



Publication: HartlandNuus - Main
Title: Water - The Central Pillar of The Greater Kruger Economy
Publish date: 08 Dec 2023
Page: 3

Reach: 2500
AVE: R 15705.97
Author: Staff Reporter

Water - The Central Pillar of The Greater Kruger Economy

Water conservation, small- and large-scale farming, job opportunities, wildlife conservation and illegal wildlife monitoring and control go hand in hand in the greater Kruger National Park (KNP) region. The park is a major source of employment and local economic development, and part of what is called the 'Kruger economy', which includes the wildlife and livelihoods of the communities around KNP.

The entire system of survival, for humans and wildlife alike, depends on the region's Mpumalanga-Drakensberg strategic water source area (SWSA), notably the Sabie River, which flows from the mountain catchment through forestry plantations, farmland and numerous communities into the KNP and out to Mozambique.

"This is one of South Africa's handful of SWSAs, which are arguably our most important natural and economic national asset," says conservation ecologist Samir Randerer-Rees, Programme Manager of WWF-SA's Water Source Areas programme. "10% of South Africa's land area, mostly in the high mountain catchments along the eastern escarpment, generates 50% of the volume of water in all our river systems."

From 2019, one of the WWF Nedbank Green Trust's freshwater projects focused on the Mpumalanga-Drakensberg SWSA, in partnership with the Kruger to Canyons Biosphere (K2C), which spans 2.5 million ha of land, including protected areas, catchments and privately and community-owned land between Limpopo and Mpumalanga.

"It requires complex management of the entire river system, together with the many different stakeholders and communities that inhabit the region," says Tobie Badenhorst, Head of Group Sponsorships and Cause Marketing at Nedbank. "A number of partners are working together to improve the quality and quantity of water throughout the system and to advance job opportunities and livelihoods in the region."

All forms of conservation, including water and wildlife, are essential to integrated management and the sustainability of the Kruger economy. The Global Environmental Facility (GEF) are two other key WWF-SA, K2C and KNP partners, focusing on livelihood projects, including environmental monitors from the community who monitor and patrol KNP's boundary fence every day. This contributes to reducing poaching and illegal wildlife trade and helps prevent community cattle entering the park through broken or cut fences, which leads to them being impounded. It also stops wildlife from leaving the park, which causes human-wildlife conflict, such as elephants destroying crops and predators attacking cattle.

The salaries of the environmental monitors are paid by the Expanded Public Works Programme. "Most of the environmental monitors have matric and they participate in field guide and ranger training to enhance their career paths," says Lazaro Sibiyi, GEF Stewardship Supervisor in KNP.

"Part of their training includes an understanding of the legal requirements of their work, such as upholding human rights, defence and use of minimum force, and how to capture statements," adds Lara Rall, WWF-SA's Project Implementation and Communications Manager. "We also work with the local judiciary to achieve an increase in successful prosecutions for poaching and the illegal trade in rhino horn and any wildlife products on both the South African and Mozambique side."

Former environmental monitor, Dimakatso Nonyane, now works with K2C's Chief Operating Officer, Marie-Tinka Uys, on the Resilient Waters Project. "K2C has developed the business case for a water fund catchment investment programme, which includes employing community members in alien invasive vegetation removal, sustainable cattle grazing, and sustainable water use for farming and forestry to improve the quantity and quality of water downstream in the Sabie River," Uys explains.

"A major problem we are addressing is the pollutants in the Sabie River, such as fertilisers, sewerage and the illegal dumping of nappies and sanitary pads," Nonyane adds. "We're engaging the communities on possible sustainable solutions, such as building kilns to burn the nappies and sanitary pads and then adding the ash to cement to make bricks."

You cannot have humans, livestock or wildlife drinking polluted water. Freshwater scientists from the University of the Western Cape conducted water testing and said it is not fit for human consumption. The lack of municipal services is a problem, and many people in the communities bordering the Kruger have to buy water.

The United Nations recognises the right to water as a basic human right. South Africa's 1998 National Water Act goes further and stipulates that humans and rivers both have a right to water. By law, a certain amount of water must be left in rivers to maintain their health and function – this is called the ecological reserve. The management of South Africa's ecological reserve is essential to South Africa's freshwater and catchment management.

Conservation efforts must start at the top of the upper Sabie catchment and address issues such as the reduction of streamflow as a result of significant amounts of water being used by agroforestry, alien invasive plants and commercial farming. These increasing and competing demands can significantly reduce the water available to the lower-catchment farmers, the KNP ecosystem, and cross-border flow to Mozambique.

"In every project we undertake, we engage the community to co-create solutions and participate. We also present agroecology and water conservation programmes at the local schools," Uys explains.

There are some wonderful examples of agroecological farming in the region, such as Siphwe Sithole's farm near Malelane where she farms mainly African indigenous crops for the slow food market.

