

Environment Quarterly

Kwartaalike Omgewingsverslag • Tikologo ka Kotara • Mupo nga Kotara

**Climate plan to bolster
resilient blue economy**

**Fisheries Summit highlights
sector gaps and opportunities**



forestry, fisheries
& the environment

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



G20 SOUTH
AFRICA
2025



2025



JANUARY

SU	MO	TU	WE	TH	FR	SA
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

FEBRUARY

SU	MO	TU	WE	TH	FR	SA
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

MARCH

SU	MO	TU	WE	TH	FR	SA
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

APRIL

SU	MO	TU	WE	TH	FR	SA
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

MAY

SU	MO	TU	WE	TH	FR	SA
			1	2	3	
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

JUNE

SU	MO	TU	WE	TH	FR	SA
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

JULY

SU	MO	TU	WE	TH	FR	SA
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

AUGUST

SU	MO	TU	WE	TH	FR	SA
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

SEPTEMBER

SU	MO	TU	WE	TH	FR	SA
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

OCTOBER

SU	MO	TU	WE	TH	FR	SA
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

NOVEMBER

SU	MO	TU	WE	TH	FR	SA
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

DECEMBER

SU	MO	TU	WE	TH	FR	SA
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

ENVIRONMENT DAYS

2 February	World Wetlands Day	17 June	World Day to Combat Desertification and Drought
3 March	World Wildlife Day	31 July	World Ranger Day
23 March	World Meteorological Day	12 August	World Elephant Day
22 April	Earth Day	16 September	International Day for the Preservation of the Ozone Layer
12 May	World Migratory Bird Day	22 September	World Rhino Day
22 May	International Day for Biological Diversity	1-30 September	National Arbor Month
5 June	World Environment Day	1-31 October	National Transport Month
8 June	World Oceans Day	21 November	World Fisheries Day



forestry, fisheries
& the environment

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



GOOD GREEN DEEDS

Cover Story

- 4** Climate Plan to Bolster Resilient Blue Economy Features
- 3** Poster: G20 South Africa ECSWG
- 6** DFFE in pictures
- 8** **Poster:** Climate Action Now!
- 9** Deputy Minister Singh hands over plantations
- 10** Minister George visits Gansbaai Penguin Sanctuary
- 11** **Poster:** June is Environment Month
- 12** SA Agulhasl Open Day showcases SA's marine science prowess
- 14** South African World Heritage Sites
- 16** Director-General unveils groundbreaking biodiversity tools
- 18** Minister George lauds SAPS for Abalone arrests
- 19** Fisheries Summit highlights sector gaps and opportunities
- 20** SA advances dimensions for Sustainable Development
- 21** Deputy Minister Swarts urges urgent land restoration
- 22** 17 June is Desertification and Drought Day
- 23** Workshop on Environmental Law Enforcement
- 24** The South African Fisheries Sector
- 26** Durban Zero Waste Project
- 28** Vox Pops: DFFE Staff on what organic products they use in their everyday lives
- 31** **Poster:** Youth Month 2025



About the back cover image:

Skukuza

Skukuza is the Kruger National Park's largest rest camp and administrative headquarters.

It is situated on the southern banks of the Sabie River. The camp is well foliaged and there are some lofty trees along the river's edge. Activities and facilities are diverse, as are the animals and plants found both within the camp and in the surrounding areas.



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



Editorial: Harmony with nature is possible



Dear Valued Stakeholder,

The other day, I was picking up my first grader from school when he answered my how was your day question with a remark on how he wanted to visit a plastic recycling plant. It had been 'recycling week' at school covering different learning areas on at-home recycling.

Naturally, I took him on a virtual tour about recycling plants and the creation of packaging products from one of DFFE's waste partners.

As a waste-fighter myself and this being Environment Month, I am particularly proud of our communities and schools for prioritising environmental education and awareness - organising clean-ups,

separating waste at source and other important recycling efforts.

I believe with intentional, hands-on collective efforts we can make a big enough to address some of the biggest issues of our time such as biodiversity loss, climate change and pollution.

On Pages 4 and 5, we have our cover story delving into the groundbreaking Ministerial launch of the climate change adaptation response plan for South Africa's coastal sector. On pages 6 and 7, our Executive Principals join hands with the communities of South Africa to address issues of biodiversity loss, plantations, Earth Day, small-scale fishing, amongst others. Please read our story on page 10 as Minister George visits the African Penguin and Seabird Sanctuary in Gansbaai, Western Cape, to shine a spotlight on seabird conservation and support the survival of the African Penguin.

On 22 – 27 May, the Minister welcomed about 30 schools aboard the SA Agulhas for an exhilarating opportunity to explore the ice-breaker's polar and ocean research capabilities. Read the story inside.

This year's IDB theme "Harmony with Nature and Sustainable Development" reminds me of the collective responsibility we have towards giving our planet a chance to survive. The responsible actions we take everyday towards ending climate change, biodiversity loss

and pollution. No action is too small to make a difference.

The G20 principles of Equality, Solidarity and Sustainability must transfer into our daily lives and back all our hope with real, tangible actions.

In this issue, we also celebrate South Africa's beautiful natural heritage sites, including my favourite, the Cradle of Humankind, just outside Johannesburg, for its part in evolution of the early modern human.

I earnestly believe that there is always room for nature in living and healing. Last year during the Biodiversity Indaba, I discovered the incredible wonders of Buchu Tea which has taken my personal health goals to a new level!

This month, the EQ team speaks to ordinary citizens about the role of natural products in their own personal lives.

Enjoy the read and do write to me: emathye@dfpe.gov.za.

Take care, see you in July!
Erica

Erica

Meet our team

Head of Communications and Advocacy

Peter Mbelengwa

Editor-in-Chief

Brian Chapole

Editor

Erica Mathye

Editorial Team

Nelisa Khumalo

Letti Mosemi

Tshegofatso Nahlovu

Zibuse Ndlovu

Design & Layout

Colani Hlatshwayo

Sibusisiwe Nxumalo

Lebohang Makhubela

Cover Image

Photography

Lunga Bengthu

Ashraf Hendriks

Lelethu Mamfengu

MRA

Paul Sigutya

Henk Stander

Ground Up

Merle Van Diemel

Somila Wayisa

Contributors

Lelethu Mamfengu

Tshepiso Seabelo

Paul Sigutya

Merle Van Diemel

For more information visit: www.dffe.gov.za or call 086 111 2468



G20 SOUTH
AFRICA
2025

ENVIRONMENT AND CLIMATE SUSTAINABILITY WORKING GROUP

ECSWG MEETING 1	25 – 28 MARCH 2025 (VIRTUAL)
ECSWG MEETING 2	14 – 18 JULY 2025 (KRUGER NATIONAL PARK, MPUMALANGA)
ECSWG MEETING 3	2 – 8 OCTOBER 2025 (CAPE TOWN, WESTERN CAPE)



www.dffe.gov.za/g20ecswg

Solidarity

Equality

Sustainability



**forestry, fisheries
& the environment**

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



South African
NATIONAL PARKS

SANBI

Biodiversity for Life

South African National Biodiversity Institute



Climate Plan to Bolster Resilient Blue Economy

By Zibuse Ndlovu



Above: In commemorating this year's World Environment Day, the Minister of Forestry, Fisheries and the Environment, Dion George, launched South Africa's inaugural Climate Change Coastal Adaptation Response Plan.

“Having a robust Climate Change Coastal Adaptation Response Plan is essential to supporting South Africa’s Operation Phakisa efforts to achieve a sustainable oceans economy.” These were the sentiments expressed by the Minister of Forestry, Fisheries, and the Environment, Dr Dion George. The Minister was speaking during the launch of the Climate Change Coastal Adaptation Response Plan (CARP), held on 05 June 2025, in Pretoria.

