framework, the coast is considered to be a national asset and it is defined as coastal public property to benefit all people. This does not imply that there are no challenges, both from the government side as well as from the side of the communities. Amongst these challenges is the legacy of exclusionary planning practices of the past which are still visible in the South African spatial structure. In particular, there remains an uneven distribution of coastal access infrastructure, whereas some coastal communities are underserved while others are well-off.

## What has the department done to address challenges around the issue?

For starters, the Department has been engaging with landowners, provinces and municipalities to negotiate for inclusive coastal access for all, particularly in areas with proper infrastructure where the landowners would previously deny non-residents to access the coast through those areas. The Department, through its infrastructure programmes, has also prioritised areas that have been starved of development, mainly coastal spaces in rural areas and small coastal towns. Lastly, the Department undertakes an annual coastal access awareness and empowerment programme during the festive season. This programme also focuses on educating the public about their rights and responsibilities with regard to coastal access as well as the risks of marine litter and pollution on the coastal environment.

## What are the future plans?

The Department has commissioned coastal access infrastructure projects, one in each of the four coastal provinces. An urban designer will be appointed to conduct feasibility studies in each respective site, to determine the best possible way to improve coastal access and unlock local economic development in such a way that is equitable, inclusive, and sustainable.







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## ***Did you know?***

*According to the National Environmental Management Integrated Coastal Management (ICM) Act of 2008, everyone has the right to equitable access to the South African beaches and its public amenities.*

*The state in its capacity as the public trustee of all coastal public property, has a duty to manage, protect and enhance it in the interest of the whole community, and for the benefit of present and future generations.*

*In terms of the IMC Act, all people in South Africa have the right of reasonable access to coastal public property and are entitled to use and enjoy coastal public property, provided such use:*

- Does not adversely affect the rights of members of the public to use and enjoy the coastal public property.*
- Does not hinder the State in the performance of its duty to protect the environment.*
- Does not cause an adverse effect to the environment.*

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# Changing our actions to help prevent marine litter this festive season

By Xolani Mnyanga, Dr Yazeed Peterson and Sumaiya Arabi

## What is marine litter and where does it come from?

**M**arine litter, also known as marine debris, is any persistent, manufactured, or processed solid material discarded, disposed of, or abandoned in the marine and coastal environment. Plastics are the most common form of marine litter. Plastic products found at sea range from common domestic material (bags, styrofoam cups, bottles, balloons), industrial products (strapping bands, plastic sheeting, hard hats), and lost or discarded fishing gear (nets, buoys, traps, lines). Thus, they can come from a variety of land and ocean-based sources.



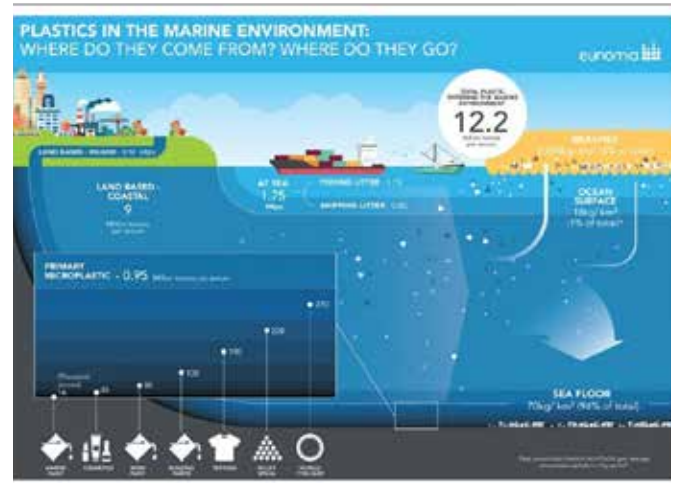
**Image 1:** Plastic clogs Cuttings Beach near Durban. (Photo by Lisa Guastella)

These items can be deliberately discarded or dumped directly into the sea or rivers or on beaches. They can also be introduced indirectly to the sea via rivers, sewage, and stormwater and can be blown from landfill sites by wind and end up in the water, impacting the marine and coastal ecosystem.



