

ENVIRO NEWS



Page 2



What is Air Pollution?

Page 4-5



Spotlight on Careers



State of the art National Pollution Laboratory
Page 6

Minister Creecy and Deputy Minister Sotyu lead World Environment Day

VERONICA MAHLABA

TO CELEBRATE World Environment Day, the Minister of Environment, Forestry and Fisheries Barbara Creecy, Deputy Minister Maggie Sotyu and Gauteng MEC for Economic Development, Agriculture and Environment Dr Kgosientso Ramokgopa led a Good Green Deeds clean-up in Nellmapius, Mamelodi East on June 5.

The community event was aimed at raising awareness about waste management and the significance of a clean and safe environment for all South Africans. It formed part of the Good Green Deeds Programme launched by President Cyril Ramaphosa in March.

Nellmapius is affected by widespread illegal dumping that impacts negatively on residents' lives. While the proportion of households with access to formal waste removal has grown to 80% – compared to 55% in 2001, waste removal remains a challenge in many urban areas. Only 66% of households have refuse removal at least once a week. The consequence is that many households resort to illegal dumping.

The minister said she and the deputy minister were extremely happy people chose to support them on their first public activity in their new role.

Creecy said World Environment Day was an important day on which “to recommit ourselves to saving our planet and to improving the quality of life of all people in our communities”.

“What we understand across the world is that poor environmental management affects people living in poor and working-class communities the most.



Minister of Environment, Forestry and Fisheries, Ms Barbara Creecy along with Deputy Minister, Ms Maggie Sotyu and the Gauteng MEC for Economic Development, Agriculture and Environment, Dr Kgosientso Ramokgopa on World Environment Day in Nellmapius, Mamelodi.

Here, in South Africa, our situation is no exception to the world trend, because of our history. Black communities and communities where people live in poverty carry a disproportionate burden

of the effects of poor environmental management. We find that in many communities, particularly informal settlements, we don't see a situation where waste removal is every week. The conse-

quence of that is people are forced to use informal systems of waste removal, which is dumping.”

She said World Environment Day was about creating awareness of the country's National Waste

Management Strategy. It was particularly about creating awareness about the importance of cleaning up the environment because it had an enormous impact on the health of communities, natural resources, waterways and so on.

The day was also an opportunity for people to start understanding that waste could also be viewed as an income-generating commodity.

“The Department of Environment, Forestry and Fisheries, as the custodian of the National Waste Management Strategy, has extensive programmes to recycle waste, including glass, plastic, paper, sludge and ash,” Creecy said. “Those programmes are all about developing the value chains, supporting the emergence of small and micro enterprises and corporates and, of course, most importantly about finding ways to use this area to create jobs.”

Ramokgopa said the government needed to mobilise communities and ensure they engendered some sort of responsibility because keeping areas clean was not just the government's responsibility but also that of the community's.

“We need to ensure that there is co-operation between the three spheres of the government to ensure that our interventions are impactful and meaningful. I am glad that all three spheres are here. There must be frequency and reliability in the collection of domestic waste.”

In an effort to prevent further illegal dumping of waste, a sign was put up dissuading the community from dumping in open spaces and bollards were erected in the areas where illegal dumping occurs.



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What is Air Quality?

ABOUT seven million people worldwide die prematurely each year from air pollution. Against this backdrop World Environment Day 2019 will urge governments, industry, communities, and individuals to join forces and explore renewable energy and green technologies to improve air quality in cities and regions across the world.

The air we breathe affects the quality of our lives and our health. Like the weather, the quality of air can change from day to day or even hour to hour. The South African government is required by the country's constitution to ensure that all citizens are inhaling air not harmful to their health and well-being.

For this reason, all spheres of

government, from national department to provinces and municipalities, monitor the state of air quality to record the levels of pollution and inform the public and there are more 130 fully automated air quality monitoring stations across the country. They provide valuable information regarding the state of ambient air quality citizens of the republic are exposed to. The stations also provide information to assess how the country's pollution level compares with legal requirements and to assess the impact of interventions to reduce air pollution.

Air pollution causes ozone depletion and global warming so the National Environmental Management: Air Quality Act is important as it helps

the government to:

- Regulate and manage air pollution in the country.
- Monitor the pollutants to ensure that air quality is improved and,
- Enhance the quality of ambient air to secure an environment that is not harmful to the health and wellbeing of people.