The launched groundbreaking national adaptation strategy will build resilience across the country’s coastal areas, ecosystems, and communities in the face of climate change. Designed to respond to increasing risks posed by sea-level rise, extreme weather events, and ongoing development pressures, the Plan is a first-of-its-kind, sector-specific adaptation framework grounded in science, inclusivity, and local relevance.

“This plan emphasises the importance of protecting coastal communities, infrastructure, and natural systems through proactive planning, risk-informed development, and collaborative governance,” Minister George explained.

South Africa remains highly vulnerable to climate change due to its geographic exposure, developmental complexities, and pre-existing

environmental stresses. Rising temperatures, floods, and droughts are threatening food security, economic stability, and ecological integrity. “Our coastline or coastal cities are at the frontline of climate change, facing severe and multifaceted complexities that threaten livelihoods, communities, economies, infrastructure, and ecosystems. These issues require integrated, inclusive, and well-funded strategies that prioritize nature-based solutions, community resilience, and sustainable urban planning to safeguard our coastal assets,” said Minister George.

The CARP initiative is also firmly anchored in the objectives of the White Paper for Sustainable Coastal Development in South Africa (2000), particularly Goal C5, which calls for responsible coastal planning to minimise exposure to natural hazards and support resilient development.



Partnership: This year's World Environment Day was commemorated in partnership with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Council for Scientific and Industrial Research (CSIR), United Nations Environment Programme (UNEP), United Nations Development Programme (UNDP), Ekurhuleni Metropolitan Municipality and Extrupet (private sector).



Recycling: As part of the WED, Minister Dion George led a site visit at the plastic recycling center, Extrupet, in Wadeville, Germiston.

The CARP launch coincided with the World Environment Day, commemorated this year under the theme: **Beat Plastic Pollution**. The Minister highlighted the undeniable benefits that plastics bring - from energy savings to material conservation. However, he acknowledged the growing crisis of plastic pollution. "There is a growing crisis of plastic pollution, which is incrementally threatening both planetary and human well-being," cautioned Minister George.

Speaking at the launch, Head of United Nations Environmental Programme, Southern Africa Region, Dr Meseret Zemedkun, said plastic pollution was a global crisis affecting nature and human health. "Plastics have benefits when used responsibly, by working together, we can secure a future with resilient ecosystems, thriving economies, and a healthier planet," said Dr Zemedkun.

For decades, plastic pollution has infiltrated every corner of the world, contaminating the water we drink, the food we eat, and the air we breathe. The rewards of combating plastic pollution are therefore profound - cleaner oceans and lands,

healthier people and ecosystems, greater climate resilience, and stronger economies.

As South Africa grapples with the interconnected complexities of climate change, urban expansion, and environmental degradation, CARP serves as a unifying roadmap, offering clear direction for protecting coastal assets, enabling equitable adaptation, and unlocking new opportunities in the blue and coastal economy.



Fishery: CARP serves as a unifying roadmap, offering clear direction for protecting coastal assets, enabling equitable adaptation, and unlocking new opportunities in the blue and coastal economy.

DFFE HIGHLIGHTS

Executive Principals at EMI Seminar

The Department of Forestry, Fisheries and the Environment hosted the Environmental Management Inspectorate (EMI) Executive Seminar on Environmental Compliance and Enforcement from 22 to 24 April 2025 at Kirstenbosch Botanical Garden, Cape Town. Minister Dion George and the two Deputy Ministers, Ms Berenice Swarts and Mr Narend Singh attended the event and provided valuable input, enriching discussions throughout the seminar.

The seminar focused on key strategic aspects of environmental compliance and enforcement, particularly within the context of the Environmental Management Inspectorate. The EMI, a network of officials from national, provincial, and local levels of government, is tasked with ensuring compliance with environmental legislation. **By Merle Van Diemel.**



Above: Minister Dion George and Deputy Ministers, Swarts and Singh participating in the Environmental Management Inspectorate Executive Seminar. **Photo by Merle Van Diemel.**



Above: Ms Frances Craigie, Chief Director: Sector Enforcement, DFFE, addressing the gathering at the EMI seminar. **Photo by Merle Van Diemel.**

Minister George Addresses Eskom's Emission Exemption

The Minister of Forestry, Fisheries and the Environment, Dr Dion George, briefed the media on the applications submitted by Eskom in terms of Section 59 of the National Environmental Management Air Quality Act (NEMAQA) for exemption from the minimum emission standards for eight (8) of its coal-fired power stations. The briefing took place on 31 March 2025 at GCIS Media Room Parliament, Cape Town.

During the briefing Minister George highlighted the importance of taking swift action to improve air quality, emphasizing the need for a rapid transition to cleaner energy. "Critical to achieving clean air as swiftly as possible, the rapid implementation of an Independent System Operator (ISO) is essential. An ISO will enhance grid management, prioritise renewable energy dispatch, and ensure a more efficient and transparent transition away from coal, underscoring its pivotal role in meeting our environmental goals," Minister George said. The Minister concluded with a call for collective action: "Together, we must forge a path to a sustainable energy future that honours our constitutional mandate and secures the well-being of all South Africans." **By Merle Van Diemel.**



Above: Minister Dion George addressing the media during the media briefing at Parliament. **Photo by Merle Van Diemel.**



Above: Minister Dion George interviewed by a journalist during the media briefing at Parliament. **Photo by Somila Wayisa.**

African community joins hands for biodiversity loss

The updating of the National and Regional Biodiversity Strategies and Action Plans took place in Cape Town from 19 – 23 May 2025 where Deputy Minister for Forestry, Fisheries and the Environment, Mr Narend Singh delivered the opening remarks.



“On the African continent, our economies and cultures are intimately connected to our natural heritage, and as such, we therefore acutely feel any loss of biodiversity. More than 7,000 species across our continent face extinction. Every hectare of forest cleared, every waterway polluted, and every species lost diminishes not just our ecological wealth, but our economic potential,” said Deputy Minister Singh.
By Tshegofatso Nahlovu.

Above: The Convention on Biological Diversity requires its parties to develop, implement and periodically update their National Biodiversity Strategies and Action Plans (NBSAPs) in alignment with the Kunming-Montreal Global Biodiversity Framework. **Photo by Tshegofatso Nahlovu.**

Minister and Deputy Ministers celebrate Earth Day

Minister Dion George, Deputy Ministers Berenice Swarts and Narend Singh commemorated Earth Day 2025 by planting a tree at Kirstenbosch Botanical Garden in Cape Town on 22 April 2025. The symbolic act reinforced South Africa’s commitment to building a greener, more resilient nation.

“Let us celebrate Earth Day 2025 by renewing our commitment to a greener, more resilient South Africa, a nation that is beautiful, sustainable and thriving,” said Minister Dion George. “We are accelerating the transition to renewable energy while unlocking carbon markets to grow our economy and protect biodiversity,” Minister added. **By Merle Van Diemel.**



Above: Minister Dr Dion George addressing learners during the media briefing at Parliament. **Photo by Merle Van Diemel.**



Above: DFFE Executive Principals together with environmentalists at the tree planting on Earth Day. **Photo by Merle Van Diemel.**



Above: DFFE Executive Principals leading the tree planting on Earth Day. **Photo by Merle Van Diemel.**

Climate Change Action Now!

Climate Change continues to exacerbate the frequency and serverity of natural disasters.

To learn more about Climate Change visit: www.dffe.gov.za



forestry, fisheries
& the environment

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



Deputy Minister Singh hands over plantations

By Lelethu Mamfengu



Above: This handover is part of the Forest Sector Masterplan, a national programme that helps communities take ownership of state-owned plantations.

Deputy Minister of Forestry, Fisheries and the Environment (DFFE), Narend Singh, officially handed over the Summerfield and Rondedraai plantations to local communities in Umzimkhulu, KwaZulu-Natal. The event marks an important milestone in government's efforts to return land and natural resources to the people who live near and rely on them.