**Diagram 1:** Common litter mostly found at beach clean-ups. (by Ocean Conservancy)

Over 80% of the annual input comes from land-based sources. 94% of the plastic that enters the ocean ends up on the sea floor. There is now on average an estimated 70kg of plastic in each square kilometer of the seabed. Barely 1% of marine plastics are found floating at or near the ocean surface, with an average global concentration of less than 1kg/km<sup>2</sup>.



**Diagram 2:** Shows the principal sources of plastic in our oceans, and where this material is deposited. (Source: Jambeck, J.R., Geyer, R., Wilcox, C., et al. 2015)

## What impacts does litter have on the marine and coastal environment?

Marine litter is the cause of increasing global ocean pollution, which in turn impacts marine life and consequently humans as well. Marine litter is an environmental, economic, health, and aesthetic problem. Marine litter negatively impacts marine life in several ways such as:

- Causing damage and death to wildlife such as seals, fish, turtles, and birds through consumption of plastic and entanglement by marine litter such as fishing lines and nets – plastic is mistakenly considered by animals as food and they can get trapped in plastic debris and subsequently die.
- Affecting navigability of boats and vessels.
- The transportation of invasive species between seas by pieces of marine litter.
- Medical and sanitary waste constitutes a health hazard and can seriously injure people.
- Causing damage that entails great economic costs and losses to people, property, and livelihood, as well as posing risks to health and even lives.
- Spoiling, fouling, and destroying the beauty of the sea and the coastal zone.



**Image 2:** An Albatross carcass found packed with plastic trash on Midway Island, where scientists estimate 99 percent of the birds have some plastic in their stomachs. (Photo by Chris Jordan).



**Image 3:** An African Penguin struggling to free his/her bill from a piece of plastic debris. This will inhibit his/her ability to eat, appropriately swim, and even effectively breathe. (Source: Avery, 2018)



**Images 4-10:** Hundreds of wildlife species, including countless individual animals are entangled, strangled, starved, or poisoned by plastic trash and fishing gear worldwide. Among the victims: 1. Antarctic fur seal with a deadly necklace of fish netting; 2. bottlenose dolphin muffled by a plastic six-pack holder; 3. blacktip shark entangled by a fishing line; 4. red-eared slider girdled by a plastic six-pack holder; 5. domestic duck trapped by plastic trash; 6. blue-striped grunt wrapped in a plastic band; and 7. European white stork at a garbage dump wearing a plastic shroud. (Source: Barry Yeoman, June-July 2019 Issue, A plague of Plastic)

### Does plastic and marine litter decompose?

The answer is No: Once in the water, plastic debris never fully biodegrades or decomposes but it breaks down into smaller pieces called microplastics over many years and will still be

floating in the water or washed up on our coast or underwater and continue to impact on the marine ecosystem. The diagram below shows how long it takes for marine litter to go away.