There are also several successful sugarcane farmers around Malelane. They have a local bank for sugarcane farmers called Akwanzde ("expand" in SiSwati) that offers loans to the approximately 1 400 sugarcane farmers in the region, including those without equity.

"When I started farming with sugarcane in 2021, I managed to lease 150 ha and have since done well for myself. But it is very hands on – you have to give it your all," says farmer Mfundo Msimango. He has since added another 48 ha and started growing cotton and paprika as part of a project with Woolworths. Paprika is in high demand, achieves a good yield at 2,5 to 2,8 tons per ha and reaches a good price of about R27 to R30 per kg.

Another local farmer, Moses Khoza, is farming several varieties of sugarcane on approximately 400 ha. Agri economist Evans Mashego for the Malelane and Komatiport region says the market for sugarcane is good, and they have an assured market no matter how much they produce. They achieve about R88 000 gross per ha.

Sugarcane is, however, a water-thirsty crop and must be managed carefully, with drip irrigation as the preferred irrigation system.

"Water conservation is the drum we continuously beat, and while we don't claim to be the sole driver of this, we take pride in the fact that this is gaining traction," says Randerer-Rees. "How we manage our water at every level is not something that can be put off. It is imperative to protect our country's water supply, and it is the business of every South African to support this."

60% OF SOUTH AFRICANS MISTAKENLY BELIEVE ANTIBIOTICS CAN CURE A SORE THROAT

In World Antimicrobial Awareness Week (18 – 24 November), generic medicine provider, Pharma Dynamics, aimed to clear up the misconceptions and myths about antibiotic use, which can contribute to the inappropriate or overuse of these life-saving medications.

Among the most common public misconceptions is that a sore throat can be cured with antibiotics.

Based on a study conducted across 13 countries, including South Africa, among 5 000+ respondents, over 80% confirmed that they visited a doctor in the last 12 months for treating a sore throat. Those who thought antibiotics would be helpful varied considerably across countries – from 24% in France to 94% in Saudi Arabia. More than 60% of South Africans also believed antibiotics could help.

Elani van Zyl, Critical Care Product Manager, for Pharma Dynamics says an acute sore throat is one of the most common concerns patients consult doctors for.

"However, antibiotics are not always effective at treating a sore throat since most throat infections are caused by viruses, not bacteria. Antibiotics are designed to treat bacterial infections, not viral infections".

She says the overuse or misuse of antibiotics can lead to antibiotic resistance, which is a major public health concern.

"Using antibiotics when they are not needed can contribute to the development of antibiotic-resistant bacteria. Antibiotics can have side effects, and taking them when not necessary can expose you to unnecessary risks. Some people may experience allergic reactions or digestive problems when taking antibiotics. When antibiotics are used inappropriately, they can also disrupt the natural balance of bacteria in the body, including the gut microbiome, leading to yeast or other fungal infections.

"Most throat infections typically run their course without medical intervention and most people recover within a week or so as their immune system fights off the virus. However, in some cases, a sore throat may be caused by a bacterial infection, such as streptococcal bacteria (strep throat). In these cases, antibiotics may be prescribed by a healthcare provider to treat the infection and prevent potential complications. Your healthcare provider can help determine whether your sore throat is viral or bacterial through clinical evaluation and, if necessary, diagnostic tests like throat swabs."

Antibiotic resistance is a significant and growing global public health problem. It poses a serious threat to modern medicine and can have wide-ranging consequences for individuals, communities and healthcare systems.

"When bacteria become resistant to antibiotics, it means that infections caused by these bacteria become more difficult, and in some cases impossible, to treat. This can lead to prolonged illnesses, increased mortality rates and a higher risk of complications from infections," says van Zyl.

Efforts to combat antibiotic resistance involve a multifaceted approach, which starts with the responsible use of antibiotics.

It's essential to follow your healthcare provider's guidance regarding the use of antibiotics and not self-prescribe or use antibiotics unnecessarily, as this can contribute to antibiotic resistance and other health problems. If you have a sore throat, it's a good practice to consult a healthcare professional to determine the cause and appropriate treatment.

Patient education and awareness about the appropriate use of antibiotics are crucial components of antibiotic stewardship. When patients understand when antibiotics should be used and when they should be avoided, they can play an active role in promoting responsible antibiotic use.

Van Zyl says when patients are actively engaged in antibiotic stewardship, it can have a positive impact on public health by reducing antibiotic resistance and preserving the effectiveness of these critical medications.

"If you're plagued by the odd sore throat, try fast-acting throat sprays like, Gesoral – a non-steroidal medication with anti-inflammatory, analgesic and anti-microbial properties, which is effective at soothing and healing a sore mouth or throat with the added advantage of reducing the development of plaque."

Visit My Dynamics for more information on the responsible use of antibiotics.