Information from the monitoring stations is transmitted to the South African Air Quality Information System, a partnership between the Department of Environment, Forestry and Fisheries and the South African Weather Service. This information is collected every five minutes and is made available through the SAAQIS website and an innovative mobile application tool for

reporting air quality to the general public. The app tells you how clean

or unhealthy your air is, and what associated health effects may be a concern.

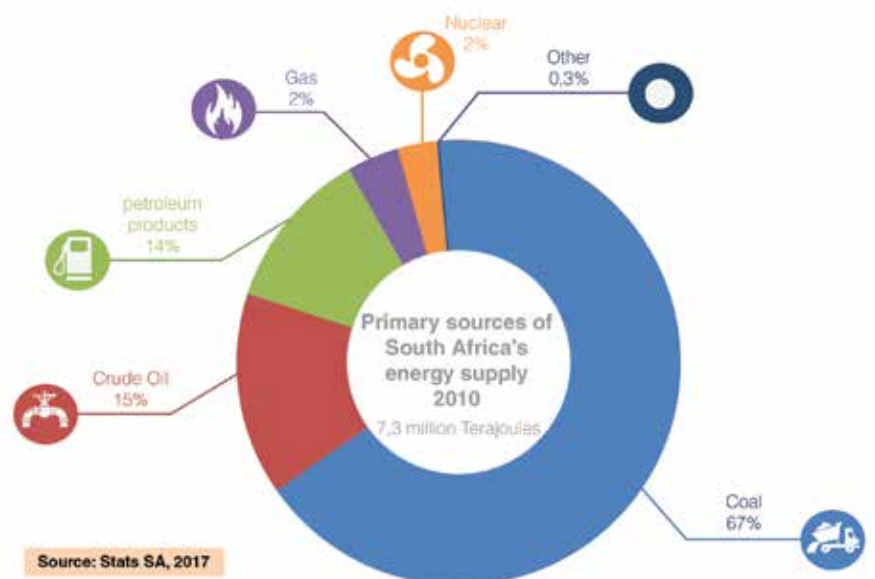
In addition to man-made sources, large quantities of air pollutants are released from natural sources, which include: veld fires, biological sources, wind erosion and volcanic eruptions. Others are, industrial plants, power stations, mining, traffic, exhaust fumes, agricultural activities, household cooking and refuse burning. As are chemical sprays; households products, such as tobacco and cigarette smoke; fumes from paint, hairspray, varnish, aerosol sprays; and many cleaning products we use in our homes.

Ambient Air Quality Monitoring

- There are currently **132** government owned stations across the country
- Of these an average of **65** are reporting to SAAQIS LIVE



South African Primary Energy Supply



South Africa's air quality is everyone's responsibility

By Salome Tsoka

DEPARTMENT of Environment, Forestry and Fisheries Chief Director: Air Quality Management Dr Thuli Khumalo highlights how the state of South Africa's air quality is worse in winter and calls on all South Africans to take responsibility.

She reminds us that it's our worst time in terms of emission sources and the climatic conditions that trap polluted air. The temperature drops and people burn coal to keep warm. There's also a natural phenomenon called the inversion layer which happens when the earth's surface cools down faster than the upper atmosphere and polluted air parcels are trapped.

Dr Khumalo believes the country should be moving towards renewable energy because we have the resources - sun and wind - to generate electricity. We also have legislation for a just transition to a lower carbon future.

As she reminds, "We have pollution implementation plans that commit industries to produce less going forward. But the solution doesn't rely



Dr Thuli Khumalo

on industry only. We all need to change our behaviour and be conscious of activities that add to the problem."

The department will raise public awareness and encourage

behavioural change. "We want to make people aware of how they can contribute," she adds.

The Department's South African Air Quality Information System (SAAQIS) App is

available for android and Apple devices and offer live readings of the state of air from the monitoring stations. Information is also available on the SAAQIS website.

Health effects of Air Pollution

BREATHING polluted air can cause one's nose to burn, irritate the throat, make breathing difficult or it can irritate the eyes. This is a typical experience when one is cooking using wood, coal or paraffin. Tiny particles of dust and smoke can get deep into a person's lungs and causes problems like wheezing and coughing, especially to those living with respiratory diseases. Some people are allergic to air pollutants (e.g. pollen, dust) especially during springtime and suffer from respiratory illnesses such as sinusitis and hay fever.