**Diagram 3:** The lifecycle of plastics. (Source: WWF)

### How can you get involved in the prevention and reduction of marine litter?

- Do not litter – put your waste in a bin. Try to separate your waste at home to ensure plastics, glass and general waste go to the correct facilities and are recycled where possible.
- Pick up litter when walking in your neighborhood or beaches and parks. Carry a waste bag with you and do your part while enjoying your walk.
- Teach others about the impacts of marine litter. Share what you know and changes that can be made in our lives that are good for the environment with friends and family. Spread the word!!!
- Try to refuse, reduce, reuse and recycle plastics. The first step is to refuse plastics where possible. This will ultimately prevent the volume of plastic used as well as the issue of correct disposal. Where refusal is not possible, try to reduce the amount of plastic you use, reuse the plastics you can and last option is to recycle.
- When fishing, remember to discard your fishing line and nets responsibly. Throwing them into the ocean results in the material breaking down into smaller pieces over time which can be ingested by marine animals. Fishing lines and nets can also strangle animals, causing them to suffer and die.
- Reduce your use of single-use plastics. These include plastic bags, water bottles, straws, cups, utensils, take-out containers, and any other plastic items that are used once and then discarded. Refuse these items and carry alternatives with you e.g., reusable shopping bags, glass/metal straws
- Participate in beach clean-up activities. You can even take the initiative and organise a river or beach clean-up in your area.
- Avoid products with microbeads. Microbeads are found in some face scrubs, toothpaste, and body washes, and they enter our oceans and waterways through our sewer systems and affect hundreds of marine species. Look for “polythelene” and “polypropylene” on the ingredient labels of your cosmetic products and avoid buying these.
- Be a conscious consumer and make choices with the environment in mind. There are more and more environmentally aware producers and products on the shelves these days which provide consumers with options that are not harmful to the environment.
- Be aware, be active, and make the best choices for the good of the environment. Your actions on land impact the marine environment.

# Government committed to cleaner air

By Veronica Mahlaba and Dimpho Matlanato



**Above:** Former MEC for Economic Development, Environment, Agriculture and Rural Development: Mr Parks Tau; MMC for Environment and Waste Management City of Ekurhuleni: Andre Du Plessis; Director-General for the Department of Forestry, Fisheries and the Environment, Ms Nomfundo Tshabalala and Acting Deputy Director-General for Climate Change and Air Quality Management: Mr Tlou Ramaru with National Air Quality Officer, Dr Patience Gwaze while she explained to the delegates the current state of air in the country and 2022 highlights.



**Above:** The 16th Annual Air Quality Governance Lekgotla had a participation of approximately 200 delegates in physical attendance with no specific limitation to the number of online participants.

areas of the Vaal Triangle, the Highveld and Waterberg-Bojanala region, as well as in our cities and towns," said Deputy Minister Sotyu.

"It requires of government to strengthen our air quality management systems, especially by capacitating the State in the implementation of legislation, the introducing of air pollution reduction programmes, improvement in the management of monitoring infrastructure, authorisation and compliance monitoring." These were the sentiments shared by the Deputy Minister of Forestry, Fisheries and the Environment, Ms Makhotso Sotyu at the 16th Annual Air Quality Governance Lekgotla on 03 - 05 October 2022 in Kempton Park.

Convening under the theme: **Strengthening Air Quality Management Systems**, the Lekgotla emphasises the importance of cooperative governance structures and measurable investments in air quality monitoring infrastructure. All keys to ensuring the air is breathable and not harmful to anyone.

Despite strides in legislative developments, air quality continues to be a national challenge. The historical urban planning and segregations legacy of South Africa means that unhealthy pollution levels are often highest in low-income communities, such as townships, in urban areas and in areas close to large industries.

"Our monitoring stations measurements show that particulate matter, sulphur dioxide and the ozone, continue to be the key criteria pollutants of concern, especially in the three priority

Air pollution levels in some areas are often over the legal thresholds specified in our National Ambient Air Quality Standards. Exceeding these indicates that part of the population is exposed to air quality that is potentially detrimental to their health and well-being, especially within the three declared priority areas and cities.

The Deputy Minister said to improve air quality, air pollution from all sources must be reduced through bankable commitments. "Sources of air pollution are diverse and complex, hence reducing it requires a multitude of interventions and a strong commitment by all stakeholders in government, the private sector and communities," she said.

The former Gauteng MEC for Economic Development, Environment, Agriculture and Rural Development, Mr Parks Tau highlighted that the province has the highest number of industries in the country, attracting a lot of traffic mobility, particularly in the metros, and thus contributing to poor air quality. "GDARD has initiated a programme of compliance and reduction which results in significantly less emissions and could be recognised in line with Section 31 of the National Environmental Management: Air Quality," said Mr Tau.



