

# Environment Quarterly

Omgewings kwartaalverslag • Ubume bendalo ngekota • Mbango wa kotara



**Minister leads SA  
delegation to COP23**

**President details progress  
on Operation Phakisa**



**environmental affairs**

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA



# 2018 environment CALENDAR



## January

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30	31					

2 February  
22 March  
23 March  
26 March  
22 April  
9 May  
22 May  
5 June  
8 June

World Wetlands Day  
World Water Day  
World Meteorological Day  
Earth Hour  
Earth Day  
World Migratory Bird Day  
International Biodiversity Day  
World Environment Day  
World Oceans' Day

17 June  
18 July  
31 July  
1 September  
18 - 22 September  
16 September  
22 September  
21 November

World Day to Combat Desertification  
Nelson Mandela Day  
World Ranger Day  
National Harbour Day  
National Parks Week  
World Ozone Day  
World Rhino Day  
World Fisheries Day

## Cover story

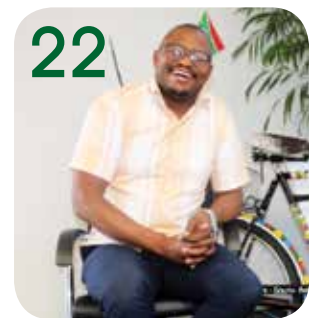
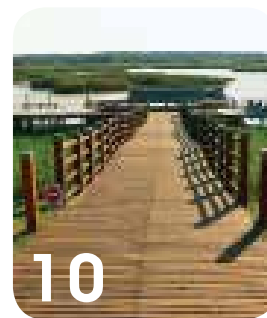
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# Guest Editorial: Minister Molewa

## Enjoy our beaches responsibly this festive season



Dear Valued Stakeholder,

Welcome to the third quarter edition of the Environment Quarterly. The festive season is always an exciting time for holiday makers and we urge all South Africans to be responsible as they exercise their right to equitable access to Coastal Public Property (CPP) this festive season.

South Africa has a coastline just under 3000 km with numerous beaches designated for the public's enjoyment and recreation. Everyone has a right to access these beaches and public amenities, as contained in the National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) (ICM Act).

Government, in its capacity as the public trustee of all coastal public

property, has a duty to manage, protect and enhance the interests of the whole community, so as to ensure that the natural resources within the coastal areas are used in a socially, economically justifiable and ecologically sustainable manner for the benefit of the current and future generations.

CCP belongs to all citizens of South Africa. Access to natural resources including the beach is a constitutional right enshrined in the Bill of Rights of our Constitution. It is thus unlawful, in terms of the ICM Act to implement measures which prevent public access to the beach.

The Act stipulates that any natural person in the Republic has:

- A right of reasonable access to coastal public property; and
- Is entitled to use and enjoy coastal public property, provided such use-
- Does not adversely affect the rights of members of the 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; and
- Does not cause an adverse effect to the environment.

It is therefore unlawful for anyone to implement measures which prevent public access to the beach, not permitted under that Act. It is only under certain strict circumstances that the public's access to the beach may be limited. In addition, under

the Act, no one may charge a fee (directly or indirectly) in order to access coastal public property, without the permission of the Minister responsible for environmental affairs.

It is our responsibility not to litter nor drive on our beaches. We are all duty bound to keep our beaches clean and useable. Let us all work together to ensure that we eliminate all items that could pollute our beach environment as this is important for our health and wellbeing.

The Department of Environmental Affairs (DEA) will be embarking on a coastal awareness campaign that will amongst others educate South Africans about their right to access to coastal public property, and their responsibility to keep such property in a usable condition. The campaign will also focus on the use of Off-Road Vehicles (ORVs) in the coastal area.

Other issues in this edition include the DEA bursary programme that has helped previously disadvantaged young people to realise their dreams and aspirations by coupling their education and work experience. We also celebrate the efforts made by our Green Scorpions in prosecuting and rendering illegal any conduct that harms the environment.

I hope that you find this issue educational and enjoyable. Remember to share it with a colleague or youngsters when you have read it, or recycle it.

**Happy Holidays!**

## Meet our team

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

# South Africa's beaches are for everyone to enjoy!

SA coastline stretches for 2 798 kilometres across four provinces, namely KwaZulu-Natal, Eastern Cape, Western Cape and the Northern Cape. It sustains livelihoods and supports many human activities, which in turn affect the wellbeing of the coast. The land and sea below the high water mark cannot be privately owned, thus the coast should be freely accessible to all South Africans.

The coast is shared by multiple users and beneficiaries for recreational use, seafood processing, aquaculture, fishing, shipping, desalination and conservation.

Because these users and beneficiaries of the same space may impact on each other's Constitutional rights, it is therefore imperative that these spaces be managed in the interest of the public.

## Did you know?

Restricting public access to beaches is a crime punishable by a fine of up to R2 000 000 (two million rands), imprisonment or community service for a period of up to five years, or to both.

Driving on beaches is only allowed to permit holders. Offenders can be fined up to R500 000 (five hundred thousand rands) or up to 2 years imprisonment, or both.

## Happy Holidays

While on your holiday this December  
leave only footprints and keep our coasts clean.

— Dr Edna Molewa, Minister of Environmental Affairs —

Call Centre: 086 111 2468

Website: [www.environment.gov.za](http://www.environment.gov.za)



environmental affairs

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REPUBLIC OF SOUTH AFRICA



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## Minister and EU Ambassadors meet on Environment matters

Minister Edna Molewa met with the Ambassadors of the European Union member states in Pretoria on environment-related matters on 10 October 2017. The meeting builds on the good relations that exist between South Africa and the EU with regard to the development of the Circular Economy, wildlife crime and climate change adaptation and mitigation. In 2016, the Minister and EU Commission member for the Environment, Maritime Affairs and Fisheries, Mr Karmenu Vella, signed a revised Terms of Reference for the Forum on Environment, Climate Change, Sustainable Development and Water.

*Image by Veronica Mahlaba*



## Let's Respond Toolkit Training

The Directorate: Climate Change Mitigation; Sector Plan Implementation led the Climate Change Mitigation Local Government Support Programme which seeks to enhance the implementation of climate change mitigation programmes in the local government space. The Climate Change Mitigation Let's Respond Toolkit Training for the District and Local Municipalities in Mpumalanga province took place on 20 -22 September 2017. The Eastern Cape, Western Cape and KwaZulu-Natal have done the training and in due time the rest of the municipalities across the country will participate.

*Image by Veronica Mahlaba*



## South Africa and Rwanda Environment Ministers bilateral discussions at the Climate Change Conference

Minister of Environmental Affairs, Dr Edna Molewa, held bilateral discussions with the Rwanda Minister of Environment, Mr Vincent Biruta following the launch of the Circular Economy in Africa on the sideline of the 23rd Conference of the Parties to the United Nations Framework Convention on Climate Change in Bonn, Germany, from 6 to 18 November 2017.

*Image by Eleanor Momberg*

## Ministers sign MOU on biodiversity conservation

Minister Edna Molewa and the Minister of Environment and Fisheries of the Republic of Chad, Dr Ahmat Mbodou Mahamat, signed a Memorandum of Understanding in the field of Biodiversity Conservation and Management in Pretoria, on 08 October 2017. The Ministers also signed a Memorandum which will allow for the translocation of six black rhino from South Africa to Chad as part of an initiative to reintroduce rhino to the country.

*Images by Zibuse Ndlovu*



## Twelve days of Service in Knysna

The June fires between Knysna and Plettenberg Bay in the Western Cape led to the largest deployment of firefighting resources and personnel in a single incident in South Africa's history.

The Department of Environmental Affairs Working on Fire programme provided the bulk of the firefighting resources which was made up of 22 teams amounting to 485 firefighters who assembled in the town of Knysna where they provided much needed firefighting resources to local fire authorities. These firefighting resources provided by Working on Fire made up 63% of the total firefighting resources deployed on these fires. It was by far one of the biggest deployment of firefighters and vehicles to a single fire incident in our recent history.

The Knysna fire which lasted twelve days, destroyed more than 600 structures in Knysna and Plettenberg Bay when gale force winds exceeding 90 km/h made firefighting extremely difficult.

*Images by Linton Rensburg*



### Deputy Minister welcomes delegates

The Deputy Minister of Environmental Affairs, Ms Barbara Thomson, co-hosted a cocktail function to welcome delegates to the international climate change talks at the South Africa Pavilion on the sidelines of COP23 on 13 November 2017. The Pavilion was a collaboration between the Department of Environmental Affairs and the National Business Initiative, headed by Joanne Yawitch (pictured).

*Image by Eleanor Momberg*

## DEA-SEED collaboration supports entrepreneurs in Limpopo

The Department of Environmental Affairs' long-standing collaboration with SEED, a global initiative borne out of IUCN, UNEP and UNDP that promotes entrepreneurship for sustainable development and poverty reduction at the local level, while stimulating enabling global policy frameworks, took on a new approach when the SEED-DEA Entrepreneurship Awareness sessions were launched recently. Since then, the collaboration has focussed on the Limpopo Starter Programme, which has seen the training of nine small enterprises. The Department of Environment Affairs' collaboration with SEED deepened with the implementation of the 2nd phase of a two phase project that aims to build the entrepreneurship competencies of Environmental Programme's participants in Limpopo.

*Images by Garth Barnes*



# Significant progress made with Operation Phakisa

By Zibuse Ndlovu



**Above:** The President visited the tugboat building facility at the Southern African Shipyards in the Port of Durban, to witness the work being done, particularly at the training facility, where he interacted with the workers.



**Above:** Southern African Shipyards visited by President Zuma is the largest Shipyard in Southern Africa and provides a complete in house marine solutions.

Operation Phakisa has thus far unlocked investments totalling R24,6 billion with a Government contribution of R15 billion. This was revealed by President Jacob Zuma in his progress report to stakeholders on work being done to implement the Operation Phakisa Oceans Economy fast results priority project in Durban, on 06 October 2017.

Speaking at the event, President Jacob Zuma said the progress achieved would not have been possible without the concerted effort and support of all government partners, especially the private sector.

“Over six thousand five hundred jobs have been created through the Oceans Economy segment of Operation Phakisa.

“The largest contribution to the total investment in the oceans economy was from infrastructure development, mainly in our ports, manufacturing, mainly in boat building, aquaculture and scientific surveys in the oil and

gas sector, having been facilitated through Government incentives. It demonstrates again that if we work together, as a collective, we can achieve much more,” said President Zuma.

From government’s own analysis, the total ocean sectors contribute approximately 4.4% to South Africa’s GDP, with the largest contribution coming from the value chains.

“When I visited the Port of Durban this morning, I was impressed that we are building specialised super tugboats at Southern African Shipyards. This is a 4 billion project. This is a demonstration of South Africa’s capacity and capability to build specialised vessels locally,” said President Zuma.

Seven of the nine tugboats have already been built as part of this project and around five hundred jobs had been created. The South African Navy seeks to build their complex and specialised hydrographic survey vessel to map the sea floor,

an investment of approximately one point eight billion rand.

In the Marine Transport and Manufacturing Focus Area, the Port of Durban has seen the completion of the Outer Dry Dock Caisson to improve safety. The upgraded Durban Dry Dock will be key to attracting ship repair business to Durban. It features the latest state of the art technologies and has provided job opportunities, learnerships and artisanal training at the facility.

In the Offshore Oil and Gas Focus Area, fourteen exploration rights, six production rights and two technical cooperation permits have been issued. The establishment of an Incident Management Organisation for joint Government and industry response drills, in cases of oils spillage or accidents, is far advanced. “We can say with confidence that for the first time, a research cooperation agreement between Government and industry will facilitate joint research and surveys,” said President Zuma.



## About the contributor: Zibuse Ndlovu

Zibuse Ndlovu is the Assistant Director: Editorial Services at the Department of Environmental Affairs, within the Communications Chief Directorate.





**Above:** Since the commencement of Operation Phakisa, TNPA has spent R506m on the upgrade of current Ship Repair Facilities.



**Above:** The president visited the South African shipyards during his Operation Phakisa tour and witnessed the super tugboats that are being built there.

In the Port of Saldanha Bay, the new Sunrise Energy Liquid Petroleum Gas Facility, through a concession issued by the Transnet National Ports Authority, has also commenced operation. The construction of the Offshore Supply Base berth at the Port of Saldanha has been completed as part of the establishment of Saldanha Bay as an offshore oil and gas support hub.

In order to further enhance the maritime sector, the Comprehensive Maritime Transport Policy has recently been finalised.

President Zuma further cautioned that the country's fish resources were becoming more limited and were also being exploited to the maximum. "In this regard, promoting the Aquaculture Focus Area has become extremely crucial. The initial target of twenty four catalyst projects has been exceeded and we now have thirty six aquaculture projects," said President Zuma.

The projects are not only from the marine species but are also from inland freshwater fish. Over fifteen Small Medium and Micro Enterprises had been empowered. The Strategic Environmental Assessment for the aquaculture sector has commenced to facilitate aquaculture development.

Speaking to Leanne Mannas during SABC's Morning Live broadcast, Environmental Affairs Minister, Mrs Edna Molewa said the policy that the government subscribes to is that of sustainable development, sustainable utilisation of natural resources. "Everything has to be at a balance all the time, it has to be that

**“Operation Phakisa is an adaptation of the Big Fast Results methodology that was first applied by the Malaysian Government very successfully in the delivery of its Economic Transformation Programme and the Government Transformation Programme.”**

when we do development it is not at the detriment of the environment.”

“When we started planning in 2010 we looked at the economics aspect of Operation Phakisa, including modelling, and we came up with nine sectors, but on those sectors we selected four that are immediately doable, and those are the ones that we here to showcase today, but we subsequently added others, among those is coastal tourism, which has been added since then, and the expansion of harbours which includes big boat building,” said Minister Molewa.