This handover is part of the Forest Sector Masterplan, a national programme that helps communities take ownership of state-owned plantations. The goal is to create opportunities for rural development, job creation, and environmental care by giving local people the tools and land to manage forests themselves.

Speaking at the handover ceremony, Deputy Minister Singh said, "This is not just about giving land. It's about giving people a real chance to change their lives. Communities can now grow trees, start businesses, and protect their environment—all while creating jobs."

Through signed Community Forestry Agreements (CFAs), local groups will now manage the plantations with support from the

The department will provide training, seedlings, expert advice, and other resources to help communities manage the plantations in a sustainable and successful way.

Traditional leaders and community members attended the event and shared their excitement

and commitment to using the land wisely. They thanked the government for trusting them with this responsibility and promised to work together to benefit everyone in the area.

The Summerfield and Rondedraai plantations were previously underused, but they now hold great potential. With proper care and planning, the land can provide wood for building, fuel, and other uses, while also creating jobs and protecting nature.

Deputy Minister Singh reminded everyone that government will continue to offer support.

"We will walk this journey with you," he said. "This is the beginning of a new chapter for the people of Umzimkhulu."



Above: Traditional leaders and community members attended the event and shared their excitement and commitment to using the land wisely.



About the contributor: Lelethu Mamfengu

Lelethu Mamfengu is an Intern within Communication Services in the Cape Town office of DFFE.

Minister George visits Gansbaai Penguin Sanctuary

By Paul Sigutya



Above: The Sanctuary provides temporary care to diseased, displaced, injured, oiled and abandoned marine birds with special focus on the critically endangered African penguin.

On 28 May 2025, Minister of Forestry, Fisheries and the Environment Dr Dion George visited the African Penguin and Seabird Sanctuary (APSS) in Gansbaai to shine a spotlight on seabird conservation. The sanctuary plays a vital role in the rescue, rehabilitation, and release of injured seabirds, acting as a “penguin hospital” for birds impacted by fishing pressures, pollution, and climate change.

“This facility does vital work. It ensures that injured penguins are given the best possible care before being returned to the wild,” said Minister George during the visit.

The visit highlighted the department’s ongoing interventions to support the survival of the African penguin. Minister George confirmed that the department had redrawn no-catch boundaries around major penguin colonies, a step aimed at securing the species’ food supply by restricting fishing in critical zones. “This was a long-standing dispute between the department and bird conservation organisations. I’m pleased we were able to reach an out-of-court settlement, which is now a court order. We’re already seeing positive results,” he said.

In addition, the Minister addressed the issue of marine pollution, noting the release of draft regulations to control bunkering, the transfer of oil between ships at sea. “Bunkering leads to noise pollution and oil spills, both of which threaten seabird populations. These regulations are open for public comment and will help us manage these risks more effectively,” he said.

African penguins are not only ecologically important but also economically valuable, drawing thousands of tourists annually. “Protecting these birds is not just about biodiversity, it’s also about sustaining livelihoods,” said Minister George.



Above: Dyer Island Conservation Trust has built a world-class seabird sanctuary in Gansbaai.



About the contributor: Paul Sigutya

Paul Sigutya is an Assistant Director of Internal and External Communication in the Directorate Communication Services CPT in the Department of Forestry, Fisheries and the Environment.

JUNE IS **Environment Month**

**BEAT
PLASTIC
POLLUTION**

#goodgreendeeds

www.dffe.gov.za



Using reusable shopping bags instead of single-use plastic bags is a simple yet impactful way to reduce plastic waste and minimise environmental harm.

Let us #beatplasticpollution



forestry, fisheries
& the environment

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



GOOD GREEN DEEDS



**WORLD
ENVIRONMENT
DAY**

UN
environment
programme

SA Agulhas II Open Day showcases marine science prowess

By Paul Sigutya

The SA Agulhas II Open Day and Demonstration Cruise, held from 22 to 27 May 2025, offered a rare glimpse into South Africa's polar and ocean research capabilities. The event, which began at the Port of Durban and concluded in Cape Town, brought together over 2000 school learners, government leaders, scientists, and members of the public to experience first-hand the vital role of marine science in environmental stewardship.

Instead of beginning with typical formalities, the Open Day kicked off with a high-energy programme that welcomed learners from more than 30 schools across KwaZulu-Natal. Deputy Minister Narend Singh led the schools programme, engaging with

learners during interactive exhibitions and science demonstrations. "It is critical that young people are exposed to the wonders of marine science," said Deputy Minister Singh. "By opening the doors of the SA Agulhas II, we're also opening their minds to future careers in ocean and climate research."

The exhibitions, held in partnership with science councils, universities, conservation NGOs, and research entities such as SAEON, SAIMI, and the KZN Sharks Board, gave learners hands-on exposure to everything from ocean instrumentation and benthic ecosystems to climate change mitigation and polar logistics. Learners also had the opportunity to board the SA Agulhas II, South Africa's only polar research vessel, for guided tours.



Later that evening, the Department hosted a Welcome Cocktail Function aboard the vessel, attended by leaders from the KZN Provincial Government, private sector executives, and representatives of partner institutions. "Events like these help us build strategic alliances for our shared oceans future," said Deputy Minister Narend Singh, who led the evening's programme on behalf of the Department.

Following the Open Day, the SA Agulhas II departed Durban on 24 May with onboard guests including Minister George, members of the Parliamentary Portfolio and Select Committees, journalists, DFFE senior management, and leading marine scientists. The vessel's Demonstration Cruise to Cape Town showcased South Africa's scientific capacity through real-time demonstrations of CTD (Conductivity, Temperature, Depth) operations, plankton sampling, and benthic ecosystem research.

In his remarks during the cruise, Minister George highlighted the global relevance of South Africa's marine science efforts. "Whether it's understanding the impact of climate change on the Southern Ocean or tackling the biosecurity crisis on Marion Island, our scientists are at the frontline of planetary protection," he said.

Minister George also addressed the current efforts to eradicate invasive mice on Marion Island, which have decimated seabird populations. "This is one of the clearest examples of why marine and polar research must be supported, not just for South Africa's benefit, but for the planet," he added.

The Demonstration Cruise concluded in Cape Town on 27 May, having successfully bridged science, education, and public engagement. As Minister George stated, "The SA Agulhas II is more than a vessel, it's a symbol of what South Africa can contribute to the global scientific community."



South African World Heritage Sites

iSimangaliso Wetland Park



Located in the KwaZulu-Natal Province, this breath-taking natural treasure's first inscription was in 1999. The park encompasses a diverse array of ecosystems, including marine, coastal, wetland, estuarine, and terrestrial environments. The centrepiece is Lake St. Lucia, Africa's largest estuarine system, which supports a rich variety of wildlife, such as hippos, crocodiles, pelicans, and flamingos.

Cape Floral Region Protected Areas



The Cape Floral Region received its first inscription in 2004 and later in 2015. The property which is located in the Western and Eastern Cape Provinces extends across national parks, nature reserves, wilderness areas, State forests and mountain catchment areas. These elements add a significant number of endemic species associated with the *Fynbos* vegetation, a fine-leaved Sclerophyll shrubland adapted to both a Mediterranean climate and periodic fires, which is unique to the Cape Floral Region.

The Vredefort Dome



Bearing witness to the world's greatest known single energy release event, The Vredefort Dome in the North West and Free State province is the central uplift of which the world's largest and oldest known meteorite impact structure two billion years ago. It was inscribed in 2005 and had devastating global effects including, according to some scientists, major evolutionary changes.