## About the contributor: Dimpho Matlanato

Dimpho Matlanato is an intern in the Chief Directorate: Communications. She holds a BA Degree in Journalism from the University of Johannesburg.

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# ALPLA to create jobs in recyclable plastic

By Veronica Mahlaba



**Above:** Minister Barbara Creecy with CEO of ALPLA Group Mr Philipp Lehner and Premier of Gauteng, Mr Panyaza Lesufi at the opening of ALPLA's new headquarters for Sub-Saharan Africa in Lanseria. **Image by ALPLA**

The ALPLA Group has commissioned a new state of art plastic packaging and recycling plant in Lanseria, Gauteng which will create and sustain 350 jobs. The project also includes an apprenticeship programme that will train 36 mechatronics and recycling technicians for ALPLA's operations across Southern Africa. Minister of Forestry, Fisheries and the Environment, Ms Barbara Creecy represented President Cyril Ramaphosa to address a gathering at the opening of the plant on 12 October 2022.

Minister Creecy mentioned that many people in South Africa may not be aware that they use ALPLA's products every day. Whether it is while taking a shower in the morning, pouring milk in our porridge, enjoying a cold beverage on a hot summer's day, or doing our laundry.

"ALPLA's packaging products are used in a number of industries. This plant is part of the company's commitment to ensure that these products do not end up in landfills or cause environmental harm, but form part of the growing circular economy. The opening of this plant is another milestone in the relationship between Austria and South Africa," stated Minister Creecy.

The company has invested 50 million US dollars in the construction of the plant.

Minister Creecy further explained that ALPLA is also aware that the country must address the shortage of skills in the

industry. Austria has a history of supporting South Africa's skills development drive. "I am pleased that ALPLA is continuing this tradition through its apprenticeship programme right here in Lanseria. We are also grateful to ALPLA for the support it has given the Youth Employment Service programme, providing work experience opportunities for 50 young people, spending R6.4 million on skills development and an additional R500,000 on learnerships for contractors with disabilities. The education and training of 19 students has also been supported by your company through bursaries," Minister Creecy said.

The plant spreads across an area of 30,000m<sup>2</sup> and includes areas for manufacturing, logistics, and offices. The transfer of production to a single plant is expected to streamline the manufacturing process while providing efficiencies in transport and logistics. "All of Sub-Saharan Africa is on the upswing, the markets have enormous potential. Our investment in South Africa is a clear commitment to the continent. In this way, we are increasing our competitiveness and guaranteeing the long-term regional supply of safe, affordable and sustainable packaging solutions," explained ALPLA CEO: Mr Philipp Lehner.



**Above:** Minister Barbara Creecy at the opening of a plastic recycling production plant by the ALPLA Group in Lanseria. Present with the Minister was the newly elected Premier of Gauteng, Mr Panyaza Lesufi, DFFE's Deputy Director-General: Chemicals and Waste Management, Ms Mamogala Musekene and the CEO of ALPLA Group Mr Philipp Lehner on the Skywalk Tour of the plant. **Image by Veronica Mahlaba**

# Drone technology transforms Green Scorpions' work

By Salome Tsoka



**D**rone technology has transformed a number of sectors around the world. Their ability to conduct surveillance and collect data in areas which can be hard to reach make them an invaluable technological solution currently being used by the Department of Forestry, Fisheries and the Environment's (DFFE) Enforcement Management Inspectorate (EMI), the South African Police Service, the South African National Defence Force as well as organisations involved in biodiversity and conservation.

The Department's EMI's also known as the Green Scorpions have stepped up their monitoring and enforcement efforts by introducing this drone technology in their work. Deputy Director: Enforcement, Ms Marie-Louise Lume said drone technology has led to a number successes including intelligence operations, the moving of suspects as well as the mapping of impacted or polluted areas.