KwaZulu-Natal MEC for Economic Development, Tourism and Environmental Affairs, Mr Sihle Zikalala said the province has made significant stride on its Operation Phakisa projects. “Durban port is one of the biggest port, but it is not the only port we have in KZN, we have started boat and ship making, we are working on aquaculture we are working on the trainings on the oceans economy, and we are starting to realise the creation of jobs, it has started in a slow pace, but with time it is going to accelerate

and increase,” said MEC Zikalala.

Ms Nomvuyo Mngadi is one of the beneficiaries of Operation Phakisa, she is a Boilermaker and works as an apprentice. “We are metal workers, we build the ships and boats, it is a male dominated space, but being part of the team encourages me to work hard and to express my passion for engineering. I am grateful for the opportunity I have received through Operation Phakisa, it has helped me to experience the workplace,” said Ms Mngadi.

The Operation Phakisa Oceans Economy initiative was launched three years ago as a results-driven approach to development. Durban Port Manager, Mr Moshe Motlohi said they were excited about the progress they have seen so far. “We have seen since the beginning of Operation Phakisa, since the commencement we have created about 200 jobs.

Operation Phakisa is an adaptation of the Big Fast Results methodology that was first applied by the Malaysian Government very successfully in the delivery of its Economic Transformation Programme and the Government Transformation Programme.

It is an innovative, pioneering and inspiring approach that is designed to enable the government to implement its policies and programmes better, faster and more effectively. It is implemented in the ocean economy, in the improvement of clinics, in rolling out information and communication technologies in education as well as in the agriculture, mining and tourism sectors.

# OPERATION PHAKISA

## OCEANS ECONOMY



### What is Operation Phakisa?



Operation Phakisa (meaning hurry up in Sesotho) was launched by President Jacob Zuma in July 2014, deriving the concept from Malaysia's Big Fast Results Methodology. It is a results-driven approach to development, involving various sectors such as business, labour, academia, civil society and government. Operation Phakisa involves setting clear plans and targets, on-going monitoring of progress and making these results public. The methodology consists of eight sequential steps. It focusses on bringing key stakeholders from the public and private sectors, academia as well as civil society organisations together to collaborate in: detailed problem analysis; priority setting; intervention planning; and delivery.

### Why the Oceans Economy matters:

South Africa has a coastline of **3 900 km** including the sub-antarctic islands. We also have an Exclusive Economic Zone (EEZ) of **1.5 million** square km, which is more than double South Africa's landmass of **1.2 million** square km. Our EEZ has also doubled following the extended continental shelf claim.

The Oceans Economy has the potential to contribute up to **R177 billion** to South Africa's **GDP by 2033** and create over one million jobs.

Over **30 000** vessels pass through South Africa's coast on an annual basis with **13 000** vessels docking in our ports, providing opportunities for job creation.

Around **80** oil rigs are estimated to be in the range of Western Cape, offering significant potential for repairs in our ports, as well as land based operational support.

South Africa has potential resources of approximately **9 billion** barrels of oil which is equivalent to 40 years of oil consumption. We also have **60 trillion** cubic feet of gas which is equivalent to 375 years of gas consumption.

The Aquaculture sector has the potential to grow sector revenue to **R3 billion**, and produce **15 000** jobs by **2019**. These are real opportunities for local and rural economic development.

The implementation of Marine Spatial Planning legislation will greatly enhance the orderly and coordinated use of the ocean space to the benefit of all.

Operation Phakisa: Oceans Economy initiative undertakes to protect at least **5%** of our ocean space by creating a network of Marine Protected Areas.

**300 million** tonnes of cargo and **1.2 million** tonnes of liquid fuel are transported along South Africa's coast, providing economic opportunities around our ports.

Coastal and Marine Tourism has the potential to further enhance economic activities and create jobs along the coast.

A coordinated Oceans Economy skills development and capacity building plan will equip potential entrants into the priority sectors of Marine Transport and Manufacturing, Aquaculture, Offshore Oil and Gas and Marine Protection and Governance.

Together moving South Africa's Oceans Economy Forward

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# Minister Edna Molewa leads South African delegation to CoP23

Images by Eleanor Momberg



**Above:** Minister Edna Molewa and the MEC for Environment in the Eastern Cape Mr Sakhumzi Somyo attend Africa Day event at CoP23.



**Above:** South African Deputy Minister of Energy, Ms Thembisile Majola and Deputy Minister of Environmental Affairs, Ms Barbara Thomson and at South Africa's cocktail function.

The Minister of Environmental Affairs, Dr Edna Molewa, arrived in Bonn, Germany, where she led the South African delegation to the 23rd United Nations Framework Convention on Climate Change (UNFCCC) Conference of Parties (CoP23).

The Minister was joined by the Deputy Minister of Environmental Affairs, Mrs Barbara Thomson.

The 23rd Conference of the Parties (COP23) to the United Nations Framework Convention on Climate Change (UNFCCC) started its meeting in Bonn on the 6th November under the Presidency of Fiji, with the High Level Segment scheduled for 15 - 17 November 2016.

The CoP23 was expected to advance work on the implementation guidelines for the Paris Agreement. This guideline has to be concluded in time to enable COP 24 to take key decisions that will enable timeous commencement of post 2020 actions to be implemented.

The CoP23 was also expected to discuss among others, Loss & Damage due to climate change,

finance, technology and capacity building for developing countries.

The South African Team consisting of provincial and local government representatives attended parallel sessions related to climate change.

"In determining the climate action during the pre-2020 period, COP23 is crucial in determining what is required of all Parties to continue the good work that we have been doing to ensure that clear elements of action are agreed to that can be converted into text early in 2018," said Dr Molewa.

Minister Molewa said it is important that there is agreement this year of the contents of, and accounting for, Nationally Determined Contributions submitted by Parties to the UNFCCC and how parties should communicate and report on action related to their adaptation efforts and needs. Dr Molewa said there also needs to be agreement on the Adaptation Fund and how compliance with the Paris Agreement will be monitored.

"South Africa is hopeful that the Bonn Climate Change Conference will not only take stock of what is required to implement the Paris Agreement, but that it will provide assurances

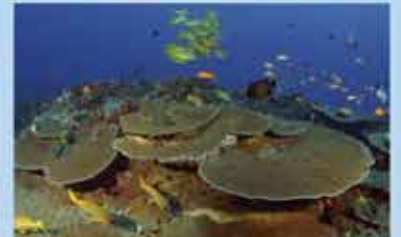
that the political balance of the Paris Agreement is upheld. We are hopeful that all issues of importance to developing countries, such as adaptation and means of implementation, will be addressed in the rule-book to be adopted before 2020," the Minister said.

Parties to COP23 are being urged to develop the governance and institutional arrangements, safeguards and operating modalities of the Adaptation Fund to be adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement, with the view of ensuring that the Fund serves this Agreement; through a clear decision in COP 23 that Adaptation Fund shall serve the Paris Agreement.

Minister Molewa had, during the Pre-COP23 meeting in Fiji, in October, called for the enhancement of institutional arrangements and support, in terms of finance, technology and capacity-building, in order for the Warsaw International Mechanism for Loss and Damage associated with climate change impacts to achieve its mandate and fulfill its functions.

# iSimangaliso – a family destination

By Debbie Cooper



South Africa's busiest holiday season is here and visitors from near and far are revving their engines for the Great Trek eastwards, ready to explore the wonders of the country's most diverse bush and beach destination – the iSimangaliso Wetland Park World Heritage Site. With 332 000ha of marine and terrestrial interlinking ecosystems, the Park offers a bit of magic for all.

It goes without saying that the Park's 220km of golden beaches lapped by the warm Indian Ocean are a universal drawcard. The busy hubs of St Lucia, Sodwana Bay and Kosi Bay are traditionally the most frequented coastal areas. Accommodation resorts like Maphelane in the south, Cape Vidal on the Eastern Shores, Thonga Beach Lodge and Mabibi campsite and Rocktail Beach Camp

offer a measure of relief from the pressure of more freely accessible areas. At the hugely popular Jabula Beach in St Lucia, additional picnic tables will be welcomed by beachgoers.

Popular activities for all ages include boat cruises on the Lake St Lucia Estuary, boat-based whale watching (until late November), turtle tours (November – March), horse riding (St Lucia & False Bay), snorkelling, scuba diving (from 10 years old, at Sodwana Bay), bicycling, guided kayak tours and fishing. The popular Charters Creek day visitor area also reopens in December with new ablutions and improved facilities.

iSimangaliso boasts excellent game

and bird viewing on the Eastern and Western Shores as well as uMkhuze section, which host the 'Big Five' along with numerous other terrestrial animals, and 530 bird species as well.

Offshore, iSimangaliso offers one of the richest warm water coral reef systems at Sodwana Bay. You need not even be a scuba diver to enjoy the variety as shallow, safe snorkelling trips are also available, even for beginners.

Maphelane, the southernmost jewel in iSimangaliso, really comes into its own at this time of year with the simple self-catering log cabins and campsites offering a peaceful destination in the lee of Park's highest



## About the contributor: Debbie Cooper

Debbie Cooper is the Executive Assistant to the CEO of iSimangaliso. She joined the organisation in 2006. Besides assisting the CEO in administrative tasks, her key responsibilities include writing the organisation's newswatches, press releases, articles for external media, social media posts and photography. Her interests include photography, natural science and conservation, skiing and water sports.



**Above:** iSimangaliso Wetland Park (previously known as the Greater St. Lucia Wetland Park) is situated on the east coast of KwaZulu-Natal, South Africa, about 275 kilometres north of Durban. It is South Africa's third-largest protected area, spanning 280 km of coastline, from the Mozambican border in the north to Mapelane south of the Lake St. Lucia estuary, and made up of around 3,280 km<sup>2</sup> of natural ecosystems, managed by the iSimangaliso Authority.

vegetated dune. Aside from the obvious attraction of the beach, the dense coastal forest offers lovely walks and trail running possibilities, including the lovely Sand Dune Trail to the high viewpoint with sweeping views towards St Lucia in the north.

In the centre of the Park, False Bay is starting to re-emerge as a destination as the Lake St Lucia water returns after a long drought, and thanks to the ongoing rehabilitation of the estuarine system by the iSimangaliso Authority. Camping is available on grassy lawns at the lake's edge. An intensive tree-labelling exercise has added great value to the self-guided walks in this section. Trail running and birding are excellent.

Kosi Bay, the Park's northernmost destination, is truly a place out of a time. The recent addition of activity licences in this section means that there are even more ways in which one can enjoy this spectacular region with its sheltered beaches, natural aquarium, fishing and boat cruises. Kosi happens to offer the best opportunity to witness one of nature's miracles: turtles nesting and laying eggs on the beach.

Book a walk with a licensed community guide – contact details are on the iSimangaliso website.

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The newly upgraded hides, entrance gates and day visitor facilities in the uMkhuze section have made visiting this oldest portion of the World Heritage Site even more of a pleasure, with additional disabled access and ablution sites improving the offerings of this 'Big Five' destination. With the addition of more cheetah and lions in the next few weeks, chances are even better of spotting these magnificent predators along with wild dog, hyaena, elephant and leopard.

As always, we suggest the following guidelines and remind you of pertinent rules to ensure you have a happy and safe visit:

- Jet skis, ski boats and paddle skis are permitted to launch from official public sites at Maphelane, St Lucia, Cape Vidal and Sodwana Bay – please check the daily limits and conditions of use with Ezemvelo KZN Wildlife's marine office.
- There are no shark nets and beaches are unprotected, so swimmers are cautioned to be careful to avoid deep swimming, rough conditions and fast moving rip tides.
- Please adhere to Park rules about no alcohol in public areas. Routine checks will be undertaken for the safety and enjoyment of our visitors.
- Any emergency or negative incidents should be immediately reported to the 24-hour iSimangaliso Emergency line 082 797 7944.



# Working Together Towards Sustainable Development Goals

The Sustainable Development Goals fondly known as the SDG's or Global Goals is an extension of the Millennium development goals (MDG's) that reached its lifespan in 2015. There are seventeen (17) SDG's which are a universal call for action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. These goals aim to holistically address sustainable development between now and 2030, while applicable to all countries around the world.

## Goal 1: No poverty

Eradicating poverty in all its forms remains one of the greatest challenges facing humanity. While the number of people living in extreme poverty has dropped, too many are still struggling for the most basic human needs. The SDGs are a bold commitment to end poverty in all forms and dimensions by 2030.



## Goal 2: Zero hunger

Extreme hunger and malnutrition remain a huge barrier to development in many countries. The SDGs aim to end all forms of hunger and malnutrition by 2030, making sure all people – especially children – have access to sufficient and nutritious food all year round.



## Goal 3: Good health and well-being

We have made huge strides in reducing child mortality, improving maternal health and fighting HIV/AIDS, malaria and other diseases. The SDGs make a bold commitment to end the epidemics of AIDS, tuberculosis, malaria and other communicable diseases by 2030. The aim is to achieve universal health coverage, and provide access to safe and affordable medicines and vaccines for all.



## Goal 4: Quality education

Obtaining a quality education is the foundation to improving people's lives and sustainable development. The world has achieved equality in primary education between girls and boys, but few countries have achieved that target at all levels of education.



## Goal 5: Good health and well-being

Ending all forms of discrimination against women and girls is not only a basic human right, but it also crucial to accelerating sustainable development. The SDGs aim to build on these achievements to ensure that there is an end to discrimination against women and girls everywhere.



## Goal 6: Clean water

Water scarcity affects more than 40 percent of people around the world, an alarming figure that is projected to increase with the rise of global temperatures as a result of climate change. Protecting and restoring water-related ecosystems such as forests, mountains, wetlands and rivers is essential if we are to mitigate water scarcity.