Robben Island



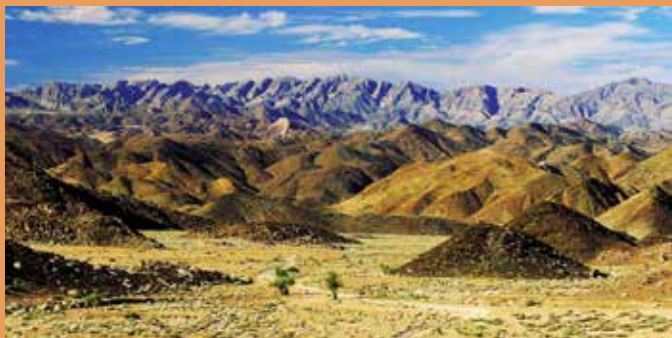
Known for its profound historical and cultural significance, Robben Island is located in the Western Cape Province about 7km from Cape Town. With its inscription in 1999 for its role in South Africa's journey towards democracy, the island was used at various times between the 17th century and the 20th century to incarcerate political prisoners, a hospital for socially unacceptable groups, and as a military base.

Mapungubwe Cultural Landscape



Mapungubwe was the most important inland settlement in the African subcontinent and the cultural landscape contains a wealth of information in archaeological sites that records its development. The site is Located in the Limpopo Province, and it was inscribed in 2003.

Richtersvel Cultural and Botanical Landscape



The Richtersvel Cultural and Botanical landscape was inscribed in 2007 and is Located in the Northern Cape Province. The extensive communal grazed lands are a testimony to land management processes which have ensured the protection of the succulent Karoo vegetation and thus demonstrates a harmonious interaction between people and nature.

The Pleistocene Occupation Sites of South Africa

Diepkloof Rock Shelter, Pinnacle Point Site Complex, and Sibhudu Cave are three widely dispersed archaeological sites located in the Western Cape and KwaZulu-Natal provinces of South Africa. These sites provide the most varied and best-preserved record known of the development of modern human behaviour, reaching back as far as 162,000 years. They also contribute to the understanding of the origin of behaviourally modern humans, their cognitive abilities and cultures, and the climatic transitions that they survived.

Nelson Mandela Legacy Site



The Nelson Mandela Legacy site is a serial property that represents the legacy of the South African struggle for human rights, liberation and reconciliation. It consists of fourteen component parts located around the country, all related to South Africa's political history in the 20th century. The inscription was in 2024.

Maloti - Drakensberg Park

The Maloti - Drakenberg Park is Located in the KwaZulu-Natal province and in Lesotho. It was inscribed in 2000 and in 2013. The site has exceptional natural beauty in its soaring basaltic



buttresses, incisive dramatic cutbacks, and golden sandstone ramparts as well as visually spectacular sculptured arches, caves, cliffs, pillars and rock pools.

Fossil Hominid Sites of South Africa



The Fossil Hominid sites of South Africa include the Cradle of Humankind, Taung Skull and the Makapan Valley which are situated in Gauteng, North West and Limpopo. They are undulating landscapes containing the fossil hominid sites of South Africa comprises dolomitic limestone ridges with rocky outcrops and valley grasslands, wooded along watercourses and in areas of natural springs. Collectively these sites have produced abundant scientific information on the evolution of modern humans over at least the past 3.5 million years. They constitute a vast reserve of scientific information, with enormous potential.

Khomani Cultural Landscape



The Khomani cultural landscape which was inscribed in 2017 can be found in the Northern Cape Province. The landscape includes landmarks of the history, migration, livelihoods, memory and resources of the Khomani and related San people and other communities, past and present, and attests to their adaptive responses and interaction to survive in a desert environment.

Director-General unveils groundbreaking biodiversity tools

By Zibuse Ndlovu



Above: CEO of SANBI, Shonisani Munzhedzi, DG of DFFE, Nomfundo Tshabalala, Deputy Resident Representative at the UNDP South Africa Country Office, Gloria Kiondo and CEO of SANParks, Hapiloe Sello at the National Biodiversity Offset conference held in Midrand, Gauteng.

In a significant move towards enhancing biodiversity conservation, the Department of Forestry, Fisheries and the Environment (DFFE) Director-General, Ms Nomfundo Tshabalala officially launched the National Biodiversity Offset Web Portal, and the SANParks Proactive Biodiversity Offset Scheme during the National Biodiversity Offset Conference held on 22-23 May 2025, in Midrand, Gauteng.

The Web Portal will help facilitate transparent tracking, monitoring, and implementation of biodiversity offsets across the country, and the SANParks Proactive Biodiversity Offset Scheme is designed to unlock new avenues for protected area expansion and streamline development planning through conservation banking. Speaking at the conference, Ms Tshabalala highlighted the importance of the Biodiversity Finance Initiative, which aims to develop innovative financial solutions for the effective management and expansion of protected areas. "This initiative encompasses the establishment of a proactive biodiversity offset scheme and a national

biodiversity offset register, alongside the web portal to meticulously track and monitor offset projects. People, businesses, and entities should follow protocol when dealing with land and the environment to avoid violating the regulations and causing harm to the environment," said Ms Tshabalala.

According to the Convention on Biological Diversity, South Africa's biodiversity is in great danger of extinction, with the National Red List assessments indicating that 10% of South Africa's birds and frogs, 20% of mammals, and 13% of plant species are threatened. In terms of natural ecosystems, the National Spatial Biodiversity Assessment (NSBA) (2004) revealed that 82% of the main river ecosystems are threatened, with 44% critically endangered, 27% endangered, and 11% vulnerable. Of the country's 440 vegetation types, 5% are critically endangered, 12% are endangered and 16% are vulnerable; 3 of the 13 estuary groups are critically endangered, a further 5 are endangered and 2 are vulnerable; 65% of the 34 marine biozones are threatened, with 12% critically endangered, 15% endangered and 38% vulnerable.

"Whilst offsetting plays a significant role in the broader impact mitigation hierarchy, it should still be considered as a last option after all other measures of avoiding, minimising, and restoring biodiversity loss has been exhausted. When executed with precision and adherence to guidelines, Biodiversity offsetting emerges as a potent mechanism to arrest biodiversity loss and foster conservation," said Ms Tshabalala.

The National Biodiversity Offset Conference coincided with the commemoration of International Day for Biodiversity (IDB). The IDB is celebrated each year on May 22 and aims to increase understanding and awareness of biodiversity issues. The theme for the National Biodiversity Offset Conference is linked to the 2025 theme for IDB which is: ***Living in harmony with nature.***

"These tools represent a significant leap forward in mainstreaming biodiversity conservation into development planning. By improving the transparency, efficiency, and impact of biodiversity offsets, we are taking bold steps to secure South Africa's ecological heritage while enabling sustainable economic growth," said the United Nations Development Programme (UNDP) South Africa Resident Representative, Mr Maxwell Gomera. The IDB 2025 campaign emphasises the critical role biodiversity plays in achieving the Sustainable Development Goals (SDGs) and the Kunming-Montreal Global Biodiversity Framework (KMGBF). The campaign calls for accelerated action and

synergy between these universal agendas to ensure a sustainable future for all.

“ These tools represent a significant leap forward in mainstreaming biodiversity conservation into development planning. By improving the transparency, efficiency, and impact of biodiversity offsets



Above: DFFE Director-General, Ms Nomfundo Tshabalala addressing the National Biodiversity Offset Conference.



Above: The conference brought together environmental professionals, government officials, developers, academics, NGOs, and biodiversity specialists to engage in knowledge exchange, capacity building, and policy dialogue.



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..

Minister George lauds SAPS for Abalone arrests



A recent report by the Global Initiative Against Transnational Organised Crime has unveiled a disturbing surge in the illegal trade of South African abalone, with sophisticated smuggling operations threatening the species and robbing the nation of critical revenue. **File Pictures: Independent Newspapers.**

Forestry, Fisheries, and the Environment Minister, Dr Dion George has welcomed the successful operation conducted by the South African Police Service (SAPS) in the Eastern Cape, in collaboration with the East London Dog Unit and the Green Scorpions, which resulted in the arrest of three suspects on May 7, 2025, for illegal possession of abalone.

"I commend the South African Police Service in the Eastern Cape, along with the East London Dog Unit and Green Scorpions, for their diligent efforts in apprehending three suspects," said Minister George. The operation in Gonubie was prompted by intelligence regarding illegal diving activities at German Bay Beach, leading to the confiscation of 693 abalone worth approximately R200,000.