Other health problems related to air pollution include:

- Asthma,
- Cancer,
- Heart diseases,
- Skin irritations,
- Headaches,
- Fizziness,
- Fatigue,
- Stress,
- Nervous disorders and birth defects.



World Oceans Day: Gender and the Ocean

By Benedict Mlaba

This year South Africa joins the World in celebrating World Oceans Day again on 8 June. The global theme this year is Gender and the Ocean however South Africa has adopted the theme Women and the Ocean to put a spotlight on the various career opportunities available for women to be a part of in the Oceans space.

In an effort to highlight just one of many such careers, we conversed with Estuary Ecologist, Jabulile Nhleko, from the Department of Environment, Forestry and Fisheries branch: Oceans Research, about her career, to get an idea of what it involves, why one should be interested, and how can one pursue a similar career path.

“Estuaries are a link between freshwater and marine. Its biota (plants and animal life of a region) is made up of biota from both environments and therefore skills learnt in estuaries could be used in both.

“Ms Nhleko, who has been working in the department for five years, after having joined it in May 2014, went on to explain the requirements needed to pursue this career and her role in the department. “Estuary ecology is a scientific field, therefore, it is imperative to do Mathematics and Science in high school in order to gain University admission. A Bachelor of Science degree, which takes a minimum of three years to complete, is the qualification that one has to complete in order to pursue a career in estuary ecology”.

“My role as an Estuary Ecologist in the department includes developing and implementing estuarine research. This involves writing proposals, going on field trips, sample processing and report writing.

I also provide the department with scientific support and advice on issues related to estuarine management”, she explained.

Network of 20 New Marine Protected Areas

By Tshego Letshwiti

IN May the Department of Environment, Forestry and Fisheries officially declared the long-awaited new network of 20 Marine Protected Areas (MPAs), following five years of work since government endorsed a plan to achieve this as part of Operation Phakisa: Ocean Economy.

Some benefits include an increase in the spatial protection of South Africa’s ocean environment from the current 0.4 percent to 5.4 percent, providing some protection to 90 percent of habitat types, as well as contributing to global protection in line with a commitment to the Convention on Biological Diversity, a sister Convention to those on Climate Change and Sustainable Development.

MPAs provide safe spaces in which fish can breed undisturbed. They are essential to maintaining eco-certification of deep-sea trawl fishery. A process to assess whether habitat and nursery areas for the hake fishery, are adequately protected. MPAs also contribute to growing SA’s marine

eco-tourism sector by providing undisturbed natural habitat for whales, sharks, seals, dolphins, turtles and seabirds for international and domestic tourists to experience.

The network will also provide the basis for ongoing resilience to the impact of climate change. Oceans are an essential component of the climate system, absorbing and transferring heat, and regulating the exchange of carbon dioxide (CO2) with the atmosphere. With increasing CO2 levels, and rising ocean temperatures, this regulatory capacity is at risk.

Our ocean space, one of the most varied in the world, is highly productive with rich biodiversity providing for living and non-living resources that contribute significantly to the country’s economy and to job creation. As we grow and intensify the ocean economy, it is essential to provide the necessary protection to a representative sample of marine ecosystems, thereby ensuring their resilience to human use and impact, and to the impacts associated with climate change.

OVER 5 000 tonnes of waste removed during sea operation

By Gaopalelwe Moroane

IN October last year, the Department of Environment, Forestry and Fisheries led a global marine crime law enforcement operation named ‘30 Days at Sea’ whereby 359 ship inspections were undertaken in South African ports and coastal waters. A host of environmental violations were detected for necessary action to be taken.

Globally led by Interpol and coordinated by its worldwide network of 122 national coordinators, the operation involved environmental, fisheries, maritime and border agencies, national police, customs, and port authorities.

This compliance and enforcement response to pollution within the marine environment was aligned to Interpol’s global enforcement operation, which attracted the participation of more than 50 countries and is the first Interpol-led global law-enforcement operation targeting, particularly illegal discharges from vessels and illegal dumping at sea.