## Goal 7: Affordable and clean energy

Ensuring universal access to affordable electricity by 2030 means investing in clean energy sources such as solar, wind and thermal. Adopting cost-effective standards for a wider range of technologies could also reduce the global electricity consumption by buildings and industry by 14 percent. Expanding infrastructure and upgrading technology to provide clean energy in all developing countries is a crucial goal that can both encourage growth and help the environment.



## Goal 8: Decent work and economic growth

In developing countries, the middle class now makes up more than 34 percent of total employment – a number that has almost tripled between 1991 and 2015. The SDGs promote sustained economic growth, higher levels of productivity and technological innovation. Encouraging entrepreneurship and job creation are key to this, as are effective measures to eradicate forced labour, slavery and human trafficking.



## Goal 9: Industry, innovation and infrastructure

Investment in infrastructure and innovation are crucial drivers of economic growth and development. Promoting sustainable industries, and investing in scientific research and innovation, are all important ways to facilitate sustainable development.



## Goal 10: Reduced inequalities

Income inequality is a global problem that requires global solutions. This involves improving the regulation and monitoring of financial markets and institutions, encouraging development assistance and foreign direct investment to regions where the need is greatest.



## Goal 11: Sustainable cities and communities

More than half of the world's population now live in urban areas. Making cities safe and sustainable means ensuring access to safe and affordable housing, and upgrading slum settlements. It also involves investment in public transport, creating green public spaces, and improving urban planning.



## Goal 12: Responsible consumption and production

Achieving economic growth and sustainable development requires that we urgently reduce our ecological footprint by changing the way we produce and consume goods and resources. The efficient management of our shared natural resources, and the way we dispose of toxic waste and pollutants, are important targets to achieve this goal. Encouraging industries, businesses and consumers to recycle and reduce waste is equally important, as is supporting developing countries to move towards more sustainable patterns of consumption by 2030.



## Goal 13: Climate action

There is no country in the world that is not experiencing first-hand the drastic effects of climate change. Effects such as earthquakes, tsunamis, tropical cyclones and flooding amount to hundreds of billions of dollars, in disaster risk management alone. Helping more vulnerable regions, such as land locked countries and island states, adapt to climate change must go hand in hand with efforts to integrate disaster risk measures into national strategies.



## Goal 14: Life below water

The world's oceans – their temperature, chemistry, currents and life – drive global systems that make the Earth habitable for humankind. The SDGs aim to sustainably manage and protect marine and coastal ecosystems from pollution, as well as address the impacts of ocean acidification. Enhancing conservation and the sustainable use of ocean-based resources through international law will also help mitigate some of the challenges facing our oceans.



## Goal 15: Life on land

Human life depends on the earth as much as the ocean for our sustenance and livelihoods. The SDGs aim to conserve and restore the use of terrestrial ecosystems such as forests, wetlands, drylands and mountains by 2020. Urgent action must be taken to reduce the loss of natural habitats and biodiversity which are part of our common heritage.



## Goal 16: Peace, justice and strong institutions

High levels of armed violence and insecurity have a destructive impact on a country's development, affecting economic growth and often resulting in long standing grievances that can last for generations. The SDGs aim to significantly reduce all forms of violence, and work with governments and communities to find lasting solutions to conflict and insecurity.



## Goal 17: Partnerships for the goals

High levels of armed violence and insecurity have a destructive impact on a country's development, affecting economic growth and often resulting in long standing grievances that can last for generations. The SDGs aim to significantly reduce all forms of violence, and work with governments and communities to find lasting solutions to conflict and insecurity.



# Connecting people and nature today

By Marie-Tinka Uys



**Above:** *Protea rubropilosa* or commonly known as the Escarpment Protea.



**Above:** Ms Dimakatso Nonyane and her landscape.

A young South African woman impressed a delegation of officials from the Rhön Region in Germany, with her knowledge and passion for reconciling biodiversity conservation with sustainable development.

Ms Dimakatso Nonyane works as a project manager for the Department of Environmental Affairs' (DEA) Environmental Monitor Programme, as implemented by SANParks Biodiversity Programmes (BSP). She couples her experience of growing up in a rural village with professional

knowledge to teach local and international visitors about some of South Africa's most beautiful scenic landscapes.

## Environmental Education

Standing on top of the historic Mariepskop, Ms Nonyane carefully explains to visitors the unique features of the stunningly scenic landscape below in terms of its historical, biophysical, and socio economic dimensions.

She points towards the east, where the Kruger National Park, buffered by the biggest parcel of privately owned land dedicated to nature conservation in the world, is situated.

"The altitudinal gradient in the geological formations and its associated rainfall ranges from the savannah to this northern tip of the Drakensberg Mountain Ranges contributes to the high biodiversity in this Landscape. We are standing on the water catchment areas for the people and the protected area system in the Lowveld."

The significance of the fact that she is standing to one of the Mariepskop fynbos plants, *Protea rubropilosa* or commonly known as the Escarpment Protea, a very unique endemic plant, whilst looking towards a world renowned protected area system, is not lost to the international visitors.

"In this landscape we have learned



that protected areas are an important part of our socio-ecological system, and that our system comprises of different parts and contributors who are all custodians of the system that need to collaborate.”

Ms Nonyane continued: “It is in this system that the Environmental Monitor Programme deploys 293 Environmental Monitors with 24 partner Host Institutions: 8 Nature Reserves, 8 Non-Government Organisations, 4 Research and 4 Community Based Organisations” Nonyane explains whilst pointing to where the Host Institutions are located in the landscape. She further explains what every group is doing and how all these different parts contributed to the fact that the sum is more than the total of the different parts. Environmental Monitors are deployed to assist with ensuring environmental security, environmental education and research support.

### Dineo’s work in the EPIP

DEA’s Environmental Monitor Programme is located in the Environmental Programmes branch of the Environmental Protection and Infrastructure Programme (EPIP) Directorate. It is an Expanded Public Works Programme that stimulates job creation whilst ensuring that the South African Government’s mandate towards the environment is fulfilled.

The Socio-Economic Impact of the Programme has been documented and Ms Nonyane’s story is also testimony to its positive impacts. “Having been born and bred in the rural village of Violetbank in Mpumalanga, nature has always been a big part of my life. I used to follow my cousins into this mountain

**“Having been born and bred in the rural village of Violetbank in Mpumalanga, nature has always been a big part of my life. I used to follow my cousins into this mountain to herd cattle and on a hot summer’s day, we would have a quick splash in the rivers. The calmness that I found in these surroundings is just priceless”**

to herd cattle and on a hot summer’s day, we would have a quick splash in the rivers. The calmness that I found in these surroundings is just priceless” she says.

She continues: “I was fortunate enough to attend the last two years of my high school in the Acornhoek area where the schools focused on Environmental Education. In Grade 11, I was amongst a chosen group of learners who spent a week in the Timbavati Bush School in the Private Reserve open to Kruger National Park. We stayed in tree houses, something I only saw on TV, and our bathrooms were outside and not fully sheltered. One night, I had a very pleasant encounter with a herd of elephant that was seemingly searching for water. A chill ran down my spine but at the same time a feeling of excitement came upon me.” “At school we learnt about nature and the environment and how our daily activities can impact on the environment. The lessons there and the experience of the wilderness inspired me to Study Nature

Conservation after completing my Matric. I completed my Diploma in 2009 and was unemployed until 2013 when I got an opportunity to join the Kruger to Canyons Biosphere Region coordinated Environmental Monitor programme, based at the Mariepskop Forest”.

Today, Nonyane is still with the Programme but as part of the SANParks BSP Programme Management Team. She is now overseeing the development and application of other Environmental Monitors in the K2C landscape. “Being out in the field gives me great joy and satisfaction and I will always be grateful for being afforded the opportunity to do that which I love”, Nonyane asserted.

“We are very proud of the Environmental Monitor Programme and the monitored results been achieved to date in terms of the data gathered and research papers supported, the monitored Environmental Education interactions as well as the contribution towards the decrease in poaching” Dr John Job, Chair of the Kruger2Canyons Biosphere Region Non Profit Company said. “We are grateful for the vision that the National Department of Environmental Affairs and SANParks BSP had with the enabling of this Programme”. Dr Doris Pokorny, Regional Head of the UNESCO ratified Rhön Biosphere Reserve in Germany concluded: “Our African counterpart, the K2C with its government partners, demonstrated to the world how collaboration in a landscape can be actioned to inspire a positive future by connecting people and nature today. South Africans can be very proud of their Environmental Monitor Programme.”



# Minister Molewa launches the #Khomani Cultural Landscape site

By Nadia Lemmetuis and Madimetja Mogotlane



**Above:** Environmental Affairs Minister, Dr Edna Molewa unveils the #Khomani Cultural Landscape site. She is seen here with Northern Cape Premier, Ms Sylvia Lucas and the newly elected Leader of the San Community, Mr Petrus Vaalbooi.

The #Khomani Cultural Landscape site has become the 9th World Heritage Site in South Africa. Minister Edna Molewa officially launched the landscape in Tweerivieren in the Kgalagadi Transfrontier Park, Northern Cape on 04 October 2017.

The site was inscribed on the UNESCO list in July 2017, which was preceded in 2002 by the historic land settlement agreement between the government, SANParks and the #Khomani San and Mier communities.

The minister also officiated the handover of game to the #Khomani community at Erin Game Ranch. She said the purpose of the launch was to celebrate the recognition of the #Khomani cultural traditions at a global stage and the acknowledgement of the #Khomani community on the successful inscription of the site.

**“The ranch is an important source of income for the community and provides training and capacity building to community members so that they can effectively manage the ranch and bring more tourists to the area.”**

The minister unveiled the plaque at Twee Rivieren Rest Camp in Kgalagadi and gestured a symbolic handover of 11 red hartebeest to the community at the Erin Game Ranch near Mier. Since 2012, as part of the organisation’s Wildlife Economy Programme, SANParks donated 438 game to the #Khomani Community’s game farm. The donations included species like Red hartebees, blue

wildebeest, gemsbok, springbok, ostrich, giraffe, Hartmann zebra and plains zebra.

The ranch is an important source of income for the community and provides training and capacity building to community members so that they can effectively manage the ranch and bring more tourists to the area.

“The World Heritage Treaty is one of the most prestigious Treaties and Programmes of the United Nations as it not only recognises the global importance of the inscribed properties, but also that the sites belong to all the people of the world. This means the protection of a region of South Africa where a community has survived life in the extreme desert landscape of the southern Kalahari through your knowledge of the land,” she said.

## **About the contributors: Nadia Lemmetuis and Madimetja Mogotlane**

Nadia Lemmetuis is the Communications Manager at SANPARKS Arid Region.

Madimetja Mogotlane is a Senior Communications Officer, Internal Communications and Events in the Chief Directorate: Communications at the Department of Environmental Affairs.



**Above:** The newly-elected Leader of the San Community Mr Petrus Vaalboo has vowed to preserve the Nuu language and liberate the San Community.



**Above:** #Khomani Community dancers showcase their traditional dance during the official launch of the #Khomani Cultural Landscape site.

On 08 July 2017 the World Heritage Committee sitting for its 41st session in Krakow, Poland, inscribed the #Khomani Cultural Landscape World Heritage Site as the 9th South African World Heritage Site. The Minister also used the occasion to honour the protector of the San Indigenous knowledge, the late Mr Dawid Kruiper with the development of the park in the Kgalagadi Transfrontier Park.

"It is also a pleasure for me to announce today that in honour of a larger-than-life leader in your community, SANParks has made available R18.1 million for the development of the Dawid Kruiper Rest Camp within the Kgalagadi Transfrontier Park, which was agreed to in 2015 by SANParks and the #Khomani San.

"Development is taking place in the area between the Heritage Park and the Auob River, an area where the community has preferential commercial development rights in

the Kgalagadi Transfrontier Park, the so-called V-zone (Voorkeur zone).

"The rest camp will consist of 10x tourist accommodation units, a reception building and living quarters, a swimming pool, parking and associated infrastructure such as water, electricity and sewer services and internal roads," she said.

Northern Cape Premier, Ms Sylvia Lucas said the request for the farm will empower women and young people in the hospitality environment.

"The request from the #Khomani San for the Farm Erin was for assistance to grow medicinal plants, solar energy, game farming and hospitality. This is aimed at empowering specifically women and young people in the hospitality environment. This also ties in with our Northern Cape Transformation Model, where people who were historically dependent on natural resources such as wildlife were denied the opportunity to

utilise them leaving their livelihoods compromised," she said.

National People and Parks Community Representatives Forum, Mr Laurence Mokgakane said the decision to release game to the #Khomani community was a step in the right direction to allow community participation in strategic decision making.

### Interesting facts:

The landscape which covers an area of 959 100ha in the Dawid Kruiper Local Municipality covers the entire Kalahari Gemsbok National Park and forms part of the Kgalagadi Transfrontier Park.

"The site includes a landscape embedded with indigenous knowledge of semi-arid desert hunting and gathering, medicine and related technologies; spiritual landscape and spaces of cultural practices of healing dances and women's ceremonies, musical and artistic tangible and intangible heritage; and landscape transmitting heritage, technical and environmental information," said the Dr Molewa.