"Drones have helped us save money. Aerial footage used to be obtained by the use of helicopters that were very expensive and a long procurement process. They have also helped with saving time. The speed at which drones capture images cannot be compared to the speed of being on the ground running around to obtain footage from various angles. Drones can survey crime scenes and provide a map and 3D images. They also help with intelligence operations," Ms Lume said.

Over the past couple of months the Green Scorpions have used drones on the Knoflokskraal land invasion, Zeekoewlei

land invasion and the Guernica Mercury plant criminal investigations.

Knoflokskraal near Grabouw in the Western Cape was first illegally occupied in November 2020 by a small Khoisan group who had the intention to establish themselves as a self-sustaining sovereign Khoisan community. This small group has now grown to thousands of people who have illegally occupied this land. This invasion spreads across three farms owned by the Department of Public Works and managed by the DFFE.

"In the Knoflokskraal area, we took a number of images as the area is enormous. These images assisted us to identify the areas where land invasion took place as the image is geo-referenced. It also shows the extent of the invasion for this specific area and the damaged caused," Ms Lume said.

In order to operate drones, the Green Scorpions have to receive Remote Pilot Licence training before operating the drone technology which adheres to Part 101 of the South African Civil Aviation Authority.

The Department is in the process of procuring more drones to assist the Green Scorpions in other fields of investigation such as wildlife crime. The department will also explore drone technology's ability to take air samples for air quality monitoring.

# Government crackdown on lead paint poisoning

By Veronica Mahlaba



**Above:** Minister Barbara Creecy handing over XRF lead-analysing testing equipment to Deputy Minister of Health Dr Sibongiseni Dhlomo.



**Above:** Also in attendance to support was the World Health Organization (WHO) representative to South Africa, Dr Owen Kaluwa.

The Department of Forestry, Fisheries and the Environment (DFFE) together with the Department of Health (DoH) have joined forces to crackdown lead paint poisoning.

The DFFE Minister Barbara Creecy handed over 8 X-Ray Fluorescence (XRF) lead analyser-testing equipment to the Deputy Minister of Health, Dr Sibongiseni Dhlomo on 28 October 2022, as part of government's efforts to monitor and restrict harmful lead-based paint and other products from entering the country at various ports of entry (borders).

Minister Creecy explained that the World Health Organization (WHO) identified lead as one of the ten chemicals of major public health concern, requiring action by Member States to protect health of children, women of productive age, and workers. There are various sources of lead that exists but lead paint has been identified as one of the main sources of lead exposure in communities.

"The WHO states that once lead enters the body, it is distributed to organs such as the brain, kidneys, liver and bones. The body stores lead in the teeth and bones, where it accumulates over time. Lead stored in bone may be released into the blood during pregnancy, thus exposing the foetus. The WHO adds that undernourished children are more susceptible to lead because their bodies absorb more lead if other nutrients, such as calcium or iron, are lacking," Minister Creecy explained.

Deputy Minister of Health, Dr Dhlomo further elaborated that the South African Medical Research Council conducted various research studies since 2007 that provide evidence of the existence of public health exposure to lead in paint from various sources such as: painted children's toys, playground equipment, ceramic crockery, and retail decorative and industrial paint supplied for sale and used.

With new scientific information, WHO policy briefs and guidance on best available and practical approach to a lead paint law, the government has learned that the 2009 Lead in Paint Law is not actually effective in protecting the health of the public. The law allows decorative paint to have a limit of 600 parts per million (ppm) lead, and for industrial

paints to have ppm limit of even higher than 600 ppm if it has precautionary labeling statements. The limit of 600ppm Lead is too high and industrial paints are mostly used in children's playground equipment. Paint formulation consists of many raw materials, which includes pigments. Lead (Pb) compounds are mostly added or found in pigments, to add color, durability, and quick drying effect and corrosiveness properties to the paint.