"This successful operation demonstrates the effectiveness of collaborative law enforcement efforts in combating the illegal harvesting and trade of our marine resources. Abalone poaching not only threatens marine ecosystems but also undermines the livelihoods of communities dependent on these resources, and it poses a severe threat to the sustainability of our marine ecosystem," said Minister George.

The Minister stressed the government's firm stance against environmental crimes, declaring the arrest of the three suspects as a clear message that such illegal activities will not be tolerated. "I'm confident in the justice system, and those responsible for these illegal activities will face the full might of the law."

“ I commend the South African Police Service in the Eastern Cape, along with the East London Dog Unit and Green Scorpions, for their diligent efforts in apprehending three suspects.

Minister George said he was encouraged by the swift action taken by SAPS and their partners, as well as their commitment to ongoing surveillance and enforcement. "As the Minister of Forestry, Fisheries, and the Environment, I remain committed to supporting initiatives that safeguard our natural heritage and promote the sustainable use of our marine resources."

"I urge communities to continue working with law enforcement by providing information that can help curb the illegal activities. Together, we can safeguard our environment for future generations," said Minister George.

Why is abalone so valuable?

Though expensive for pearl farming, abalone does have its commercial advantages, as it is the only mollusk which can be used in its entirety. Its shell is used for inlay, buttons, and carvings, its meat is used for food, its guts are used for fishing bait, and of course, its pearls are wondrously valuable gems.

Fisheries Summit highlights sector gaps and opportunities

By Paul Sigutya



Above: Deputy Minister Swarts addressing 72 small-scale fishing co-operatives.



Above: Each of the 72 small-scale fishing co-operatives presented their challenges and needs directly to Deputy Minister Swarts.

On 20 May 2025, the Department of Forestry, Fisheries and the Environment convened the Eastern Cape Small-Scale Fisheries Summit at Mthatha Stadium. The gathering brought together 72 small-scale fishing co-operatives; government officials; development agencies; and local partners in a focused effort to assess the state of the sector and strengthen support mechanisms.

Deputy Minister Bernice Swarts opened the summit with a clear message; the success of South Africa's ocean economy depends on the inclusion of small-scale fishers. The summit was not just symbolic; it was structured to enable direct engagement between co-operatives and those tasked with shaping the policies that affect them.

Participants raised recurring concerns; chief among them were access to markets; delays in permit approvals; insufficient cold storage and processing infrastructure; and poor alignment between national policy and local realities. Although some co-operatives reported receiving boats and equipment through municipal programmes, many highlighted the gap between resource provision and long-term sustainability. Several co-operatives shared frustration that the current regulatory framework still leans heavily toward commercial fishing; offering limited flexibility for small-scale operations. One participant remarked that "co-operatives are working within a system not built for them; it needs to change if we are to grow."

Despite these concerns, the tone of the summit remained constructive; many welcomed the opportunity to voice their challenges in a space

designed to listen and respond. Exhibitors, including SEFA; CIPC; and SARS, offered practical support at on-site help desks; while mentors assigned to co-operatives provided feedback on strengthening compliance and governance.

Deputy Minister Swarts reaffirmed the Department's commitment to the Small-Scale Fisheries Policy; the Marine Living Resources Act; and the co-management models already being tested in regions like Port St. Johns. She noted that partnerships; not parallel efforts; are key to sustainable transformation.

The summit concluded with a shared understanding; small-scale fisheries are essential to food security; livelihoods; and rural development in the Eastern Cape. For many who attended, the day was more than a dialogue, it was a signal that their work matters; and that government is beginning to match policy with presence.



Above: Small-Scale Fisheries Cooperatives from across the province and their mentors.

SA advances dimensions for Sustainable Development

By Tshegofatso Nahlovu



Above: The Department of forestry, Fisheries and the Environment Director-General, Ms Nomfundo Tshabalala facilitated the virtual meeting alongside Deputy Director-General for Climate Change and Air Quality, Mr Maesela Kekana and Chief Director for International Governance and Resource Mobilisation, Mr Stuart Mangold.

"South Africa strives to champion and fast-track action in the pursuit of a just transition to a low-carbon, climate resilient and inclusive society, and lead by example," These were the words of Minister for Forestry, Fisheries and the Environment, Dr Dion George as he set the scene for South Africa's Presidency of the Group of 20 Environment and Climate Sustainability Working Group (G20 ECSWG) during the opening session of the first ECSWG meeting. The meeting which was held virtually on 25 March 2025 provided an opportunity for discussion around the five priorities and deliverables and present the proposed work plan for the G20 ECSWG for 2025.

Themed, Solidarity, Equality and Sustainable, South Africa's Presidency of the G20 has the main objective to advance the environmental dimension of the 2030 Agenda for Sustainable Development and its Sustainable Development Goals through a number of priorities and deliverables. The G20 ECSWG aims to enhance cooperation amongst all G20 members and invitees to address environmental and climate change priorities.

The priority focus areas for South Africa's Presidency of the G20 ECSWG are:

- 1. Biodiversity and Conservation** – Implementation of the Global Biodiversity Framework and the Biodiversity Economy.
- 2. Land Degradation, Desertification and Drought** – Land Degradation Neutrality targets.
- 3. Chemicals and Waste Management** – Sustainable Chemicals Management; Circular Economy; Waste Management; Waste to Energy; Extended Producer Responsibility implementation.

- 4. Climate Change and Air Quality** – Just Transition; Loss and Damage; Adaptation, including Climate Resilient Development; Climate Finance and Air Quality.
- 5. Oceans and Coastal Management** – Marine Spatial Planning – ocean governance; combatting marine plastic pollution.

"The five inter-related priorities of the G20 ECSWG provide us with an opportunity to address multiple complexities within this context, while advancing the achievement of the Sustainable Development Goals. These priorities have been carefully chosen. They build on the successes and key outcomes of the previous G20 ECSWG presidencies, particularly those of Brazil, India and Indonesia, and are also aligned to the objectives contained in the African Union's Agenda 2063, the Africa We Want, the blueprint for the Continent's sustainable development," said Minister George.

Minister George went on to add that the priorities that have been set are viewed as critical enablers to address poverty, create employment and meet other sustainable development goals, thereby contributing towards the global effort to respond to the triple complexities of Climate Change, Pollution and Biodiversity Loss, in line with the overall theme of South Africa's G20 Presidency of solidarity, equality and sustainability.

Three more meetings for the G20 ECSWG will be held throughout the year, with the next meeting set to take place at the Kruger National Park on 14-18 July 2025 where technical papers will be presented and discussed. The 3rd meeting where Final versions of the technical papers and draft outcome document will be discussed will take place in Cape Town on 13 -15 October 2025 followed by a final Ministerial Meeting in Cape Town on 16 – 17 October 2025 where the outcome document and the other deliverables will be adopted.

In closing Minister George emphasised the need for unity. "In conclusion, to advance the priorities that have been set and to deliver concrete outcomes from our working group requires us to work together as a collective during the course of this year. We must act together and with resolve and clarity of purpose in the spirit of Ubuntu, Said Minister George.



Deputy Minister Swarts urges urgent land restoration

By Zibuse Ndlovu and Nelisa Khumalo



Above: Deputy Minister Swarts during an interview with SABC Africa. The main purpose of reviewing and refining the LDN targets is to ensure that the national efforts remain responsive, evidence-based, and aligned with evolving socio-economic and environmental conditions



Above: The workshop was a partnership between the Department of Forestry, Fisheries and the Environment, UNCCD, G20 Global Land Initiative, Land Degradation Neutrality Target Setting Programme, Global Environment Facility, International Union for the Conservation of Nature, Changwon Initiative, Canada and the Germany Federal Ministry for Economic Cooperation and Development.