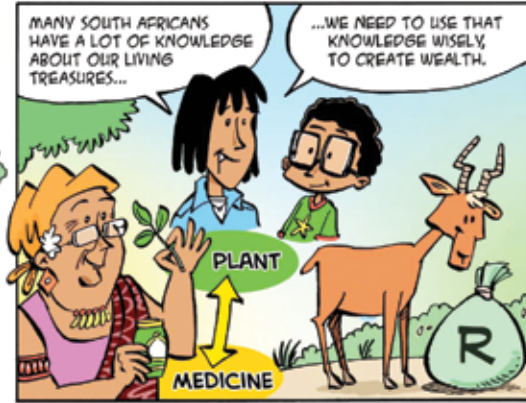
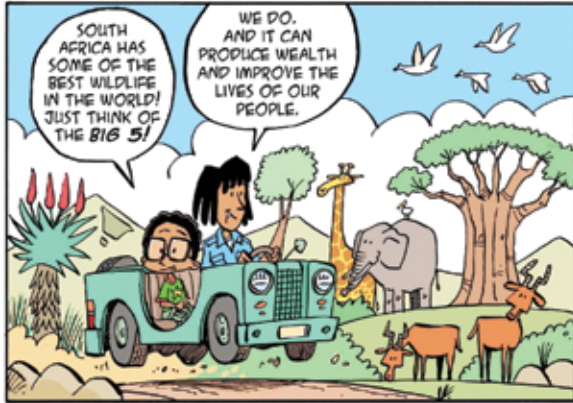
The #Khomani Cultural Landscape joins the likes of the Cape Floral Region Protected Areas, Fossil Hominid Sites of Sterkfontein, Swartkrans, Kromdraai, and Environs, iSimangaliso Wetland Park, Mapungubwe Cultural Landscape, Richtersveld Cultural and Botanical Landscape, Robben Island, uKhahlamba / Drakensberg Park and the Vrededorst Dome.



**Above:** The Kalahari Heritage Park Agreement, its outcome resulted in the transfer of ownership of 50 000 hectares of land within the boundaries of Kgalagadi Transfrontier Park from SANParks to the two communities.

# THE BIODIVERSITY ECONOMY

## BUILDING BUSINESS FROM BIODIVERSITY



THE BIODIVERSITY ECONOMY INCLUDES THE BIOPROSPECTING ECONOMY AND THE WILDLIFE ECONOMY.

### THE BIOPROSPECTING ECONOMY

MANY SOUTH AFRICAN PLANTS AND ANIMALS HAVE USEFUL PROPERTIES.

BIOPROSPECTING IS WHEN SOMEONE RESEARCHES THESE PROPERTIES OR CREATES PRODUCTS FROM THEM TO SELL.

THERE ARE MANY OPPORTUNITIES TO USE OUR UNIQUE BIODIVERSITY TO MAKE A LIVING AND BENEFIT YOUR COMMUNITY.

BAOBAB

ALOE FEROX

RUCHU

BAOBAB FRUIT POWDER

ROOIBOS TEA

ALOE BODY CREAM

RUCHU OIL

TEA

### THE WILDLIFE ECONOMY

THERE ARE OTHER WAYS TOO THAT OUR AMAZING WILDLIFE CAN BE USED TO BENEFIT SOUTH AFRICANS.

HERE ARE JUST SOME EXAMPLES.

GAME RANCHING

HUNTING

ECOTOURISM

WILDLIFE PRODUCTS

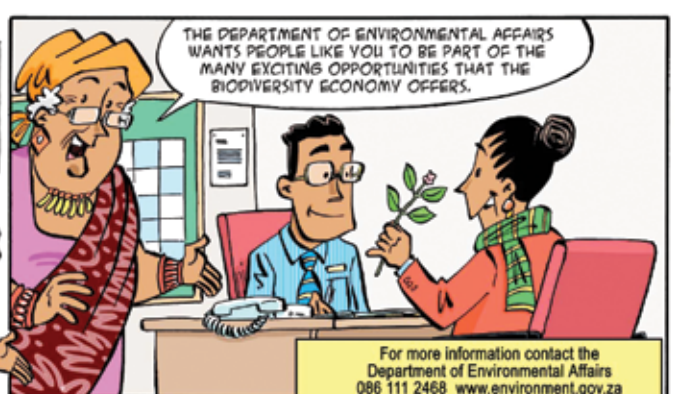
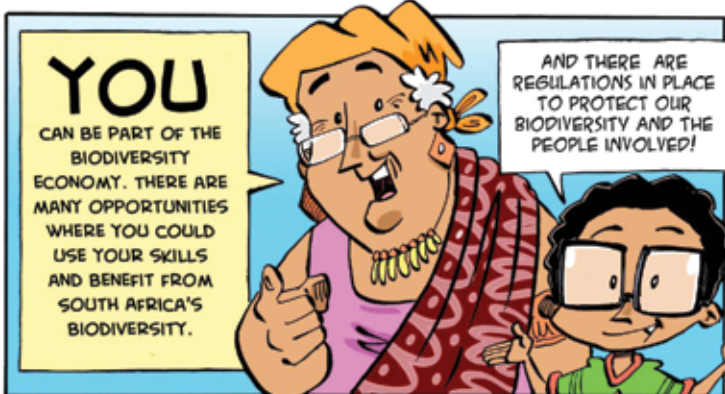
ANTI-POACHING

ENVIRONMENTAL MONITORING

ACTIVITIES THAT PROTECT OUR WILDLIFE

Provinces shown: LIMPOPO, GAUTENG, NORTH WEST, FREE STATE, NORTHERN CAPE, WESTERN CAPE, EASTERN CAPE, KWAZULU-NATAL.

Wildlife examples: Kudu, Leopard, Rhino, Ostrich, Elephant, Giraffe, Antelope, Bird.



environmental affairs  
Department:  
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REPUBLIC OF SOUTH AFRICA

Developing the Biodiversity Economy is a key focus of the Department of Environmental Affairs.  
For more information contact 086 111 2468 or visit [www.environment.gov.za](http://www.environment.gov.za). Environmental Crime hotline - 0800 205 205. The Biodiversity Economy posters series is licensed under the Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-nd/3.0/>.  
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# Students benefit from DEA Bursary Programme

By Nonkululeko Mazibuko



**Above:** DEA bursary holder, Ms Thandekile Khumalo shares how the DEA bursary benefitted her.



**Above:** Mr Chulumanco Myataza is a first year intern, who also benefitted from the DEA bursary programme.

Since the inception of the bursary programme at the Department of Environmental Affairs (DEA) in 2004, an average 30 students have been awarded bursaries to further their studies.

According to a September report by Statistics South Africa, there are 10 million South Africans between the ages of 15 and 24, 54% of whom are unemployed.

Once they have completed their studies, the DEA bursary holders are given the opportunity to serve through the department's internship programme for a maximum of two years. This is done as a way for them to give back to the department for funding their studies. During the internship, the bursars get exposure on the work environment which gives them a chance to put theory into practice and gain valuable experience for future employment.

The DEA internship programme is in line with Department of Public Service and Administration's (DPSA) initiative established in 2002 which seeks to bridge the gap between academic study and competent performance in the workplace. Two bursary recipients, Ms Thandekile Khumalo and Mr Chulumanco Myataza share how the DEA bursary programme has affected their career.

Ms Khumalo is currently serving her final year of the two-year internship at the department. "Receiving the bursary fund from the department led to more opportunities to enhance my career development. I received the bursary in 2013 while I was doing my second year in university and now I had completed my studies in Community and Development Studies at the University of KwaZulu-Natal."

She is currently a Stakeholder Engagement and Public Awareness intern where she deals with the implementation of awareness campaigns, organising the celebration of the Department's events as well as planning and implementing Ministerial Public Participation Programmes.

"Not only did the bursary pay for my tuition fees, it also guaranteed me a job with the department to gain the experience through an internship programme. This bursary represents a support structure that took me through university and into a career path," said Ms Khumalo.

Mr Chulumanco Myataza, is also a DEA bursar who is doing his first year of the two year internship programme. He received his bursary in 2015 until he completed his studies in

Environmental Geosciences at Nelson Mandela Metropolitan University.

"The bursary came as a huge relief for me and my family. I had not been accepted by The National Student Financial Aid Scheme (NSFAS) and only managed to pay the registration fee. When I received the DEA bursary, it lifted a huge weight off my shoulders in terms of tuition fees, as I was working part time to cover my tuition and other expenses," he said.

Mr Myataza is currently working as an intern in the Biodiversity and Conservation Branch under the sub-directorate of Transfrontier Protected Areas, that monitors compliance within transfrontier conservation areas.

## Useful information

DEA's bursary programme opens each year before the end of October. The internship for the year 2018/2019 is advertised between November and December. DEA encourages matriculants and anyone who is interested in pursuing an environment related career to apply for bursaries and internships. For more information and application forms, you can visit the DEA website: [www.environment.gov.za](http://www.environment.gov.za)



### About the contributor: Nonkululeko Mazibuko

Nonkululeko Mazibuko is an Intern: Editorial Services and External Communications for the Department of Environmental Affairs. She holds a BA Journalism from University of Johannesburg.



SAVING THE PLANET IS IN YOUR HANDS

# ENVIRONMENTAL

## JANUARY:

1 New Years Day

With five eco-factories nationally, the Department of Environmental Affairs is working hard to improve the quality of education in schools by providing much-needed desks for the poorer communities of South Africa. The eco-desks are made from wood of invasive alien plants, cleared as part of the Expanded Public Works Programme and Working for Water programme.



## FEBRUARY:

2 Wetlands Day

Teaching children about the environment is the first step towards building a sustainable future. DEA runs the Working for Wetlands Programme which is implemented through the government's Expanded Public Works Programme methodology. The programme focuses on rehabilitation, maintenance and protection interventions to ensure healthy wetlands.



## MARCH:

3 World Wildlife Day  
21 Human Rights Day  
22 World Water Day  
23 Meteorological Day  
30 Good Friday

History has proven that conservation has to be about the protection and the sustainable use of plants and animals for their survival.

Within the ambit of the Biodiversity Economy, South Africa has adopted a path that ensures transformation, economic growth and ecological suitability. This approach facilitates amongst others, the socio-economic upliftment of rural communities through conservation and meaningful ownership of natural resources.



## APRIL:

2 Family Day  
22 Earth Day  
27 Freedom Day

The SA Agulhas II is South Africa's state-of-the-art polar research and supply vessel. The vessel has provided logistical support to research bases in Antarctica, Marion and Gough Islands including rescue missions. Aboard the ship will usually be the expedition team, as well as a host of researchers and scientists from DEA and tertiary institutions who are conducting research in the ocean and on the island.



## MAY:

1 Workers' Day  
12 World Migratory Bird Day  
22 International Biodiversity Day



Nature-based tourism, or rather eco-tourism is recognised as a driver and critical component to the sustainability and efficacy of conservation management. The "I Do Tourism" campaign launched by South African Tourism is moving South Africa forward to make Biodiversity and Sustainable Tourism a reality.

## JUNE:

5 World Environment Day  
8 World Oceans Day  
16 Youth Day  
17 World Day to Combat Desertification

South Africa celebrates Environment Month in June. World Environment Day is the biggest, most globally celebrated day for positive environmental action. Youth Month is also celebrated in June with a specific focus on 16 June which is known as Youth Day. The department is focusing on empowering the youth through environmental careers, internships, bursaries and employment opportunities in the green economy.



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**FOR FURTHER INFORMATION, CONTACT:**

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# CALENDAR 2018

SAVING THE PLANET IS IN YOUR HANDS

## JULY:

- 18 Nelson Mandela Day
- 31 World Ranger Day

On 31 March, South Africa pays tribute to game rangers who dedicate their lives to the protection of South Africa's rich biodiversity. Rangers in certain parts of South Africa face daily hardships in their efforts to protect many of our species, such as the elephant, rhino, cycad and abalone, from unscrupulous poachers.



## AUGUST:

- 9 National Women's Day

National Women's Day is an annual public holiday celebrated on 09 August. The month of August is now dedicated to women and is marked by several government and nongovernment events. The National Environmental Management Act seeks to recognise the vital role of women and youth in environment management and development.



## SEPTEMBER:

- 1 National Arbour Day
- 16 World Ozone Day
- 19 International Coastal Clean-up Day
- 22 World Rhino Day
- 24 Heritage Day

South Africa brought the rhino back from the brink of extinction in the 1960's and today has an estimated 20 000 black and white rhino. The international trade in rhino horn remains prohibited in terms of the Convention on the International Trade in Endangered Species of Wild Fauna and Flora.



## OCTOBER:

- 10-15 National Marine Week

South Africa observes October as Transport Month. With the introduction of the Zero Emission Electric Vehicles, which are also referred to as green cars, the department seeks to ensure that South Africa contributes to the reduction of environmentally harmful gases, by promoting the use of cleaner sources of fuel by the automotive industry. The department also added four new BMW i3's to its fleet of green cars, making it easier for staff to reduce the carbon footprint.



## NOVEMBER:

- 3 National Disability Rights Awareness Day
- 21 World Fisheries Day

Operation Phakisa: Oceans Economy commenced with operational work in October 2014. Overall progress to date includes the unlocking of investments amounting to approximately R17 billion in the Oceans Economy. Over 4 903 jobs have been created in the various sectors.



## DECEMBER:

- 16 Day of Reconciliation
- 17 Public Holiday
- 25 Christmas Day
- 26 Day of Goodwill

South Africa has over 3000 km of beautiful coastlines and some of the most diverse environments in the world. There are many benefits derived from these coastal environments but because of constant development along our coastal environment, it is of utmost importance to educate communities about the impacts of litter on the marine environment. While on your holiday this December leave only footprints and keep our coasts clean.



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## Mr Tlou Ramaru:

### Chief Director for Climate Change Adaptation

By Zibuse Ndlovu



**M**r Tlou Ramaru, is a leader with strong negotiations skills honed by his extensive involvement in international negotiations for both sustainable development and climate change. He believes in selfless leadership, in people who are able to see beyond their individual preference, and who are goal oriented.

As a Chief Director responsible for Climate Change Adaptation, Mr Ramaru is tasked with leading the country's adaptation policy planning and programme implementation, a portfolio that requires someone with ability to coordinate key role players across in the social, economic and environmental sectors, and facilitate establishment of partnerships.

#### What, in your opinion, makes a good leader?

I believe this is someone who is able to synergise and harmonise ideas towards the fulfilment of the collective objective rather than being trapped in personal ambition. Someone who is selfless and able to see beyond individual preference, who is goal oriented and able to facilitate active participation of key role players.