South Africa’s participation in the 30 Days at Sea Operation demonstrates the commitment of the South African government to combat marine environmental crimes.

The month-long operation in South Africa led to:

- 49 detections of environmental violations which will be addressed through enforcement notices;
- 10 cases of serious environmental non-compliances which will be dealt with through criminal investigations and;
- 27 vessels were identified for focussed MARPOL inspections with a gross tonnage of 1 250 214 tons.
- The following immediate results were also reported:
 - In excess of 5 000 tonnes of waste was removed from the marine environment;
 - Revenue that would have been lost to the state will be recovered by SARS which will follow up on certain detected violations;
 - Several unlawfully built structures within coastal public property will be addressed through enforcement notices;
 - Three cases dealing with serious discharges of sewage and potentially harmful pollutants exceeding the maximum threshold of three companies’ coastal discharge permits are currently being addressed, and
 - A first of its kind conviction of a Ukrainian ship for illegally discharging sewage into coastal waters.

8 June is World Oceans Day

This year we celebrate the day under the theme: **Gender and the Ocean**

The theme opens a platform to address the importance of Sustainable Development Goal 5 which aims to address gender equality, towards achieving effective and sustainable use of ocean resources and realising their full socio-economic potential.

The Department celebrates the contribution of women in the ocean space and promote opportunities of careers in the oceans space.



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Department of Environment, Forestry and Fisheries hires 153 Environment Ambassadors

By Nomxolisi Mashiyi, Madimetja Mogotlane and Abraham Shoba

ONE hundred and fifty-three young people from different municipalities around the country have been appointed as Project Support Officers for the Department of Environment, Forestry and Fisheries. As Environment Ambassadors they will participate for three years and extend their environmental management education to people in their local municipalities.

The primary objective is to educate communities about conservation and protection of environment while creating job opportunities and skills development.

Initiated by the Department of Environment,

Forestry and Fisheries last year, the Youth Community outreach Programme's key objectives are:

- Promote active participation of youth in environmental management;
- Create job opportunities for youth,
- Environment related skills development opportunities,
- Work experience for employability,
- Enhance the environment capacity in the municipalities to enable effective and efficient execution of environment functions.

The programme is the Department of Environment, Forestry and Fisheries response to the President's call for prioritisation of youth development, hence the launch of the Presidential Youth Employment Service Programme.

It targets 5075 youth appointed on contract and deployed in the country's 213 municipalities. In each there will be 23 young people. And there will be 44 in each Metro. These young people will ultimately obtain a degree or national diploma in environment related studies or bonafides from the municipalities. So far 184 have been appointed the remainder are in progress. It must be noted that these young people were all unemployed. They will be in the coal face of government's service delivery programme, the champions of the Department of Environment, Forestry and Fisheries. 'Thuma Mina Good Green Deeds Programme,' which aims to ensuring a clean and safe South Africa by conducting environmental education and awareness and clean up campaigns of illegal dumps or waste hot spots at ward level.



BEFORE he became a Project Support Officers Mr Sphamandla Mbatha worked as a petrol attendant. He has a National Diploma in Environmental Science and says he wants to learn as much as he can about the environment sector. "In the next three years, I want to teach my community about maintaining a clean and healthy environment for future generations. I would like to thank the department for giving me such an unimaginable opportunity and I hope other graduates will be given the same."



Mr Shaheen Thakur who will be serving under the Endumeni Municipality says he will use the opportunity to apply his theoretical knowledge in a practical environment. He said "I feel immensely privileged to be afforded this opportunity by Department of Environment, Forestry and Fisheries and I aim to fully take advantage of this opportunity to do my best to achieve all my goals as well as to leave a legacy and a mind-set that promotes environmental conservation and stewardship in communities within my municipality. This is also a huge opportunity to apply my theoretical knowledge in a practical environment,"



INNOCENTIA Magubane, Youth Environmental Coordinator, holds a National Diploma in Nature Conservation from Paulpietersburg in Edumbe Local Municipality in

KwaZulu-Natal. Upon completing secondary school in 1998, she stayed home, unable to pursue tertiary education due to financial constraints. In 2010 she began work as a security guard at the Department of Justice and used her earnings to register with the University of South Africa. It was during her employment with the Department of Justice that she learnt of the National Student Financial Aid Scheme. Working full time and paying for her tuition with the help of NSFAS, Innocentia went on to complete her National Diploma in 2017. Her choice in qualification was informed by her love for animals and curiosity to better understand how the animals interact with their habitat. In 2018 she was advised by a friend to register as an unemployed graduate in the local municipality's database. Her CV was forwarded to the Department of Environment, Forestry and Fisheries and after a successful interview she was employed as a Youth Environmental Coordinator in the Youth Community Outreach programme led by Ms. Nomxolisi Mashiyi, Director of the Youth Development Directorate.