Dr Dhlomo stated that they have learned that it is not technically feasible to set a 'zero' limit for lead content in paint. "If a manufacturer does not intentionally add lead compounds to its paints and takes into consideration the residual lead content in raw materials, then the total lead content in the paint will be low. Therefore, we have revised our 2009, Lead (Pb) in Paint Regulations by prescribing the 90ppm as a required total lead limit in all types of paint and prescribed other key effective and enforceable requirements. The 90ppm is the recommended limit that is protective for public health and at the same time technically feasible for paint manufacturers to achieve," explained Dr Dhlomo.

The Department has identified specific ports of entry which must be used for the importation of paints products. This will allow for a more streamlined monitoring and enforcement of the limit's requirements on paints manufactured outside the country. The DoH in collaboration with the DFFE is working on equipping these identified Ports of Entry to ensure that there is capacity in place to identify any products that will be imported and are not within the required limits.

The WHO states that once lead enters the body, it is distributed to organs such as the brain, kidneys, liver and bones. The body stores lead in the teeth and bones, where it accumulates over time.



# Stats SA committed to enviro data

By Zibuse Ndlovu



**Above:** Delegates of the Natural Capital Accounting (NCA) Forum.

The Department of Forestry, Fisheries and the Environment Director-General, Ms Nomfundo Tshabalala has lauded Statistics South Africa (Stats SA) for embracing Natural Capital Accounts (NCA) as one of the critical data sets and for its continued commitment to producing environmental statistics.

Speaking during the NCA Forum held at the Stats SA offices in Pretoria, on 18-19 October 2022, Ms Tshabalala said that NCA complemented environmental information already available through existing initiatives such as State of Environment Reporting, which is part of the Department's mandate. "The NCA will give us environmental statistics and indicators to track progress towards South Africa's national, regional and global commitments," she said.

The National Biodiversity Assessment 2018 highlighted that more than 400 000 jobs are linked to biodiversity, drawing in part from Stats SA's data. The biodiversity economy includes wildlife economic activities worth billions, bioprospecting and biotrade, medicinal plants and more. "A considerable percentage of South Africa's tourism industry relies on our natural assets and natural infrastructure. Therefore, NCA will help us to make better choices and decisions for a sustainable South African future," said Ms Tshabalala.

Speaking on the role of the youth in NCA, South African National Biodiversity Institute's Ms Mookho Makayane who studied Geography, majoring in GIS Remote Sensing and Statistics, said NCA needed to grow with the youth. "NCA definitely needs to grow with the youth, we need to make sure that Natural Capital Accounting and all its elements appeals to the youth," said Ms Makayane.

NCA is a growing field of work globally and in South Africa. NCA includes accounting for environmental assets such as water, minerals and energy. The NCA Forum was convened as part of the implementation and monitoring of the National NCA Strategy that was released by Stats SA in June 2021.



**Above:** The Department of Forestry, Fisheries and the Environment Director-General, Ms Nomfundo Tshabalala addressing delegates at the Natural Capital Accounting Forum.



**Above:** SANBI's Ms Mookho Makayane and Mr Luvuyo Kani address the forum on the role of youth in Natural Capital Accounting.



## About the contributor: Zibuse Ndlovu

Zibuse Ndlovu is the Assistant Director in the Communications and Advocacy Chief Directorate at the Department of Forestry, Fisheries and the Environment.

# SA biodiversity, a key driver for economic growth

By Zibuse Ndlovu



**Above:** The Department of Forestry, Fisheries, and the Environment Director-General, Ms Nomfundo Tshabalala delivering a key note address at the launch of the Biodiversity Sector Investment Portal.



**Above:** The launch event under the theme: **Transformative Economic and Financial Interventions for Nature** presented a unique opportunity for domestic and global impact investors to interact with actors in the biodiversity sector and the investment opportunities they represent.