#### What do you find most challenging and on the opposite end, most rewarding, about working for the Department of Environmental Affairs?

The mandate of the Department transcends to the socio-economic dimension of sustainable development, it has a global dimension which is ever evolving. This challenges me to remain relevant and connect the dots with the view to influence other spheres of society.

For example responding to the impact of climate change is one such a challenge and also offers exciting opportunities. The most rewarding about working for DEA is the opportunities for ongoing learning and growth to keep me on a personal competitive edge.

#### What do you consider to be your single greatest achievement in life thus far?

Being part of a team of global negotiators which set the global agenda for sustainable development. I actively and successfully negotiated the 2030 Agenda for Sustainable Development which outlined sustainable development goals (SDGs) to be pursued by the international community.

#### If you could give your 20-year-old self any advice, what would that be?

When at work, conduct yourself professionally without compromising the professional ethics and codes that govern your profession. Continue to learn as much as possible including learning by doing and never doubt your capabilities. Remain optimistic about and patriotic to Mzansi--- our beautiful Country.

#### What does going green mean to you and how do you practice it in your daily life?

In my view it entails doing things in a manner that promotes efficiency and reduces wastage whilst promoting sustainable consumption and production amongst other things. I do separation of waste at home; I use a solar geyser, reduce food waste by dishing manageable meal sizes,

promote recycling and composting; I use energy saving bulbs as well as rain water harvesting.

#### What are 3 core tenets of your management/leadership philosophy that you would never compromise?

- Be honest to yourself and the people you lead.
- Treat people as assets rather than tools.
- Find strength in vulnerability- everyone has weakness so learn from criticism.

#### Quick facts:

**Home town:** Mokopane – Uitzicht Village.

**Role model:** My father – Lesiba Ramaru – How he raised his children and led them to believe in Christ.

**Favourite quote/motto:** "You Can Do Whatever You Set Your Mind To".

**Hobbies:** Soccer, reading and politics.

**I am currently reading:** The Grand Design – God's Ultimate Purpose for Africa by Sunday Adelaja.

**I am currently listening to:** Lira – "something inside so strong".

**Do you use Facebook or Twitter?** Facebook.



# Climate change in SA under new global industrial revolution

By Prof Francois Engelbrecht



South Africa has ratified the Paris agreement and has committed to an ambitious climate change mitigation programme through its Intended Nationally Determined Contributions.

This commitment has significant implications for South Africa's energy futures, and may imply tremendous opportunities for the country to align its industrial development and technological innovation to what may well become a new global industrial revolution.

There are two main scenarios for dealing with climate change: One is a low mitigation or business as usual scenario- this is where we leave climate change unchecked. The other is a future in which the Paris agreement is implemented.

## Low mitigation scenario

As warming slips past the 2 °C threshold, the impacts are likely to be vast. Many of these effects will have huge implications for food security, water availability, energy demand, employment, exports and tourism. But it does not end there; in areas where more rain and higher temperatures are projected, tropical diseases such as malaria may become more prevalent. In addition, an increase in

the occurrence of extreme weather events may increase the risk of cholera outbreaks, especially in informal settlements where sanitation is lacking, and residents often do not have access to safe drinking water.

An increase in heat waves will increase the demand for energy for cooling systems, placing a burden on power utilities. In recent years, South Africans caught a wake-up call where we witnessed heat-waves, storms and devastating fires. These impacts have demonstrated how vulnerable we are to climate variability and a changing climate system.

## Paris Agreement future

Important aims of the agreement are to:

- Limit global temperature increases to 2 °C above pre-industrial levels, with the aspiration of limiting the increase to 1.5 °C;
- Accelerate emissions reductions by inducing a global revolution in energy generation: that is, walking away from fossil fuels towards low carbon emission forms of energy, such as nuclear and renewable energy;
- Foster climate resilience and low greenhouse gas emissions development; and

- Make funding available to reduce greenhouse gas emissions, and induce climate resilience by funding large-scale adaptation programmes.

Should the Paris Agreement be a success, it will imply a revolution in the ways in which we live on the planet. The transport system will undergo a revolution, with electric cars completely replacing combustion engine cars. To mitigate the impacts of climate change and halt temperature increases, we would need to convert to nuclear and renewable forms of energy for a large portion of our energy requirements.

## What action is being taken?

The CSIR is building Africa's first Earth System model. This model will incorporate the physics and chemistry of the atmosphere, land, oceans and their interactions, and aim to answer questions such as what might happen to South Africa's and Africa's climate if greenhouse gas concentrations continue increasing. The result will be a climate model developed through an African lens, with a particular focus on African and Southern Ocean climate issues.



## About the contributor: Prof Francois Engelbrecht

Francois is a Chief Researcher at the CSIR. He leads the climate studies, modelling and environmental health research group. He currently leads the development of the first African-based earth system model in collaboration with national and international partners. Francois also serves as an invited member of the Working Group on Numerical Experimentation of the World Climate Research Programme.

# Launch of the South African Air Quality Information System

By Veronica Mahlaba and Dimakatso Tsutsubi



**Above:** National Air Quality Officer, Dr Thuli Khumalo, Mr Mnikeli Ndabambi from SAWS and DEAs Acting Deputy Director-General, Mr Tlou Ramaru at the launch of an upgraded SAAQIS.



**Above:** Delegates that attended the 12th Annual Air Quality Governance Lekgotla in Sandton.

The Minister of Environmental Affairs, Dr Edna Molewa welcomed the launch of an upgraded second generation South African Air Quality Information System (SAAQIS) during the 12th Annual Air Quality Governance Lekgotla in Sandton, on 04 October 2017.

SAAQIS is a web-based interactive system that makes air quality information available to stakeholders, in a common system and provides uniformity in the way data; information and reporting are managed across the country. It streamlines the flow of air quality information; provides tools to assist in managing air quality and builds awareness about air quality among stakeholders. The SAAQIS provides live (real time) state of air reporting as it is recorded in the ambient air quality monitoring stations in various areas around South Africa and it also comes with an app which can be downloaded on smart phones and related gadgets.

The live data will assist people, to take necessary precaution measures and avoid high air pollution concentration areas especially for those individuals who suffer from respiratory illnesses. The Department of Environmental

Affairs (DEA) in partnership with the South African Weather Service (SAWS) established the first generation SAAQIS in 2010.

Speaking at the launch, the National Air Quality Officer, Dr Thuli Khumalo said that the upgraded SAAQIS platform is an indication of government's commitment to achieve the quality of air that is not harmful to the health and wellbeing of the people. "With the upgraded App, members of the public are able to get the status of ambient air, and make informed decisions on their daily activities, particularly in areas where ambient air quality is compromised," she said.

However, she pointed out that the power and utility of the ambient air quality component of the SAAQIS is largely dependent on all government-owned monitoring stations functioning and supplying data to the system. "I therefore encourage national and provincial departments to continue providing support to all municipalities and ensure that all government owned stations will be reporting to SAAQIS," Dr Khumalo further said.

The Annual Air Quality Governance Lekgotla provides Air Quality Officers from all spheres of government with a unique opportunity to discuss

and debate ways and means of addressing the various governance challenges and discuss plans for the year ahead. Therefore, the Lekgotla aims to provide the necessary guidance and support to authorities towards the effective implementation of the National Environmental Management: Air Quality Act (39) of 2004 (AQA).

Attending the Lekgotla from the Northern Cape: Environment and Nature Conservation, Ms Thandeka Mlatha stated that the Lekgotla was informative and spoke to the line of work she does as an Air Quality Officer. "We have learned the challenges and accomplishments of other provinces and municipalities. We plan on using and implementing some of the methodologies. All the presenters gave informative information, especially Dr Patience Gwaze about the State of the Air Quality Report which was interesting and shows how the air quality fraternity is making strides," Ms Mlatha said.

The Lekgotla focused on amongst others ambient air quality monitoring initiatives, the review of the National Framework for air quality management and atmospheric emission management.

## About the contributors: Veronica Mahlaba and Dimakatso Tsutsubi

Veronica Mahlaba is the Senior Communication Officer: Editorial Services at the national Department of Environmental Affairs. Ms Mahlaba has experience as a Lecturer in the Media Studies Department at a private college. She has worked as writer for a metropolitan municipality and she is a keen photographer.

Dimakatso is the Assitant Director: Media Liason. She holds a B.A Degree in Communication from University of Northwest and she is currently studying towards her Honours Degree with UNISA.

# SAB Environmental Media Awards

By Gaopalelwe Moroane  
Photos by Itumeleng Motsepe



**Above:** Minister of Environmental Affairs Minister, Dr Edna Molewa and Vice President of Procurement and Sustainability at AB InBev Africa and SAB, Mr David Hauxwell.



**Above:** Endurance swimmer and activist for the world's oceans, Mr Lewis Pugh won the Nick Steele award for Environmentalist of the Year.

Minister of Environmental Affairs, Dr Edna Molewa encouraged journalists to continue to report on environmental issues at the 2017 South African Breweries (SAB) Environmentalist and Environmental Media of The Year Award ceremony held in Illovo, Johannesburg on 24 October 2017. "We as government would like to see more of the media working in partnership with us to educate the population around environmental issue," she said.

The awards which have been running for 29 years were started by the late conservationist Dr Ian Player, to recognise members of the media who have excelled in reporting on

environmental matters in video, audio and written media as well as photography over the past year.

SAB has made a commitment to keep these awards in line with best global practice, listening in earnest to the feedback received from the environment media in South Africa at large and ensuring the awards are reflective of both the local and global media landscape.

Vice President of Procurement and Sustainability at AB InBev Africa and SAB Mr David Hauxwell, echoed Minister's sentiments, "The media plays a critical role in highlighting the critical environmental issues facing the plant, and we are proud to have

sponsored these Awards for the past 29 years," he said.

The award ceremony also saw endurance swimmer and tireless activist for the world's oceans, Mr Lewis Pugh being named the SAB Nick Steele Environmentalist of the Year at the SAB Environmental Media Awards 2017.

English born, Lewis Pugh was instrumental in negotiating the creation of the largest marine protected area in the world, the Ross Sea off Antarctica. The negotiations required consensus among 24 nations and the European Union.

Mr Pugh left his maritime law practice to campaign on a fulltime basis for the protection of the oceans in 2003. In 2009, he and Desmond Tutu took the evidences of witnesses across Africa on the effects of Climate Change at the Pan-African Climate and Poverty Hearings.

Speaking prior to receiving his award Lewis Pugh said, "The single biggest issue we're facing right now is the protection of the environment- the media shine a light to the darkest corners- and for that- thank you."

## The awards were conferred as follows:

Award Category	Winner	Merit Winner/s
Written Media	Oxpeckers Centre for Environmental Rights: Mark Olalde	Mail & Guardian: Spho Kings Saturday Star: Sheree Bega
Photography	Forbes Africa's: Jay Caboz	Scott DeBoz Films : Susan Scott The Sowetan: Sandile Ndlovu
Video Media	Carte Blanche: Sasha Schwendenwein	Carte Blanche: Carol Albertyn Carte Blanche: Anne-Marie van Niekerk
Audio Media	SABC Radio: Minoshni Pillay	SABC Radio: Reginald Witbooi EWN: Monique Mortlock



## About the contributor: Gaopalelwe Moroane

Gaopalelwe is a Senior Communication Officer under the sub-directorate, publication in the department of Environmental Affairs. Prior to working as intern in Environmental Department's media liaison team; she worked for short periods with the Pretoria News, Grahamstown's local paper, Grocott's Mail as well as writing reviews for the National Arts Festival publication, Cue Newspaper.

# Combatting Invasive Species in SA

By Veronica Mahlaba and Bongekile Zikalala



**Above:** The Biosecurity team working at Environment House and OR Tambo Airport in Pretoria.



**Above:** The Biosecurity team working at the Cape Town office.

In this issue, we profile the Directorate: Biosecurity. This directorate, led by Ms Nomahlubi Geja has four sub-directorates: Issuing Authority (Permitting), Competent Authority (Post-Border), National Biosecurity (Ports of Entry) and Advocacy, Coordination and Reporting. The Directorate is one of the sections within the Environmental Programmes (EP) Branch.

Article 8(h) of the Convention on Biological Diversity (CBD) calls on Parties/Members to as far as possible and appropriate: Prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species. Furthermore, a ten-year framework for action (Strategic Plan for Biodiversity 2011-2020) was developed with associated Aichi Biodiversity Targets.

Aichi Target 9 of the CBD requires Parties to identify and prioritise invasive alien species (IAS) and pathways of invasion; priority species are controlled or eradicated and measures are in place to manage

pathways to prevent their introduction and establishment by 2020. To respond to this call, the Biosecurity Directorate was established.

Ms Geja says her section is responsible for establishing and maintaining systems aimed at preventing the introduction of invasive species into the country, and managing those that are already in the country.

This is achieved through administering the provisions of the National Environmental Management Biodiversity Act, 2004 (Act No. 10 of 2004) (NEMBA, 2004) and its associated Alien and Invasive Species (AIS) Regulations and Species Lists.

"The Act provides the legal framework for the Directorate to ensure that AIS are prevented from entering the country, and those already in the country are managed through compliance monitoring, advocacy interventions and issuance of relevant permits," explains Ms Geja.

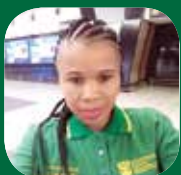
The Directorate provides strategic leadership and overall management of the implementation of biosecurity measures through its four functional subunits.

## Issuing Authority (Permitting)

They are responsible for:

- Receiving and processing permit applications together with associated risk assessments.
- Conducting pre-inspections and issuing of permits for importation and other restricted activities involving AIS in South Africa.
- Developing and reviewing of permit conditions.
- Conducting and coordinating post-border risk assessments.