Empowering a skillful youth

By Nomvuyo Mlotshwa

THE Youth Empowerment Programme implemented by the Environmental Protection and Infrastructure Programmes assists youth to become more employable through employer-centric skills training. Skills development is based on the national list of occupations in high demand as published by the Department of Higher Education and Training.

In November last year, 120 Gauteng youth achieved a 12-month Recycling and Entrepreneurship certificate at the University of South Africa. The five modules being risks and responses, action to address an environmental issue, environmental education

as a community awareness tool, development of an original environmental learning programme and workplace evidence collection.

The students also received non-accredited training interventions such as open space greening, career guidance, CV writing, presentation skills and motivational speaking. Mr Malusi Vatsha, CEO of Delta Environmental Centre said, "One student was able to start a small recycling business, and five others have found employment". Moreover, 70 of the best performing students were given an opportunity to apply for the second-year enrolment of their diploma, while four students opted to venture into other fields of study."



Picture: Madimetja Mogotlane

Find us at a Career Expo near you

ON a regular basis, the Department of Environment, Forestry and Fisheries hosts career expos across the country to increase knowledge on environmental careers and to help students make the right career choices at tertiary level.

Career opportunities and bursaries offered by Department of Environment, Forestry and Fisheries to learners and unemployed youth include but are not limited to: Environmental Law; Resource

Economics: Waste and Pollution Management; Environmental Sciences; Chemistry / Chemical Engineering; Marine Biology and Marine Sciences; Toxicology; Geographic Information Systems; Conservation Planning and Conservation Biology; and Statistics.

The expos also provide exhibitors an opportunity to advertise their various work opportunities, bursaries, internship programmes, learnership and graduate programmes.



Students from Carl Marcomess High School in Kokstad during an Environmental Careers Expo. Picture: Erica Mathye

Opportunities for Youth in Environment



Steven Mabungana, a popular educational shark dissector and entrepreneur from Durban helps the Department of Environment, Forestry and Fisheries raise awareness at schools and outreach events about the effects of pollution on marine life. As a result of his successful career in marine biology, he has participated in numerous Department of Environment, Forestry and Fisheries events such as World Oceans Day and National Marine Week. Here demonstrates the impact pollution has on ocean life.

FRESH young minds are needed to revolutionise the way we travel, the energy we use, minimise our waste as well as sustainably feed our people and build our houses and towns. To pursue a career in the sector, learners generally need certain subjects at Grade 12 level, depending on the specific career in mind. Most programmes relevant to environmental careers are classified as Science Programmes so relevant Grade 12 subjects include Mathematics, Biology, Physical Sciences, English and/or Geography.

Internship Programme

The environmental field provides many exciting, interesting and satisfying career choices, stretching across a range of fields and

disciplines so the has implemented an internship programme as a pipeline for candidates competing for appointments in and outside the department.

Unemployed South African undergraduate and postgraduate students who have not been previously employed under any internship programme can apply in fields that are in line with the department's core business.

Applicants should not be above 35 years of age and applications open in October each year.

For more information contact: Department of Environment, Forestry and Fisheries Mr Thomas Mathiba Director: Sector Education, Training and Development Tel: 012 310 3653 Email: tmathiba@environment.gov.za Call Centre Tel: 086 111 2468 Email: callcentre@environment.gov.za Switch Board: 012 310 - 3911 Physical Address Environment House 473 Steve Biko Road Corner of Soutpansberg Road Arcadia Pretoria 0002 Postal Address Private Bag X447 Pretoria 0001.

Fixing wetlands to help the environment and improve water security

FROM an ecological perspective, when we fix wetlands we increase the environment's ability to store water in the soil. And, for communities that fetch water from the rivers or use water for irrigation or livestock feeding, we have actually made a difference by fixing their wetlands which can now provide water directly to the people.