Deputy Minister for Forestry, Fisheries, and the Environment, Ms Bernice Swarts has called for a swift implementation of the large-scale land restoration programmes and projects including transboundary efforts and initiatives. Deputy Minister Swarts was addressing the Global Land Degradation Neutrality – Integrated Land Use Planning (LDN–ILUP) Inception Workshop held on 13-16 May 2025, in Sandton, Gauteng.

Speaking at the workshop, Deputy Minister Swarts said there was a need to mobilise additional and innovative resources to support Parties in accelerating actions and interventions on the ground to address Desertification, Land Degradation, and Drought (DLDD). “Without substantive financial resources, we will not achieve all the commitments, obligations and targets set under the Convention on Biological Diversity and Climate Change.

While we appreciate the support from the Global Mechanism of the United Nations Convention to Combat Desertification (UNCCD) and all its partners and donors, our view is that adequate financial resources still need to be mobilised to implement the Land Degradation Neutrality (LDN) targets and land restoration related initiatives,” said Deputy Minister Swarts.

Deputy Minister Swarts further acknowledged that South Africa’s G20 Presidency was taking place at a moment in which the world was facing severe environmental challenges, such as climate change and global warming, water scarcity, migration, worsening of drought impacts, floods, wildfires, soil and forest degradation.

“Across the world, billions of people are affected by environmental crisis, underdevelopment, inequality,

poverty, hunger and unemployment. Different reports and statistics also indicate that, annually, 100 million hectares of healthy and productive land is lost or degraded, and this is impacting the lives of 1.3 billion people, we therefore cannot continue developing frameworks and strategies without addressing issues that our vulnerable communities are faced with daily,” cautioned Deputy Minister Swarts.

For the first time in the history of the G20 Presidency, South Africa has made a bold commitment by including DLDD issues among its G20 priorities. This commitment fosters global solidarity in addressing the drivers of DLDD while promoting the mainstreaming of Sustainable Land Management practices and approaches across key sectors.

“The main focus under the G20 priority on DLDD is on the implementation of Land Degradation Neutrality (LDN) targets and its deliverables. A key principle of LDN is that people at grassroot level, whose daily decisions and actions directly impact land and water resources, should be actively involved in implementing measures to address DLDD,” said Deputy Minister Swarts.

Speaking on the importance of Integrated Land Use Planning (LDN – ILUP) and target setting programme of the UNCCD, Dr Baron Joseph Orr, Chief Scientist from the UNCCD Secretariat, stressed the need for vertical and horizontal integration strategies. “I embrace the need for vertical and horizontal integration strategies, and the key thing is that once you fully embrace this approach, you are going to be linking various data sets. You are going to be able to better position cross collaborations,” he said.



United Nations
Convention to Combat
Desertification

17 JUNE IS

DESERTIFICATION AND DROUGHT DAY

#restoretheland
#goodgreendeeds
www.dffe.gov.za



RESTORE THE LAND.
UNLOCK THE OPPORTUNITIES.
DESERTIFICATION AND DROUGHT DAY | 17 JUNE
2025



forestry, fisheries
& the environment

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



G20 SOUTH AFRICA
2025



GOOD GREEN DEEDS



Workshop on Environmental Law Enforcement

By Merle Van Diemel



Above: Mr. Mzondeleli Dhlane, Director: Enforcement Oceans and Coast, DFFE opened the training workshop.



Above: Delegates at the training workshop.

The Department of Forestry, Fisheries and the Environment held The Justice and National Prosecuting Authority Training Workshop in Port Alfred, brought together key stakeholders in environmental law enforcement. With experts from the Department of Forestry, Fisheries, and the Environment (DFFE), the Department of Justice, National Prosecuting Authority, DEDEAT, Department of Mineral Resources and Energy, DALRRD, Department of Water and Sanitation, South African Police Services, Eastern Cape Parks and Tourism Agency, and other regulatory bodies, the event aimed to strengthen legal compliance in coastal and environmental protection.

Day one focused on the Integrated Coastal Management Act and the challenges facing Eastern Cape's coastline. Mr. Mzondeleli Dhlane, Director: Enforcement Oceans and Coast, DFFE opened the workshop, followed by presentations on compliance enforcement. Discussions covered vehicle control in coastal areas, marine protected zones, and indigenous forest conservation.

On the second day, the workshop delved into marine resource laws, mining regulations, and water use compliance. A critical session explored environmental crimes linked to illegal mining. Later, law enforcement and prosecution representatives, including the South African Police Service and the

National Prosecuting Authority, discussed case handling and legal proceedings.

The workshop underscored the necessity of collaboration between law enforcement, environmental agencies, and judiciary. By strengthening knowledge and coordination, participants reaffirmed their commitment to protecting South Africa's natural resources through lawful and effective enforcement. "We have achieved a lot by working together, value in each other's skills, knowledge and actually tapping on it... so thank you colleagues." Mr. Dhlane said in closing the workshop.



Above: The collaborative Justice and National Prosecuting Authority Training Workshop united law enforcement leaders.



About the contributor: Merle Van Diemel

Merle Van Diemel is a Senior Communication Officer: Media Relations and Internal Communications in the Directorate: Communication Services in Cape Town. She holds a master's degree in Public Relations Management from the Cape Peninsula University of Technology.

The South African Fisheries Sector

By Tshegofatso Ndhlovu



Above Hout Bay Harbour is currently undergoing significant repairs and upgrades as part of a larger government-led initiative to revitalize small fishing harbors in the Western Cape. *Photo by Ashraf Hendricks/ GroundUp.*



Above: A cage system for trout farming in Stellenbosch's Jonkershoek Valley. *Photo by Henk Stander.*

The Department of Forestry, Fisheries and the Environment's forestry branch is responsible for ensuring the sustainable use of and orderly access to marine living resources through improved management and regulation and the development of South Africa's fisheries sector. With six sub-programmes namely Monitoring, Control and Surveillance, Fisheries Research and Development, Marine Resources Management, Marine Living Resources Fund and Aquaculture Development and Freshwater Fisheries, the key objectives of the branch include:

- An increased stability in the commercial fishing sector in South Africa.
- Training interventions, mentorship programmes and other development support packages to small-scale fishing cooperatives.
- The finalisation of the Aquaculture Development Bill which will assist in streamlining approval processes, the elimination of unnecessary red tape, unlocking competitiveness of the sector and contribution to food safety and security.
- Ongoing need to address illegal fishing, particularly in the nearshore space.



Some interesting facts about the South African Fisheries Sector:

South Africa's ports attract foreign fishing vessels:

Due to the geographical proximity of South Africa to productive fishing grounds in the Atlantic, Indian and Southern Oceans, its ports are attractive to foreign fishing vessels for refuelling and resupply, closely followed by crew changes and landing of fish and fish products which is monitored and inspected by Monitoring, Control, and Surveillance.



Above: Regulating foreign fishing vessels provides more oversight on the presence of fishing vessels and ensures that all fishing gear is properly stowed to regulate transshipment as well as minimise illegal, unreported and unregulated fishing. **Photo by MRA.**

The Aquaculture Industry in South Africa is fast growing:

Aquaculture is the farming of aquatic organisms, including fish, molluscs, crustaceans, seaweeds, and other invertebrates in a controlled or selected environment for all or part of their lifecycle. The typical means of enhancing production include good animal husbandry selective breeding programmes, feeding, regular stocking, grading and protection from predators.

Necessary understanding of fish is important for anyone trying farm them:

Like any animal, a basic understanding of how fish function is necessary if one is to try to culture them. Fish are different to land animals as they have evolved to live in water, which makes movement, breathing, buoyancy and food or predator detection very different to that encountered on land. Due to the organism's biology, conversion of feed into mass is more efficient than with land animals, when farmed in optimal environmental conditions.