The functions of this unit enable the directorate to regulate the importation of restricted activities involving AIS through the issuance of the relevant permits.



### About the contributor: Bongekile Zikalala

Ms Bongekile Zikalala is the Assistant Director under the Biosecurity Directorate. Ms Zikalala has a Master's degree in Agricultural Science, specialising in Botany. She is responsible for the implementation of the advocacy programme in the directorate, promoting compliance with relevant legislative tools.

## Competent Authority (Post-Border)

They are responsible for conducting post-border compliance monitoring and the development of Species Management Plans. The unit elevates all non-compliant cases to LACE for administration enforcement. The unit, in close collaboration with the advocacy team, ensures that relevant stakeholders strive towards voluntary compliance without the need for enforcement through compliance promotion. This is achieved through their participation in advocacy interventions such as awareness campaigns and events.

## National Biosecurity (Ports of Entry)

The sub-unit is responsible for conducting inspections at ports of entry and acts as the first line of defense at the border against possible unauthorised introductions of AIS into the country. Currently, the subunit is more active at the mail-centre, commercial cargo and international arrivals at Oliver Reginald Tambo International Airport.

Biosecurity compliance inspectors are deployed at the port to conduct primary inspections through visual examination and secondary inspections by means of x-ray machines for the detection of AIS. The unit is in the process of acquiring sniffer dogs to strengthen the biosecurity interventions at the port

## Biosecurity Advocacy Programme

Aichi Target 1 of the CBD provides that "by 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably". This target recognises that addressing the direct and underlying drivers of biodiversity loss will ultimately require behavioral change by individuals, organizations and governments. It is against this background that the Advocacy component was established within the directorate.

The unit is responsible for the establishment and maintenance of an effective national biosecurity advocacy programme by raising awareness on the importance of

## "The EP appointed SANBI as an implementing agent to direct a number of activities targeting invasive alien species listed on the NEMBA, 2004 AIS Regulations"

managing invasive species as well as their impacts and, promoting compliance with the prescribed legislative tools.

The focus of awareness interventions that have been put in place, such as the development of advocacy material and awareness campaigns, are to make everyone aware of their respective roles and responsibilities in managing invasive species.

Additionally, the unit promotes awareness on the provisions of the legislation pertaining to invasive species to ensure compliance with the relevant legislation.

Some of the work that the component has undertaken to date includes the roll-out of various multi-stakeholder forum workshops in every province supported by the different spheres of government, civil society, NGOs, NPOs and academics.

Furthermore, the unit has invested in activities aimed at raising awareness amongst international travellers and traders at ports of entry through different interventions including media campaigns and exhibitions.

## Directorate Projects

The directorate is working on two major projects at the moment, namely: The South African National Biodiversity Invasive Species Programme and the African Centre DNA Barcoding Services.

Ms Geja explained that the Directorate provides funding to the South African National Biodiversity Invasive Species Programme to combat new invasions.

"The South African National Biodiversity Institute (SANBI) has a legal mandate to promote the conservation of South

Africa's exceptional biodiversity, to monitor and report on invasive alien species and run programmes to eradicate invasive species," she said. The EP appointed SANBI as an implementing agent to direct a number of activities targeting invasive alien species listed on the NEMBA, 2004 AIS Regulations. Among the functions of SANBI listed in the Act is that, it must monitor and report to the Minister on the status of all invasive species. This work is conducted through the implementation of the Invasive Species programme (ISP), which was initiated in September 2008.

However, identifying plants and animals outside their native range is often difficult. Ms Geja says in light of the challenges opposing accurate identification, alternative solutions are needed.

"One such solution is using DNA barcoding as a tool to aid in the identification of unknown material, especially when only incomplete material is available.

This requires the use of short, highly informative DNA regions to discriminate between species. To this end, the directorate has contracted the African Centre for DNA Barcoding located at University of Johannesburg to provide DNA barcoding services which complements the identification of specimens done by the inspectors," said Ms Geja.

## The African Centre for DNA Barcoding

The African Centre for DNA Barcoding (ACDB) is a division of the department of Botany & Plant Biotechnology within the Faculty of Science at the University of Johannesburg, South Africa. Formally established in 2010, this centre aims to remain at the forefront of research on DNA barcoding and its applicability to biosecurity, surveillance and biodiversity surveys in Africa.

# Invasive species: an eminent threat to biodiversity

By Bongekile Zikalala



**Above:** Launching the National Invasive Species Week 2017 with Johannesburg City Parks and Zoo.

**A**lien Invasive Species (AIS) are known to have negative impacts on biodiversity, economy, agriculture and human health. The impact of AIS on the country's economy is estimated at hundreds of billions of rands and without controls, these costs are expected to rapidly escalate as the AIS spread and grow, and could be further exacerbated by climate change.

Political and social impacts associated with AIS include hampering of agricultural productivity and sustainable development as these species negatively impact food security and rural development. For example, Famine weed (*Parthenium hysterophorus*), originally from South America, is spreading across northern KwaZulu-Natal and has the potential to invade all but the driest parts of South Africa, and most of Africa. Fields of famine weed, as the name implies, can wreak economic,

ecological and human health havoc because the species can rapidly spread across much of the country, including grazing and agricultural land, resulting in reduced income with significant effects on smallholder farmers and beneficiaries of agrarian reform, and may lead to the deepening of poverty in rural areas due to the destruction of livelihoods as neither South Africa's stock nor game species can survive in these invaded areas.

## The impact on biodiversity

Moreover, pines, gums, hakeas and wattle trees consume much greater quantities of water than arid-adapted indigenous plants do and increase fuel loads and aggravate the intensity and heat of fires, making such fires more difficult and unsafe to control as experienced during the devastating Table Mountain fires in March 2016 and Knysna fires in June 2017.

The impact on biological diversity, whilst difficult to quantify in monetary terms, can be devastating. For example, some invasive bird species such as mallard duck (*Anas platyrhynchos*) were imported into South Africa as ornamentals but some escaped to form feral populations. These invasive birds can hybridise with native species thus negatively impacting on biodiversity. Other species such as the house crow (*Corvus splendens*) are causing mayhem as they out-compete indigenous birds for resources and nesting sites. They are also known to damage crops in the agricultural fields.

The National Invasive Species Week One of the most effective ways to tackle invasive species threats is by making people aware of invasive species and their negative impacts, by fostering responsible practices and utilization of invasive species and by encouraging voluntary compliance among relevant stakeholders. The

Department of Environmental Affairs (DEA) launched the National Invasive Species Week (NISW) on the week of the 9th – 13th October 2017. This event was the annual culmination and highlighted the ongoing national awareness raising interventions aimed at promoting compliance with the relevant legislation, and to educate the public and relevant stakeholders about the threats posed by invasive species to biodiversity, economy, agriculture, human and animal health. It also aimed at creating awareness on what can be done by our stakeholders and the public at large in safeguarding South Africa from the impacts posed by invasive species.

This year's theme for the NISW, "Stop the spread of invasive species," highlighted some of the interventions and efforts government has put in place to manage the spread of invasive species in the country as well as every South African's role and responsibility towards supporting this outcome. Everyone is impacted directly or indirectly by invasive species, which means that we have a shared responsibility to manage the problem, by taking the necessary steps to control and eradicate, where feasible, invasive species already in the country and of preventing them from spreading further. It is thus the duty of every citizen to familiarise himself or herself with the listed invasive species and to comply with the corresponding duty

**“Much remains to be done towards increasing public awareness on the concern of invasive species, promoting pro-active responses and community ownership of biodiversity initiatives aimed at the management and containment of invasive species”**



**Above;** Mr DEA's Tani Tshivhandekano giving a presentation.

of care relating to invasive species as outlined in the relevant prescripts. This year the department collaborated with the Johannesburg City Parks and Zoo in launching the NISW on the 12th October 2017 at Jukskei Park, where a portion of the park was cleared of invasive plants by the Working for Water Programme,

as part of government's efforts in eradicating these species. More activities were conducted during the month of October, such as the African ports evolution event, which took place on the 17-18 October in Durban. In this event, hundreds of stakeholders attended the DEA workshop to discuss the importation of AIS into the country.

These activities are in support of biosecurity measures currently deployed by DEA at the ports of entry in the form of Biosecurity Inspectors who are responsible for conducting inspections to ensure compliance with relevant legislation, and act as the first line of defence against possible unauthorised introductions of AIS into the country. This work is supplemented by the DNA-barcoding initiative lead by the Department in collaboration with the University of Johannesburg, which enables Inspectors to effectively and efficiently identify specimens at ports of entry.

Much remains to be done towards increasing public awareness on the concern of invasive species, promoting pro-active responses and community ownership of biodiversity initiatives aimed at the management and containment of invasive species. Government calls on all South Africans to work together and join hands in the fight against invasive species to contribute in the conservation of the country's biodiversity.



**Above:** Clearing of invasive plants during the launch of NISW 2017 by Working for Water.



**Above:** Removing invasive plants and plant indigenous vegetation.

# EPIP creates opportunities in waste

By Nomvuyo Mlotshwa



**Above:** The Mohlakeng Waste Recycling Buy Back Centre in Mohlakeng, Randfontein.

**Above:** Waste sorting bays with ablution facilities and showers.

The waste recycling business is growing in South Africa. The EPIP waste recycling buy-back centre project in Rand West City Local Municipality has employed 89 residents of Mohlakeng and serves as a depot for the community to sell their recyclable waste such as paper, plastic, cans and glass. The participants (57% women, 47% youth and 1% persons living with disabilities) were employed for a period of one year under the programme.

Recycling is a recommended waste management technique that seeks to benefit the environment and the society. Buy-back centres facilitate waste recycling and assist to reduce the enormous amounts of waste disposed in landfill sites and also realise reduced pollution and carbon emissions.

Buy-back centres also provide informal jobs for waste pickers, impacting on the socio-economy of the community. The participants had this to say about the programme:

"The Department of Environmental Affairs has brought a significant change in our community through this project. Most of us were jobless

without any working skills because the majority of our youth here do not have a matric and we can't find jobs but this project was able to hire us.

The skills we have gained here have helped us to find other jobs," said Mr Sibusiso Nyakaza (28) who manages operations and maintenance at the centre.

### The establishment of the buy-back centre includes:

- The construction of a guard house,
- A weigh-Bridge,
- Waste sorting bays with ablution facilities and showers,
- 2 metre high concrete fencing,
- Installation of a power transformer,
- Electricity and solar energy connection,
- Sewer system connection, Connecting 15 CCTV cameras, and
- Purchasing recycling equipment such as the 10 waste collection trolleys, bailing machines, forklift and waste collection metal storage cages that will be dispersed to companies that will feed waste into the buy-back centre.

Project participants got skilled in bricklaying, fencing, ceiling, painting, electricity connection, plastering and sewer system plumbing.

Furthermore, the department implemented this buy-back centre project through Siphumelele Youth Organisation, a local youth non-governmental organisation and managed to empower Small, Medium and Micro-Enterprises (SMMEs). Influencing the community sustainable development this facility will be sustained by cooperatives that will be formed from the 25 wards of the Rand West City Local Municipality.

The community will also supply their waste into the buy-back in exchange for cash and also benefit from the healthy environment that will be created.

"This facility stands a good potential to flourish as it is strategically located close to commercial and industrial centres that will feed in large amounts of recyclables plus the merger of Westonaria and Randfontein municipalities will be of great advantage. We also seek to develop partnership with Nampak, Remade Recycling and other recycling companies so that we can sell the cumulated waste," said the Project Manager, Lennox Gudu.



### About the contributor: Nomvuyo Mlotshwa

Nomvuyo Mlotshwa is the Assistant Director: Programme Publicity and Liaison. She is responsible for managing and promoting the brand of the Environmental Protection and Infrastructure Programmes. She is passionate about community outreach and stakeholder liaison.



# Community cleans up Etwatwa

By Veronica Mahlaba

Piles of waste were collected when the community of Etwatwa in Daveyton came together to clean their township. The clean-up took place on 17 November 2017 as part of an initiative by the City of Ekurhuleni Metropolitan Municipality in partnership with the Department of Environmental Affairs.

City of Ekurhuleni's Senior Manager: Waste Minimization Division, Mr Andile Gcaba stated that the clean-up came about after Minister Molewa had attended an environmental summit in Rwanda, where they have National Clean-Up Days every Saturday to keep Rwanda Clean.

"DEA as entrusted with a crucial legislative mandate to ensure all citizens within the Republic of South Africa live in a clean and healthy environment, decided to mirror the efforts and partner with municipalities across the country to do clean up campaigns. DEA came up with a schedule to do the campaigns and Ekurhuleni was the chosen City to launch the National Clean Up Day," explained Mr Gcaba.

The City of Ekurhuleni (Waste management Services Department) has a legislative obligation to do community awareness and clean up campaigns annually. The City saw fit to start with the community of Etwatwa

as there is already a willingness from the community to clean and take care of the environment. "As the custodians of waste at municipal level as Waste Management Services, it is our duty to do round refuse collection, promote recycling and clean communities. Today we provided plastics, dust masks and gloves to make that people are protected," Mr Gcaba said.

DEA's Control Environmental Officer: Grade B, Ms Boitumelo Dlamini said the DEA carries a mandate of ensuring that the natural resources are preserved for the future generation, and illegal dumping is one of the major challenges the country is faced with. The DEA Directorate: General Waste came up with a concept of National Clean-Up Days whereby we encourage the municipalities to work together with their communities in cleaning up the illegal dumping areas.

The DEA encourages the municipalities to continue with clean-ups at least once a month. "The reason we encourage community involvement is to ensure that they take ownership of those areas and assist the municipality in curbing the illegal dumping challenge," Ms Dlamini explains.

The Etwatwa community has many social challenges and had previously requested the Municipality to work with them towards combatting illegal dumping in their area, therefore the DEA saw it fit to join work with Ekurhuleni and kick-start the programme at Etwatwa.