So says Mbali Goge, Provincial Coordinator for Working on Wetlands KwaZulu-Natal who adds she's found the working on wetlands experience very rewarding, "I am proud to be part of a programme that strives to help improve water security in rural communities."

"Wetlands have many benefits including an ability to hold water longer.

Communities are now able to harvest natural material to make mats and baskets. During the flood season people sometimes find pockets of fish. Wetlands have also helped communities improve grazing in summer and winter."

Ms Goge adds that the programme has helped employ many community members while opening doors for women in the area.

"From a financial perspective, the programme has enabled some of the communities to achieve quite a bit. With the income people are making from our projects, they are able to afford a better education and lifestyle for their children and many have built houses since the project began."

World class facility monitors oceans and coasts

THE world class National Pollution Laboratory at the Walter Sisulu University's Mthatha Campus and headed by Mr Ayanda Matoti, is key to operations involved in monitoring oceans and coasts under the Department of Environment, Forestry and Fisheries.

Dr Motebang Nakin, acting Project Manager, says the lab is managed by a steering committee comprised of three officials from the department and three scientists based at the university. The facility is strategically placed in the Eastern Cape, which has the highest number of estuaries leading into ocean waters, with important consequences as sites for evaluating coastal water contamination. The laboratory, he adds, is poised to implement phase two of its operations, which will see the expansion of lab space, as well as office space for hosting visiting scientists.

Dr IJ Ntozakhe, the lab's Technical and Principal Investigator, says, although the Department of Environment, Forestry and Fisheries is funding the facility, it is run independently by the university, in keeping with the international regulations and requirements. As a non-profit entity, it conducts affordable monitoring of the quality of water and pollution of coastline areas and was a core development of Operation Phakisa initiatives. As such, the lab features state-of-the-art equipment not found in other facilities in the country. It also does its own sample-gathering in coastal areas and allows members of the public, business entities and other stakeholders to submit samples for testing.

Operationally, the facility contains a micro-biological lab, a

chemical lab, a GC-MS Prep Room, an ICP-MS Prep Room, and a cold room where all collected samples are kept. In the

micro-biology lab, samples are tested for bacteria in the water. The chemistry lab analyses the chemical composition of collected samples, determining the quality of the water based on components such as fluoride, phosphates, chlorides, ammonia, nitrates and silica. In the GC-MS Prep Room the separation of organic materials, compounds and chemicals takes place, where the presence of contaminants such as petrol, diesel or oil can be determined. The ICP-MS Room is where the presence of inorganic materials, such as mercury and metals, is tested.

Five technicians presently work in the different labs. As phase two of the expansion programme kicks in, their numbers will increase. The micro-biology lab, for instance, will soon be split into two, with one focusing on testing for pathogenic (poisonous) and the other for non-pathogenic bacteria. The current pool of technicians hold degrees and post-graduate qualifications in biology, chemistry and microbiology, and receive further training in the course of their work.

For example, Silindokuhle Ndelela, technician in the micro-biology lab, has a BSc in Microbiology, is earning a MSc and has also had on-the-job training such as how to skipper the boat used to collect water samples from estuaries such as the one in Qolorha. She encourages young people who study physical science subjects at High School level to consider pursuing a career in "an exciting, rewarding and growing field in the sciences in South Africa".



The National Pollution Laboratory, located at Walter Sisulu University.

A gigantic ship navigating treacherous waters

By Perfect Hlongwane

THE SA Agulhas II is a huge, nine-deck icebreaker dwarfing every other ship as it sits majestically in harbour. Owned by Department of Environment, Forestry and Fisheries, it is capable of sailing up to and around the South Pole, navigating treacherous Antarctic waters with relative ease. Over 134m long, its maiden voyage was seven years ago.