Aquaculture Development Zones are aimed at attracting investment:

The Department of Forestry, Fisheries and the Environment together with other institutions has established and earmarked Aquaculture Development Zones (ADZ) to attract investment into the aquaculture sector in South Africa. An ADZ is an area set aside exclusively to create an investment-ready platform for planned commercial aquaculture operations. ADZ's

minimizes costs of obtaining an Environmental Impact Assessment and bulk infrastructure, while promoting employment and growth of the sector.



Above: Saldanha Bay Aquaculture Development Zone.

The Aquaculture development bill will be the first dedicated national aquaculture legislation:

The development of the Aquaculture Development Bill is the culmination of a prolonged process of collaboration, partnership and cooperation amongst government departments, State-owned entities, aquaculture industry stakeholders, academia and civil society that took a period of over five years. The Bill, amongst other things, provides for the recognition of aquaculture industry associations and the appointment of aquaculture extension officers.

Plenty of fish living in South African freshwater dams are still to be explored:

that although you may be accustomed to seeing fish all the time as a constant fisher in South Africa, but more than half the freshwater dams remain unexplored and their potential for inland fisheries development is not fully understood. So, there is a fair chance that there are so many more species we still aren't familiar with.

Fish contribute to our overall health: Fish are an important source of omega-3 fatty acids which can lower a risk of heart disease. Eating fish, therefore, provides a significant health benefits such as improved brain and heart health among the many benefits. Some virtual signs of a fresh and good quality fish to consider for consumption are a shiny skin with slime on the surface and bright, clear eyes that are not sunken in.

“ I commend the South African
Plenty of fish living in South
African freshwater dams are
still to be explored.

Durban Zero Waste Project

By Tshepiso Seabelo



Collaboration at the Warwick Zero Waste Project. *Photo by Lunga Benghu.*

Every year, 1,6 billion tonnes of food is wasted across the world of which 1,3 billion tonnes is edible, according to the UN's Food and Agricultural Organization (FAO). In South Africa, 10 million tonnes of **food goes to waste every year.**

Based on the Waste Management Strategy 2020, about one-third (33%) of food produced for human consumption is lost or wasted. Approximately half of the 33% loss which is 16.5 take place during harvesting, with processing, packaging, distribution and retail accounting for a further 45% of wasted food, the remaining 5% of food waste is the responsibility of consumers.

Food waste has been identified as one of the problematic waste streams in South Africa due to its **negative environmental impact** and its contribution to **greenhouse gas emissions.**

The Durban Zero Waste Project is being implemented by groundwork, the Durban University of Technology (DUT), and the eThekweni Municipality. The aim of the project is to co-create zero-waste to landfill case models, addressing waste management in the municipality's informal markets and climate change with the aim to replicate successful models across other African cities.

eThekweni Metropolitan municipality derived a benefit from **diverting organic waste** from the

landfill sites through The MOU to set the stage for collaborative efforts from different organisations to effectively manage organic waste to produce nutrient-rich compost between the municipality units Business Support, Markets, Tourism, Agribusiness Unit (BSMTAU), Cleansing and Solid Waste (CSW) Unit, Parks, Recreation, Culture (PRC), the Durban University of Technology (DUT), and non-governmental organisation Groundwork.

Waste-picker integration is also embedded within the project, working in partnership with South African Waste Picker Association (SAWPA) by using the bottom-up approach to reach all levels in understanding the operation by coordinating waste pickers with communities through separation at source.

This project aligns with the principles of zero-waste, promoting inclusive, regenerative, circular economies in urban settings. A cost benefit analysis has been done through the pilot that diverts organic waste from two municipal run markets, the Early Morning Market in Warwick Junction and the Bangladesh Market in Chatsworth as part of zero-waste solutions for eThekweni Metropolitan Municipality. This project is being implemented in 2 of the 9 markets in eThekweni, with plans and research taking place this year in a third market. The model is not business-based; but it is a **savings model** where waste management costs are reduced for the city to improve infrastructure, etc.

The initial pilot at the Durban Botanical Gardens was initiated in 3 phases as follows:

- The initial phase 1 x 240L wheelie bin of waste food was collected per week combined with green and brown garden waste from the botanical garden to create 16 compost heaps (2022),
- Phase 2 scaled up the pilot whereby a 1 ton bakkie was used to collect the food waste once off from the market to create a single last compost windrow (2023),
- 3rd phase collection by a 4 ton truck twice a week to construct 12 windrows along with relevant drainage to capture leachate run off (2024 onwards).

The compost is produced and matured in rotation over a 3-month period with rotational distribution to the recipients, parks, small-scale farmers, schools, etc. Training is offered to educate communities on how to create compost from food waste.

Throughout the phases, research is continually conducted on the composition of each compost heap, technical data on the air temperature and humidity, soil moisture content and temperature etc. The quality of **compost is assessed** through sampling for full nutrients testing and microbial analysis.

This project creates positive benefit to the municipality as it has created **10 employment opportunities** and transferred skills to the employees, reduced GHG emission from compost production and reduced transport costs and reinvestment of savings for all three of the city's Unit that are part of the MOU.

The project aims to gradually scale up operations with the goal to divert all the organic waste generated from the three markets, as well as begin implementation in the remaining six markets over time. This will benefit the municipality financially and contribute positively to the environment in mitigating the climate change challenge and save landfill space.

For any further information sharing contact: Directorate: General Waste Management | Tel: +27 12 399 8794/ 9093/9812 | Email:BSdlamini@dffe.gov.za ASiyengo@dffe.gov.za, LSeabelo@dffe.gov.za



Above: The delivery organics to the compost site and windrow preparations. *Photo by Lunga Benghu.*



Above: Compost Heaps and the compost quality showcasing.



Above: Durban Zero Waste Project Team, CSW and DFFE Officials.



Above: Durban Zero Waste Project Team.



About the contributor: Lorraine Tshepiso Seabelo

Lorraine Tshepiso Seabelo is an Environmental Officer Production in the Directorate: General Waste. She holds a BA Degree in Environmental Management.



DFFE Staff on what organic products they use in their everyday lives

The world as we see it today is unfortunately facing severe environmental challenges. These challenges affect our ecosystems, human health and the sustainability of our planet. All of these challenges are driven by human activities, especially unsustainable production and consumption patterns. It is therefore vital for us as the custodians of this planet to look for healthier ways of living, methods that can be beneficial for us but also for the health of our planet. One of the ways that we can do this is by using natural and organic products in our everyday lives, these products play a crucial role in bioprospecting due to their immense value in discovering and developing novel, effective, and sustainable solutions across various sectors. Some benefits that come from using natural and organic products include the reduction of chemical pollution, Lower carbon footprint, soil health and regeneration as well as the conservation of water and biodiversity.



Ms Thato Nkoana is an intern in the Biodiversity and Conservation branch working under the TOPS and CITIES directorate.

She says shea butter is her daily bread for her dry and eczema prone skin. She uses it for its richness in fatty acids and vitamins which deeply nourish and soften her skin.

DID YOU KNOW?

Shea butter is a fat extracted from the nuts of the shea tree with scientific name, *Vitellaria paradoxa*. The tree is native to West and Central Africa.

It's a popular ingredient in skin and hair care products due to its high concentration of vitamins and fatty acids.



Mr Neo Phologe is an intern under the Biodiversity and Conservation branch. He works for the Directorate: Biodiversity Economy and Sustainable Use.

"I use an organic soap named lavender calm organic soap. It contains saponified oil, distilled water and lavender oil. My facial skin is quite sensitive so I stay away from perfumed products as they usually give me acne and pimples. The soap I use is environmentally friendly and contains biodegradable ingredients and has sustainable packaging," says Mr Phologe.

DID YOU KNOW?

Lavender oil has anti-inflammatory and antimicrobial properties, making it helpful for Minor burns, Insect bites, Acne and Eczema.



Ms Rebhone Mooke is an Office administrator in International Climate Change Relations and Reporting under the Climate change and Air Quality Branch.