"South Africa's biodiversity is not only a national asset but is also a source of economic prosperity through the sustainable use of a wide variety of plants, and our wildlife. For this reason, our natural environment needs to be taken care of." These were the sentiments by the Department of Forestry, Fisheries, and the Environment (DFFE) Director-General, Ms Nomfundo Tshabalala during the launch of the Biodiversity Sector Investment Portal held at the South African National Biodiversity Institute (SANBI), in Pretoria, on 23 September 2022.

The portal promotes investment opportunities in the biodiversity sector and encourages the development of connections between communities and investor ready and bankable intermediaries. "These connections will ensure that the biodiversity sector is able to contribute to the growth of the economy, and the well-being of society while conserving our country's rich biodiversity," said Ms Tshabalala.

South Africa's biodiversity sector remains substantially untransformed and there is inequality in access to benefits arising from biodiversity and associated ecosystem services. "Transformation of the biodiversity sector is key to creating an inclusive approach in which all levels of society and all key stakeholders can assist in addressing the triple challenges of inequality, poverty and joblessness. This can be achieved

through greater investment in a largely under-developed sector," said Ms Tshabalala.

As part of a broader campaign to promote nature-positive economies and close South Africa's national biodiversity funding requirements, estimated at no less than US\$100 million per annum, through transformative economic and financial interventions for nature, the investment portal is a culmination of ongoing collaborative efforts between the DFFE and its partners at the SANBI; and the United Nations Development Programme's (UNDP) Biodiversity Finance Initiative (BIOFIN).

The SANBI Chief Executive Officer, Mr Shonisani Mundzhedzi said the launch presented a unique opportunity for the stakeholders to talk to biodiversity economy in real terms. "Biodiversity is more than just ecological and related aspects, but beyond that it brings services and opportunities that are economic in nature. This sector employs directly more than 480 000 people, and indirectly in the value chain it's countless numbers, therefore we are expanding that whole space with this initiative led by DFFE," said Mr Mundzhedzi.



## How to enjoy the festive season sustainably

By Dimpho Matlanato

Although a joyous time, the festive season can negatively affect the environment in a number of ways from the purchasing and firing of fireworks to the buying and preparing of the festive season lunches, dinners and braais. The festive season is a time when people relax and look back at all the great and bad things which happened in the year. While it is encouraged to have fun, drink, eat and socialise, people need to be mindful of the environmental impacts of the festive season and how they can play their part in avoiding that. So, the EQ team asked: **what advice would you give to people to keep a clean and healthy environment this festive season?**



**Ms Cheryl Ogle: Financial Management**

This holiday season, try to prepare only what you need and eat only what you need at the time. If you do prepare a little bit more, you can always freeze it and eat it later. There is no need for us to cook too much and end up wasting the food. Food waste is a major issue in the world, especially considering how many people go hungry. I think we should be mindful of that this holiday season and be grateful for what we have. Keeping in mind that other people are not as fortunate as we are.



**Mr Tjaart Kruger: Security and Vetting Services**

I think people should reduce the use of chemicals and properly dispose of waste. Recycle waste products like for example glass, plastic, and paper. It can be recycled instead of it being disposed. Lastly, people should buy locally and eat more plant-based meals.