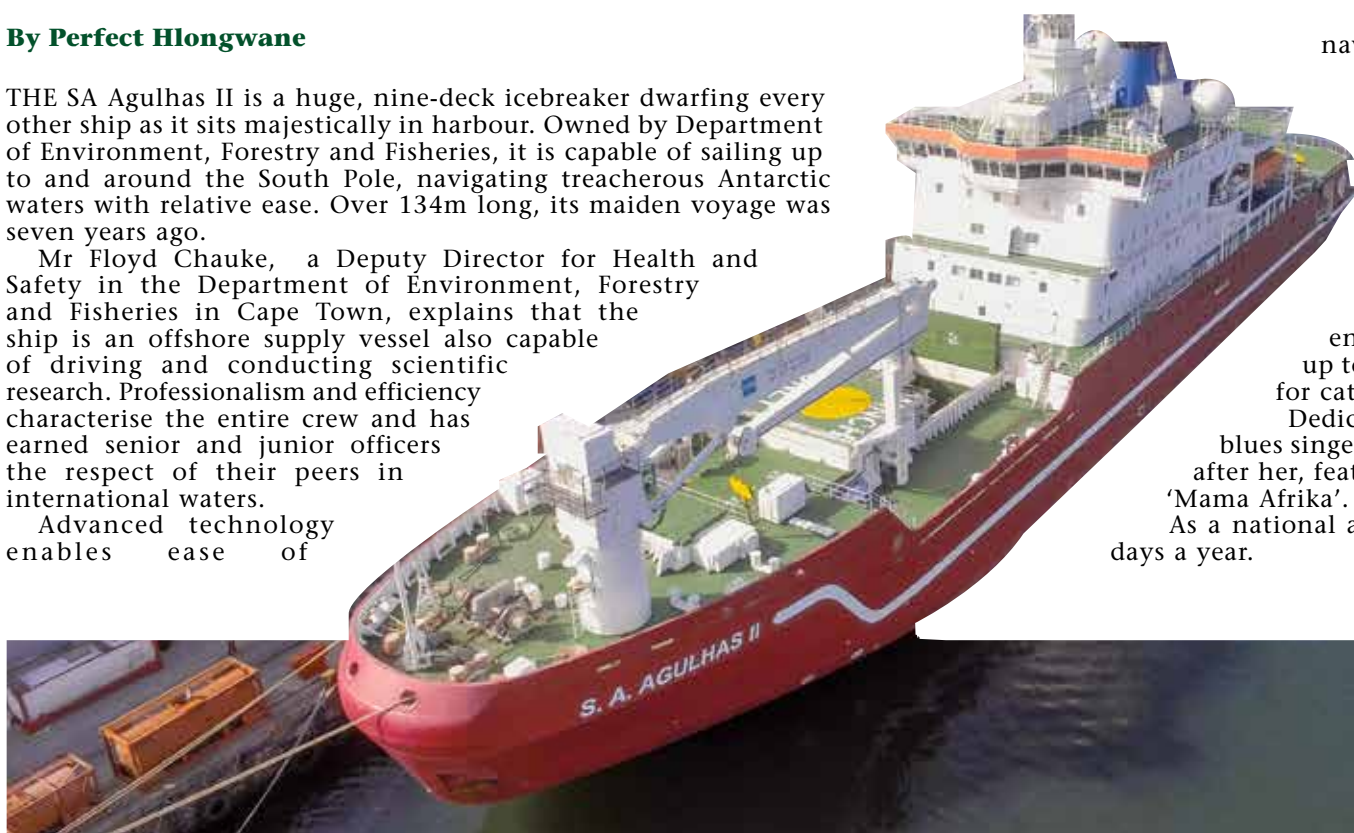
Mr Floyd Chauke, a Deputy Director for Health and Safety in the Department of Environment, Forestry and Fisheries in Cape Town, explains that the ship is an offshore supply vessel also capable of driving and conducting scientific research. Professionalism and efficiency characterise the entire crew and has earned senior and junior officers the respect of their peers in international waters.

Advanced technology enables ease of

navigation

and safety of passage out at sea, with both automatic and manual steering for various expeditions. The Agulhas II is designed to supply South African research stations in the Antarctic, as well as to carry out scientific research. A single trip can take up to 35 days so fully-equipped facilities, such as an onboard hospital and canteen, are necessary to keep the crew healthy and well-nourished. There are several scientific laboratories and, on any given trip marine and offshore scientists engage in research. The ship is also capable of carrying up to three helicopters at a time, and also has cargo space for caterpillars.

Dedicated to the memory of the iconic jazz and traditional blues singer Miriam Makeba, a luxurious spacious lounge named after her, features stunning colour and black-and-white images of 'Mama Afrika'. It is where crew and passengers occasionally relax. As a national asset, the SA Agulhas II is opened to the public two days a year.