Ms Mooke says that she switched to using Jamaican castor oil and Amar oil for her hair after discovering their many benefits. She added that the introduction of these natural products into her hair care routine has since left her healthy!

DID YOU KNOW?

Jamaican Black Castor Oil is a natural oil extracted from roasted castor beans, in Jamaica and the Caribbean. It is well-known for its thick consistency, rich nutrient profile, and wide range of benefits, especially for hair, skin, and overall wellness.



Ms Everlast Khoza is an Internal Audit Intern in the office of the Director General.

"I use a shampoo and conditioner combination from a brand called "Organics hair products", these products contain aloe vera and argon oil and they are helpful when it comes to nourishing my scalp and promoting healthy hair growth," said Ms Khoza.

DID YOU KNOW?

Aloe vera is a succulent plant known by many for its healing, soothing, and moisturizing properties. The gel in the Aloe plant is packed with vitamins, enzymes, amino acids, and antioxidants, making it a popular natural remedy for skin, hair, digestion, and overall wellness.



Mr Amos Zukwa is an Assistant Director in the Directorate: Safety, Health, Environment and Quality Management.

He says that coconut oil is the hero of his daily selfcare routine as he uses it to reduce bacteria in his mouth, therefore preventing bad breath and promoting good gum health. Mr Zukwa also uses coconut oil to maintain his facial hair, he says the oil keeps his beard shiny and prevents breakage.

DID YOU KNOW?

Coconut oil, in its purest cold-pressed form is rich in medium-chain fatty acids like lauric acid, which has antibacterial, antifungal, and anti-inflammatory properties.



Ms Cynthia Matlebjane works in the Directorate: Management Accounting under the Financial Services Management branch.

"I have incorporated quite a few natural products into my everyday life, Fresh Moringa tea is my go-to on the days when I feel fatigued, it aids in rejuvenating my system and helps with concentration as well. Once a week I treat myself to a white egg, plain yogurt, and honey face mask which helps with smoothening my skin. I also use a body scrub made from brown sugar and tissue oil, this really helps with exfoliating my skin," said Ms Matlebjane.

DID YOU KNOW?

Known as the miracle tree, Moringa is one of the most nutrient-rich plants on Earth. The plant has anti-inflammatory properties and contains antioxidants with the ability to lower blood sugar levels and cholesterol while improving brain health and boosting immunity.



Mr Sicelo Mabika works in provisioning and logistics under the Supply Chain chief directorate.

"As a gym fanatic, water, fruits and vegetables are the way to go! Every morning before heading to the gym, I make fruit shakes. They are a quick and easy way to feed the body with a variety of nutrients, especially for my busy lifestyle. Fiber rich fruits such as bananas and berries have benefited my digestive system and improved my gut health," Said Mr Mabika.

DID YOU KNOW?

Fruits and vegetables are vital for a balanced and healthy diet. They are naturally rich in vitamins, minerals, fiber, antioxidants, and water. They are linked to lower risks of chronic diseases, improved body function, and longer lifespan.



Mr Adriaan Dreyer is an Assistant Director for Antarctica & Islands

Free range food products are the way to go at the Dreyer household as Mr Adriaan Dreyer says he buys as much free range food as possible. "Free range animals typically have more space, natural light, and the ability to engage in natural behaviors like foraging or roaming.

They have fewer antibiotics and hormones though this depends on the specific practices of the producer",

says Mr Dreyer. He also added that environmentally friendly free-range farming involves more rotational grazing and less reliance on intensive feedlot operations, which can reduce soil degradation and water pollution.

DID YOU KNOW?

Free-range food products come from animals that are allowed to roam freely outdoors for at least part of the day, rather than being confined in industrial farming systems. Many free-range food products offer better nutritional value, improved animal welfare and support ethical and local farming.

“ dandelion is a powerful natural remedy with a wide range of health benefits such as the support of liver health, aiding digestion and is a natural diuretic.

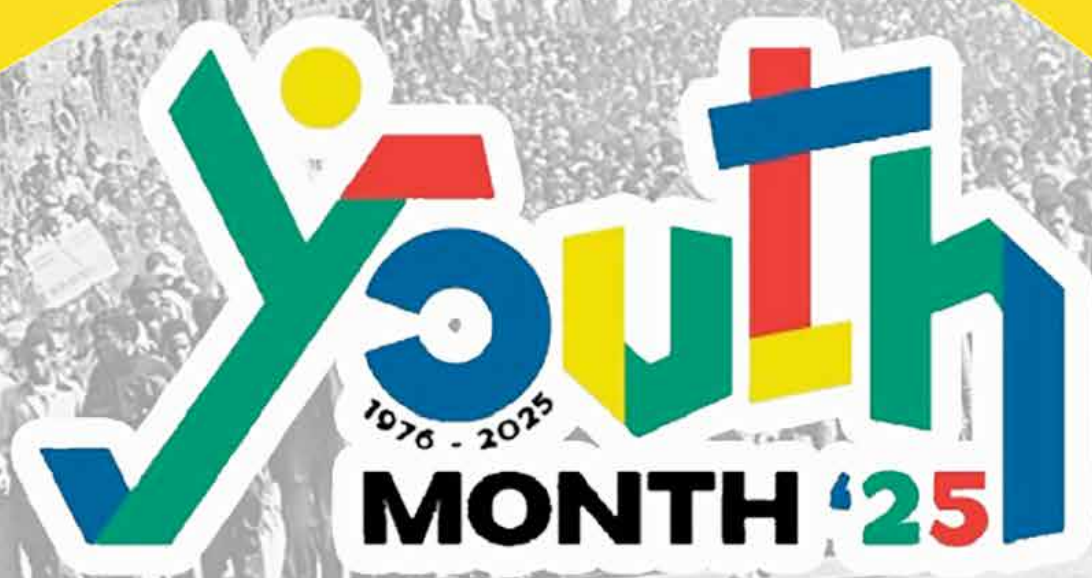


Ms Amanda Dana- Mfikili is a Deputy Director: Control Biodiversity Production Officer at Grade B.

She says that dandelion tea mixed with green tea makes her everyday mornings. She says the dandelion tea is made from the root of a weed plant and the tea is available at health shops. Ms Dana-Mfikili believes that the health of the skin depends on what you eat or drink, consequently she believes that dandelion tea has benefits for her skin.

DID YOU KNOW?

Dandelion tea is made from the roots or leaves of the *Taraxacum officinale* plant, which has been used for centuries in herbal medicine. Though often seen as a weed, dandelion is a powerful natural remedy with a wide range of health benefits such as the support of liver health, aiding digestion and is a natural diuretic.



**"Skills for the changing world –
Empowering youth for meaningful
economic participation."**

JUNE 16 COMMEMORATION 1976 - 2025

"Gear Up For Greatness"



#49thCommemoration #YouthDay2025 #GearUp4Greatness

 **GovernmentZA**

 **GovernmentZA**

 **GovernmentZA**

**Minister of Forestry, Fisheries
and the Environment**

Dr Dion George
Private Bag X447
Pretoria, 0001
Environment House
473 Steve Biko Road
Arcadia
Pretoria

**Deputy Minister Forestry, Fisheries
and the Environment**

Ms Bernice Swarts
Private Bag X447
Pretoria, 0001
Environment House
473 Steve Biko Road
Arcadia
Pretoria

**Deputy Minister Forestry, Fisheries
and the Environment**

Mr Narend Singh
Private Bag X447
Pretoria, 0001
Environment House
473 Steve Biko Road
Arcadia
Pretoria

Call Centre: 086 111 2468 • callcentre@dfre.gov.za
Website: www.dfre.gov.za



Find us:
Department of Forestry, Fisheries
and the Environment



Watch us:
EnvironmentZA



Follow us:
@EnvironmentZA



PLEASE RECYCLE THIS PUBLICATION



For any enquiries or contributions, please contact:
Ms Erica Mathye, Tel: 012 399 8976 email: EMathye@dfre.gov.za