"Issues of opportunities in waste were also raised by the DEA as there are also community members who are unemployed. We made the community realise that they can collect the recyclables from their area and sell them, this is the first step towards unlocking the circular economy in that area," Ms Dlamini explained.

On the day the City of Ekurhuleni brought Mr Funky Mkhwanazi, a local waste picker to educate and create awareness amongst the community about the value of separating waste and selling it to buyback centres for economic gain.

Ms Nomsa Motaung, a resident of Etwatwa explained that since there are no jobs, she has learned that she can pick up litter, recycle it and even sell it. "We can make a living out of picking up waste and put food on the table for our families. The regular clean-ups will keep our community clean and safe for our children," she said.



# Increase in enviro-crime arrests

By Gaopalelwe Moroane



The Department of Environmental Affairs hosted and celebrated the hard work carried out by the Environmental Management Inspectors (EMI), commonly known as the Green Scorpions from across the country during the 7th Enforcement and Compliance Lekgotla held in White River from 6 November 2017 to 9 November 2017.

"Dedication, passion and purpose are key drivers which sum up the qualities which are inherent to Environmental Management Inspectors as well as other officials here whose duty it is to rise to these challenges and sustain the fight against environmental crime," said Legal Authorisation, Compliance and Enforcement Deputy Director General (DDG) Mr Ishaam Abader during the opening of the conference which was celebrated under the theme: People, Purpose, Passion: the pathway to EMI success.

As well as the launch of a new logo, the Lekgotla saw the launch of the recent National Environmental Compliance and Enforcement Report (NECER) which highlighted some of the achievements of the



**Above:** The newly launched Green Scorpions logo.

green scorpions over the past year. Some highlights include the below:

- An increase in opened dockets 1526 dockets were opened in the reporting period and 1,092 arrests were made by the Green Scorpions;
- Convictions increased from 52 to 76;
- In 2016 the number of rhinos poached declined to 1,054 from 1,175 in 2015 and 1,215 in 2014;
- The total number of acquittals has increased from 5 in 2015/16 to 10 in 2016/17, which shows an increase of 100%;

- There has been a slight increase of 6.8% in the total number of EMIs on the national register in respect of national and provincial EMIs from 2411 in 2015/16 to 2577 in 2016/17.

In support of Operation Phakisa: Oceans Economy, the coordinated and integrated compliance and enforcement programme focuses on combatting all illegal and unregulated activities which have significant negative impact on marine and coastal resources, infrastructure, trade and food security that results in substantial economic and employment losses.

To wrap up the Lekgotla, an award ceremony to acknowledge and award those who demonstrated outstanding performance over the 2016/17 period was held. "Through their unrelenting pursuance of compliance to the law, these individuals which we are going to honour tonight have given their best in executing the core functions that lie at the heart of the Environmental Management Inspectorate," referring to the award winners. The winners were announced as below:

The winners were announced as below:

Award	Recipient
Outstanding Contribution to the Prosecution of Environmental Crime: Biodiversity and Conservation	Advocate Antoinette Ferreira
Outstanding Contribution to the Prosecution of Environmental Crime: Waste and Pollution	Advocate Mashudu Nethononda
Outstanding Contribution to the Prosecution of Environmental Crime: Oceans and Coast	Advocate Blane Lazarus
Outstanding Contribution to the Investigation of Environmental Crime - Environmental Management Inspectors: Biodiversity & Conservation	Mr Etienne Kitching
Outstanding Contribution to the Investigation of Environmental Crime - Environmental Management Inspectors	Mr Jason Liebenberg
Outstanding Contribution to the Investigation of Environmental Crime - South African Police Services	The Skukuza Stock Theft and Endangered Species unit
Outstanding Contribution to the Administrative Enforcement of Environmental Crime	Mr Brenden Perumal
Outstanding Support to the rendered to the Environmental Management Inspectorate	Mr Louis Look and Mr Nico Oosthuisen

### Do you know the Green Scorpions?

The Green Scorpions, the commonly used name for the Environmental Management Inspectorate, is a network of environmental compliance and enforcement officials from national, provincial and municipal government. They have a legal mandate to enforce environmental compliance in the green (biodiversity/protected areas), brown (pollution, waste, impact assessment) and blue (coastal management) sub-sectors in terms of the National Environmental Management Act (NEMA).

### How does one become a Green Scorpion?

Green Scorpions are employees working in all spheres of government, municipal, provincial and national as well as Park Authorities who work within the environmental compliance and enforcement division. Training is offered to those who want to qualify as EMI's. Successful completion of the EMI Basic Training is the current requirement for designation as Grades 1-4 EMIs. The current curriculum for the EMI Basic Training includes the following modules and units. Government employees interested in finding more about EMI training can contact Mark Jardine on [mjardine@environment.gov.za](mailto:mjardine@environment.gov.za).

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# SA committed to strengthening the Science-policy interface

By Lufuno Ndlovu

Images by Veronica Mahlaba



**Above:** Ms Wadzi Mandivenyi, Chief Director: Biodiversity Monitoring & Specialist Services welcoming the delegates.



**Above:** Plenary session during the Indaba.

South Africa's National Departments are faced with major challenges of growing complexities in Biodiversity and sustainability management which require decisions to be made with the potential of impacting greatly on biodiversity services and social economies. This places the national departments under pressure to gather evidence to support policy development and implementation.

This is mainly because society has become more aware of the fact that it is mainly affected by the policies which government makes and implements. Traditionally, researchers used to push the evidence to the policy makers hoping that policy makers will use the findings for decision making, which caused significant misunderstandings.

Currently, the National Department of Environmental Affairs (DEA) is concerned and has become more responsive to the gaps that typically

exists between the scientific and the policy-making community. DEA supports the uptake of evidence-based decision making and increasing the dialogue between the research and policy-making communities for the betterment of Biodiversity Services. It also recognises that evidence is needed by policy-makers continuously in order to support strategies and policy development over the long term. DEA has shown a response to the need for evidence-based decision making through hosting of the Annual Biodiversity Research and Evidence Indaba.

Following the success of the Inaugural Biodiversity Research and Evidence Indaba, the Branch Biodiversity and Conservation (B&C) hosted the 2nd Annual Biodiversity Research and Evidence Indaba.

The purpose of the 2nd Annual Indaba was for policymakers, researchers, practitioners and civil society representatives to dialogue and

report on progress made on research and evidence needs and priorities as reflected in the National Biodiversity Research and Evidence Strategy, whilst identifying and strengthening interventions of scientific evidence to influence decision and policy making.

This year DEA partnered with the African Centre for Evidence (ACE), hosted and administered by the University of Johannesburg. The Indaba was also hosted as part of the build up from the South Africa-European Union policy dialogue and the Future Earth Sustainable Development Goals (SDGs) Lab on implementing the South African National Development Plan's sustainability transitions through the domestication of the SDGs 12, 15 and 17.

The Indaba attracted over 130 participants over a period of 2 days from across various sectors, including government bodies, academia, researchers and private organisations. At this event, it was



## About the contributor: Lufuno Ndlovu

Lufuno Ndlovu is an intern at the Department of Environmental Affairs, within the Science Policy Interface directorate under the Branch: Biodiversity and Conservation.



Above: Group discussions during the Indaba.



Above: Delegates registering for the Indaba.

fulfilling to see members of the Science-policy interface fraternity engaging and contributing to the research and evidence debates and sharing knowledge. Delegates shed more light on the present work being conducted, progress made and gaps available in the body of research and evidence, thus contributing to the evidence base for biodiversity related policies and decision making.

This Indaba embodied the commitment of various representatives of society in advancing the Science-policy agenda and significantly contributing to the global agenda guided by the Intergovernmental Platform on Biodiversity and Ecosystem Services.

### IPBES Functions

IPBES provides a mechanism recognized by both the scientific and policy communities to produce, review, assess and critically evaluate relevant information and knowledge on the contribution of biodiversity and ecosystem services to sustainability generated worldwide by governments, academia, scientific organizations, NGOs and indigenous communities. It is for this reason that the South African Government through its National Department of Environmental Affairs is committed to promoting a domestic dialogue for an evidence-based approach to policy development and decision making, responding to IPBES and other international commitments. IPBES is unique in that it also

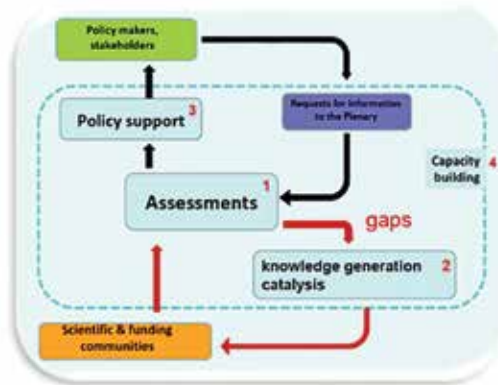
aims to strengthen capacity for the effective use of science in decision-making at all levels, and to address the needs of Multilateral Environmental Agreements (MEAs) that are related to biodiversity and ecosystem services. South Africa is an active pioneer member and a host country for the IPBES Technical Support Unit for the African regional assessment administered by the CSIR. The IPBES assessments can take on a variety of roles at different

Through these assessments we are able to contribute necessary evidence for decision making and relevant policy development by means of strengthening the dialogue between these communities, increasing the delivery of policy-relevant knowledge (local knowledge) and catalysing the formulation of knowledge-based policies.

### Evidence-based Policy Making

As indicated, policymaking is a relatively complex process and is basically shaped by a number of factors including social, political, economic, and in other instances scientific context in society. This article endorses and acknowledges the critical role played by the researchers to provide the necessary evidence to inform decision making and policy development.

During the Indaba researchers were afforded a platform to share their knowledge and the work done on the ground, and this allowed information to be shared amongst researchers and policy makers. This was done so that the entire value chain of policy development and decision making for the Biodiversity sector is transparent and open. In this regard, DEA is delighted to announce the success of this 2nd Annual Biodiversity Research and Evidence Indaba, confident that this engagement between the science and policy community will shape our contribution and progress as a nation and as a global society.



Above: Four Functions of IPBES

scales, involving different knowledge forms and stakeholders. Therefore, the African regional assessment which was prioritised by the global community together with other regional assessments, is aimed at critically evaluating the knowledge for the African region on biodiversity and ecosystem services. These assessments further strengthens the science-policy interface on biodiversity and ecosystem services by contributing to the identification of needs for capacity-building and policy support tools that are more relevant to the particular region.

# SA Agulhas II cruises to Tanzania on research

By Mthuthuzeli Gulekana and Tshego Letshwiti



**Above:** From left (front row): Director of Southern Oceans and Antarctic Support Mr Nishendra Devanunthan, DEA's Director-General Ms Nosipho Ngcaba, Minister Edna Molewa, Deputy Director General for Oceans Coasts Ms Judy Beaumont and the Chief Director of Ocean and Coastal Research, Mr Ashley Naidoo with the IIOE-2 Expedition DEA team members. Mr Gulekana (4th from left in back row) was the cruise leader.



**Above:** Director of Southern Oceans and Antarctic Support, Mr Nishendra Devanunthan, DEA's Director General; Ms Nosipho Ngcaba, Captain Knowledge Bengu, Minister Edna Molewa and Deputy Director General for Oceans and Coasts; Ms Judy Beaumont.

Following the Cabinet Approval in August 2017 that granted DEA permission to coordinate South Africa's participation in the Second International Indian Ocean Expedition (IIOE-2) under the auspices of UNESCO's Intergovernmental Oceanographic Commission (IOC), preparations started swiftly for this historical voyage. Cabinet approved that South Africa would contribute towards the IIOE-2 programme by undertaking two regional research cruises using South Africa's research and polar vessel the SA Agulhas II in the Western Indian Ocean.

The research cruises were designed taking into consideration several themes of the general IIOE-2 Science plan including, but not limited to, climate variability and change; human impacts; extreme events, impacts on human population, and unique geological features of the Indian Ocean.

The SA Agulhas II research cruise left the Cape Town harbour on 14 October 2017 to take an unusual

sailing route to the north. Prior to its departure, on 13 October 2017, the cruise was launched by the Minister of Environmental Affairs, Dr Edna Molewa who was accompanied by the Director-General of Environmental Affairs, Mrs Nosipho Ngcaba and the Deputy Director-General of Branch: Oceans and Coasts, Ms Judy Beaumont. Minister Molewa wished all participants well on this venture.

"We mark a significant milestone here today, because this will be the first multidisciplinary African-led scientific research cruise – comprising of scientists and students from South Africa, Mozambique, Kenya, Nigeria and Egypt. Other international scientists and students joining the research cruise are from India, Belgium and Italy. The data collection will cover physics, chemistry, plankton, biodiversity, biology such as whales and seabirds as well as geology. All these areas provide important information in understanding the ocean environment and its links to developing a successful Ocean Economy," said the minister.

## Leg 1: Arriving in Durban

The first leg (Leg 1) of the cruise was completed when the SA Agulhas II arrived in Durban on the 16th of October 2017 after a two-day cruise from Cape Town. During Leg 1 there was a series of lectures and demonstrations on the operations of the ship to the invited guests from various organisations, agencies, print and broadcast media and high-level dignitaries. The demonstrations were also on science and how the training and human capacity development was going to be conducted in the days to come.

Several informative presentations and demonstrations including a sampling station that tested all the equipment onboard allowed the guests an opportunity to observe and experience the scientific activities that would be conducted during the cruise.