Let's combat desertification and grow the future together

ON June 17 'World Day to Combat Desertification' will be a unique occasion to remind everybody that land degradation and drought can be effectively tackled and solutions are possible.

The theme will be 25 years of implementation of the Convention and beyond, focusing on the path the Convention has taken, and the future the Convention could bring, with the slogan, "Let's grow the future together".

This calls for a celebration of the 25 years of progress made on Sustainable Land Management. It also questions how we envision a world in which Land Degradation Neutrality provides a solid basis for poverty reduction, food and water security and climate change mitigation and adaptation.

Different reports indicate that, indicate a global impact. The recurrent and growing threats of forest fires, heatwaves, mass migrations, flash floods, sea-level rise as well as food and

water insecurity will become more evident. Hence an urgent need to address these challenges through rehabilitation, conservation and restoration of degraded landscapes through sustainable land management practices and approaches.

Key messages

There is an urgent need to grow economies and secure enough food, clean water and energy by ensuring land users an enabling environment for sustainable land management, which should be everyone's business. Together, we can restore the productivity of over 2 billion hectares of degraded lands and improve the livelihoods of more than 1.3 billion people around the world.

With the costs of land restoration in the range of approximately R2165.52 a hectare, achieving Land Degradation Neutrality is one of the most cost effective ways to fight hunger and cope with climate change, secure water and energy resources and promote inclusive growth.



An environment well worth protecting

OUR environment extends far beyond our everyday surroundings, it comprises of every natural aspect of our beautiful country. South Africa's rivers and wetlands, mountains and plains, estuaries and oceans, magnificent coastline and landscapes all contain an exceptionally rich and varied array of life forms. In fact, our country ranks as the 3rd most biologically diverse country in the world, with South Africa having

its very own Cape Floral Kingdom – one of only six worldwide.

Our national coastline, hugged by two oceans, boasts one of the most diverse marine ecosystems in the world; and our oceans host about 83 percent of all known marine fish families.

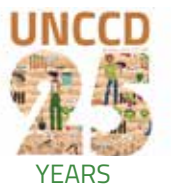
By protecting our environment, we not only save animals and plants, but also ensure the survival of our species through conservation and sustainable practices.

The environment

can be compared to the foundation of a building - as you remove critical parts of the foundation, the building weakens to a point where eventually the entire structure collapses. Similarly, each plant and animal has a specific role and, as we destroy and remove them, we interfere with the natural processes that form the backbone of the ecosystem, eventually causing it to deteriorate beyond repair.



17 June is World Day to Combat Desertification Let's grow the future together



RESPONSE ON DROUGHT

The approach being employed by government in addressing the drought and land degradation problem, facilitates coherent and integrated intergovernmental responses, namely, the Landcare Programme, Working for Water, Working on Fire and Working for Wetlands. These responses contribute to job creation, food security, skills development, conservation, land rehabilitation and restoration as well as rural development.



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#Let'sgrowthefuturetogether

#GoodGreenDeeds

TOGETHER

WE CAN BEAT AIR POLLUTION

DON'T LET THE FUTURE GO UP IN SMOKE



POWER STATIONS:

Need pollution control equipment on stacks; find alternatives to fuel combustion; switch to renewable energy; and set -stricter emission limits for industries.



MINING SHOULD:

Control fugitive dust emissions by watering or chemical suppression; vegetate mine dumps and adopt UNEP solutions.

INDUSTRY SHOULD:

Continue to improve pollution control equipment; switch to alternative fuels or renewable energy; opt for cleaner technologies; and set stricter emission limits.

BEAT AIR POLLUTION



Use public transport or car sharing, cycle or walk • Switch to a hybrid or electric vehicle and request electric taxis • Turn off the car engine when stationary • Reduce your consumption of meat and dairy to help cut methane emissions • Compost organic food items and recycle non-organic trash • Switch to high-efficiency home heating systems and equipment • Save energy: turn off lights and electronics when not in use • Choose non-toxic paints and furnishings.



AVOID CIGARETTE SMOKE



AVOID HARMFUL CLEANING PRODUCTS



REDUCE OR ELIMINATE FIREPLACE AND WOOD STOVE USE.

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