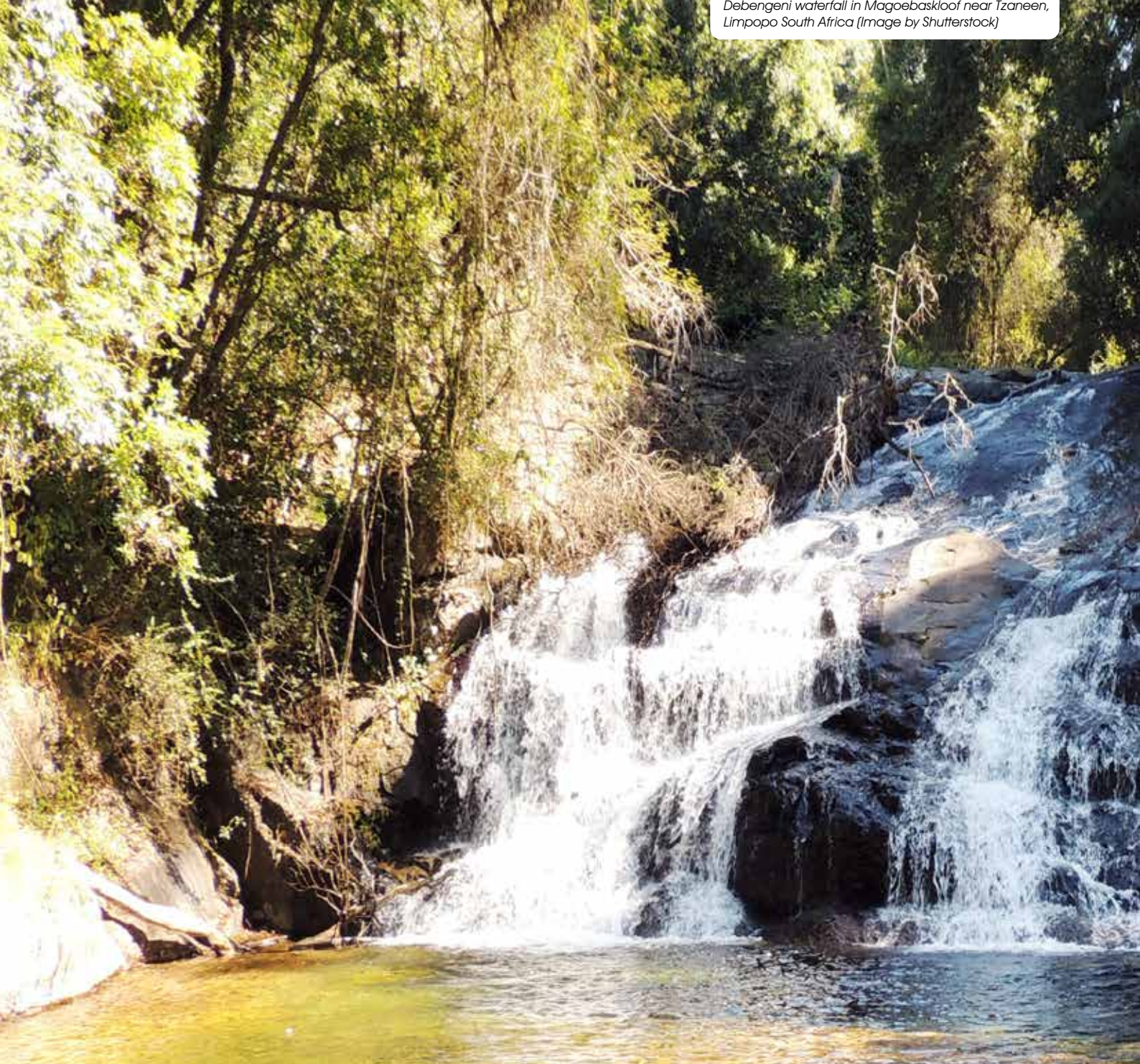
**Mr Mahlatshe Mothata: Budget and Financial Management**

When consuming alcoholic beverages this festive season, avoid littering. It is our responsibility to keep our cities clean and vibrant. Remember littering can contaminate earth, air, and water with poison, chemicals, and bacteria that cause diseases.



**Puleng Mabe: Media Relations**

We are not averse to celebrations, but we cannot celebrate at the cost of the lives of others. This holiday season, let us do better. Firecrackers increase the concentration of dust and pollutants in the air we breathe. While we cannot prohibit people from firing them up, but we can promote green crackers. This is simply an ad-hoc band aid solution to the problem of air pollution, for they only limit emissions.



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