In Durban, the ship was welcomed by Minister of International Relations and Cooperation (DIRCO), Minister Maite Nkoane-Mashabane, who was

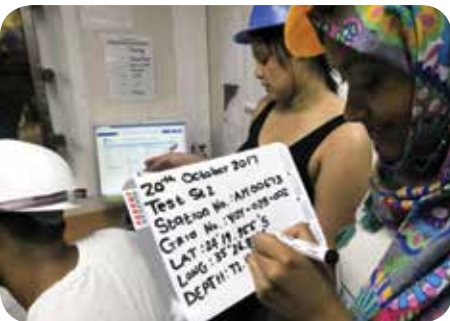
### About the contributors: Mthuthuzeli Gulekana and Tshego Letshwiti

Mr Mthuthuzeli Gulekana is a Science Manager in the CD: Oceans and Coastal Research; Directorate: Oceans Research. He obtained his MSc degree (Physical Oceanography) from the University of Cape Town.

Ms Tshego Letshwiti is an Assistant Director within the Internal and External Communications Sub-Directorate at the Department of Environmental Affairs, in Cape Town.

hosting a high-level ministerial event for various ministers and dignitaries from countries around the Indian Ocean under the Indian Ocean Rim Association (IORA). South Africa was assuming the Chairship of IORA, hence these two functions were combined to showcase the country's intention and potential leadership whilst the DEA was launching a regional research cruise into the Indian Ocean.

Aboard the SA Agulhas, Minister Mashabane confirmed that the IOE-2 activities also support IORA Chairship which is spearheaded by DIRCO. The Minister urged everyone to rally behind the research cruise, and commended DEA for the cruise as a capacity building activity to enhance, develop and endorse South Africa's participation and contribution towards the understanding of global change and the general influence that the Indian Ocean has on the human population along the Indian Ocean Rim.



**Above:** Participants (Shandre Dreyer and Bilqees Davids) in the Marine Biodiversity prepare the details of a test station prior to the equipment being retrieved from the seafloor.

### Cruising to Moz

The ship had received blessings from two South African ministers which is a unique and inspiring occurrence. The ship set sail to the Mozambican territorial waters, where the scientific operations and sampling were conducted to collect data and information towards developing information baselines from which the region can use and enhance its understanding of the ocean dynamics, the effect on the ecosystem and people.

Another important objective of the cruise was to develop human capacity of young African scientists in several marine science fields such as Chemical, biological, physical oceanography, meteorology, marine pollution, marine mammals and

seabirds, marine geology, through the collection of data and information in the Indian Ocean.

The team leaders for each discipline were sourced from DEA scientific personnel in the Chief Directorate: Oceans and Coastal Research. Each team leader was tasked with ensuring that they conduct scientific operations as well as transferring skills and that they capacitate other junior participants in their respective field. The capacity development was conducted in a step by step fashion whereby the participants were firstly brought to speed on the theoretical side through a series of lectures onboard

The participants were then taken through practical sessions during the sampling and scientific operations with the aim of ensuring that they are able to operate the scientific equipment and instruments.



**Above:** The scientists led by Dr Toufiq Samaci sift through the benthic biodiversity samples.

### Arrival in Dar es Salaam

After the intense training and scientific activities, the SA Agulhas II arrived in Dar es Salaam (Tanzania) to allow for conference attendants of the Western Indian Ocean Marine Sciences Association (WIOMSA) to tour the ship. The majority of the conference attendants were invited to tour the ship whilst some joined the cruise as participants after the conference.

The Tanzanian government officials, the conference organizers (WIOMSA) and the South Africa's High Commissioner in Tanzania Mr Thami Mseleku, welcomed the SA Agulhas II in Tanzania. The Tanzanian Institute for Marine Studies (IMS) also arranged for school learners in Grade 4-7 to tour the vessel and experience the life onboard and to meet the scientific and technical personnel onboard. This was the third diplomatic and VIP event for the ship within 15 days in three different cities and two countries.



**Above:** The ship's bosun (orange overalls) deploy a net used to collect egg, larvae and plankton from the water column during the cruise.

After they were shown how to do the operations, the participants were allowed to operate the instruments under supervision. By the end of the cruise the participants were able to operate the scientific equipment and instruments themselves, including knowing the methods of sample collection, sample preservation; data analyses and eventually generating products. To complete the training and capacity development "cycle" the participants, in conjunction with team leaders, were requested to present in the lecture room (where they started with theoretical lessons) to everyone about their experience onboard and about the cruise in general, with main emphasis being on the training received and the skills developed and how they are going to use the acquired skills in their institutions of origin.

One of the major benefits of the cruise was to document the experience of all the people who participated onboard and this was done through photography, videos and questionnaires. Playing sport (volleyball, table tennis, darts) and board games onboard proved to be a catalyst in making participants work together as a team, despite the very tight schedule between scientific operations and sampling. At the end of the scientific cruise all participants were awarded a certificate of participation to indicate that they had been successfully trained and that they could also train others in their respective disciplines. The certificate-awarding ceremony was an emotional affair as participants showed their gratitude and appreciation to everyone who contributed.

# Inaugural National Biodiversity Stewardship Conference

By Shahieda Davids



**T**hemed Unlocking benefits through biodiversity stewardship, from 27 to the 28 September 2017, the first ever National Biodiversity Stewardship Conference was held in KwaZulu-Natal. The two-day event led by the Department of Environmental Affairs (DEA) in collaboration with the South African National Biodiversity Institute (SANBI) attracted over 90 conference delegates representing government departments, provincial conservation agencies, the private sector, non-governmental organisations and biodiversity sector institutional partners.

The purpose of the conference was to provide engagement between decision-makers, provincial representatives and the broader biodiversity stewardship community of practice to fully recognize the benefits and challenges in implementing biodiversity stewardship.

The Deputy Director General from the DEA, Shonisani Munzhedzi set the scene by sharing the unique South African Biodiversity Stewardship story and its programmatic implementation since its inception. Delegates were able to develop

robust recommendations for biodiversity stewardship, protected area expansion and mainstreaming biodiversity implementation into key sectors. Delegates were also bearing cognisance of ambitious and long-term tools, policies and strategies contained within national and global policy frameworks, such as the National Development Plan 2010 (NDP), the National Protected Area Expansion Strategy (NPAES), the Sustainable Development Goals, and South Africa's role as a Party to the Convention of Biological Diversity (CBD) in its commitment and progress towards the Aichi Targets.

Some of the diverse and rich discussions presented during the two-day interactive sessions were::

## **Promoting diverse partnerships and community involvement**

- Taking ownership and approaching biodiversity stewardship in a holistic manner in order to ensure equal beneficiation by including the aspirations of people.
- Looking at how to support communities, land owners, involving women and the youth in biodiversity stewardship initiatives.

- The need for strengthened coordination between the People and Parks Programme towards transformation.
- Providing adequate incentives to communal land owners.
- Overcoming silos and encouraging government departments and traditional leaders to work closer.
- Finding new and innovate ways to engage with sector and industry bodies.

Coming out of the conference, commitment towards unlocking and upscaling biodiversity stewardship efforts have been captured as priority actions for current and future biodiversity stewardship implementation in a set of devised Draft Resolutions.

This National Biodiversity Stewardship Conference showcased the incredible success and collaboration of 14 years of biodiversity stewardship implementation.

For more information contact Alex Marsh on [a.marsh@sanbi.org.za](mailto:a.marsh@sanbi.org.za) The visuals from the National Biodiversity Stewardship Conference 2017 are available at SANBI Flickr



## **About the contributor: Shahieda Davids**

Shahieda Davids provides strategic learning network and communication support to the Biodiversity Information and Policy Advice Directorate at SANBI. Her responsibilities include providing strategic learning network support to enable to learning across SANBI and diverse institutional contexts and multi-stakeholder partnerships.



## State vs Granada Home Builders

### Developer found guilty on first criminal case relating to the Alien and Invasive Species Regulations

The Department of Environmental Affairs (DEA); Biosecurity Compliance Monitoring unit received a complaint about a property infested with listed invasive species. In response, an inspection was conducted on 12 May 2016 by the Environmental Management Inspectors (EMI's) where they observed listed invasive plant species such as Seringa, Bug weed and Castor oil that pose a serious fire hazard to the neighbouring properties. There were several concerns relating to the presence of these invasive species.

Firstly, residential owners were worried that they may lose their properties in the event fire occurs. Secondly, the property was not fenced off and was adjacent to residential complexes and therefore accessible to the public which served as a hiding zone as criminals were hiding there after committing crimes in the neighbouring properties.

Thirdly, the infestation of listed invasive plant species may negatively affect the value of land and productivity of the land. Finally, invasive species reduce water flow and water quality, lead to extinction of indigenous species, cause erosion and destroy habitat for animals.

#### Administrative Enforcement and Criminal Investigation

A notice of the intention to issue a pre-directive and final directive was issued in terms of section 73(3) of NEM: BA to the Granada Home Builder for failing to submit a detailed work programme to the DEA for approval.

This programme would have been compiled by a qualified specialist in this field and provided a plan for the listed invasive species to be cleared and eradicated. The DEA instituted criminal investigation as per case 601/02/2017 Pinetown, due to the fact that the landowner did not comply with instructions of the final directive. After the finalization of the criminal investigation, the matter was then referred to the National Prosecuting Authority for prosecution.

#### Judgement

On 1 September 2017, the criminal case against the accused, the sole member of Granada Home Builders, was finalized in the Pinetown Magistrate Court. The accused appeared on charges relating to environmental offences. He pleaded

guilty and was sentenced to R50 000.00 or 2 years imprisonment which is suspended for five (5) years on strict conditions.

This case highlights the legal duty of a landowners to report listed invasive species occurring in their properties to the competent authority, to take steps to control listed invasive species, in order to prevent the spreading of listed invasive species and to take all required steps to prevent or minimize harm to biodiversity. The accused has spent approximately R350 000.00 in rates, environmental reports and the removal of invasive species from the property.



Above: Castor Oil Plant.

# Vox Pops

DEA staff members

## What are your green New Year's resolutions?



**1. Dr Livhuani Nnzeru**  
Biodiversity Officer

My Green New Year's resolution is to prevent the introduction of alien and invasive species in South Africa. It would be a great initiative if we could have officials at the ports of entry to make sure whoever is coming into the country is not coming with invasive species, that will assist the country in terms of conserving our biodiversity. South Africa is rich in biodiversity but presently has been invaded by different species which cause negative economic impact on human health, for example, there are a lot of pine trees and other species that have invaded our water ways and streams, as South Africa is a water scarce country and we are suffering because of the introduction of such species.



**2. Mr Umesh Bahadur**

**Operations: Working for Wetlands**

My Green New Year's resolution is to educate people randomly about the importance of caring for the environment and give out booklets that deal with environmental issues. I think this could be one of the ways to instill the importance of environment in people's minds.

The change has start from the way people start think about the environment. The idea is to change people's mind-sets. I will always remind people of the 3R's Reduce, Re-use and Recycle, and that they must use locally produced groceries, goods and services where they can.



**3. Mr Raymond Scott**

**Environmental Programmes**

With the water crisis we are facing in the country, I will contribute to the environment by using less water as much as possible. I want to make this something that I do continuously even if we were to say the water crisis is over.

My green New Year's Resolutions include having a grey water system.

I will use this water for things such as watering the garden and washing the car. I will also use LED lightbulbs for my house for less electricity consumption.



**5. Ms Shafeeqah Goolam Hoosen**

**Biodiversity and Conservations: Biosphere and Economy**

I am trying to plant flowers, but since I live in a flat, it is quite difficult to have a proper garden. So I am using little pot plants to plant my flowers. When I get a proper home, I will then transfer my plants to create a beautiful and proper garden



**4. Mr Arnitus Forbes**

**Biodiversity and Conservations: Biodiversity Enforcement**

# Vox Pops continued

## Members of the public



**1. Fikile Maoka**  
*Student*

I am planning to plant trees at home and around my community as they contribute to the environment by providing oxygen, improving air quality, conserving water, preserving soil, and supporting wildlife.

Trees help in controlling climate by regulating the effects of the sun, rain and wind and also preserve warmth by providing a screen from harsh wind. Trees also lower the air temperature and reduce the heat intensity of the greenhouse effect by maintaining low levels of carbon dioxide.

My Green New Year's resolution is to take my own grocery bag to the supermarkets. This will save me money as well as the planet because buying plastic bags every day when going to the market is a waste because they end up causing pollution.

Using my own bags means that more plastic bags won't end up in a landfill or other places where wildlife can be in danger. I feel strongly about using the re-usable bags because that saves energy and we use them over and over again. This leads to using less energy because now less bags are being produced and we reduce the amount of garbage we daily produce.



**4. Nomawethu Tabule**  
*Call Centre Agent*

My Green New Year's resolution is giving back to the community by recruiting youth groups that perform different activities such as drums, poetry, stage plays and soccer clubs.

The motive behind is to ask the groups and involve other community members to volunteer at least once a month in community cleaning, where certain areas will be cleaned.

encouraging people to use greener alternatives such as encouraging people to join car clubs by means of using public transport, signing up to a ride-sharing app such as Uber instead of using their own cars especially when going to work. This would help the environment by reducing air pollution because now there would be less cars on the road and by that there would be less air pollution.

People need to be encouraged to keep a green perspective and keep their old cars running and well-maintained as long as they can.



**3. Mr Solomuzi Ndlovu**  
*Bank Teller*

I am currently recycling bottles and planning to carry doing so for my green New Year's resolution.

Recycling helps with keeping the environment clean and creating jobs, I also hope that in future I can be able to recycle coal as it is the one mineral I feel we need the most, but at the same time it destroys our environment the most.



**5. Shedley Schilder**  
*Legal and Tax Services Call Centre Agent*

It would be a great investment if the government could run an awareness programme



**6. Samuela Silva**  
*Financial Management*

My Green New Year's resolution is to contribute in educating children about environmental issues like saving water by encouraging them to use less water when brushing their teeth. Emphasis will be on what nature offers us, so they can be motivated to care for the environment.

I will hope that the information that will be shared with them will then be passed on to their families and friends.



**2. Ms Aneekah Mullins**  
*Receptionist*



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