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Water and Sanitation
REPUBLIC OF SOUTH AFRICA

OPINION PIECE

Water, Water, nurturer of life

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The next big question in the minds of many South Africans after load shedding is whether the country is faced with a debilitating water-shedding crisis.

The question is invariably based on the perceived notion that South Africa is consistently hopping from one crisis to another without fail. .

The perception is propelled by some academics who have recently predicted that water shedding is almost certainly our next biggest headache in the advent of democracy. As such, South Africans are holding a collective breath in panic, wondering if during this period we will have a drop to drink, let alone for performing other chores that are associated with the precious resource.

Remember the infamous doomsday prophesy in the 1990s that come the year 2000 the world would collapse from technology and that the earth would become a ball of inferno? How about the red herring that white South Africans would be attacked in their homes and streets by their fellow black countrymen when Nelson Mandela dies?

Admittedly, South Africa is rated among 30 driest countries in the world that are faced with the possibility of becoming a desert in the next 50 years unless we took serious measures to save water. The prediction by the World Bank was made some years back and the government has since introduced a number of programmes to obviate the scourge.

Furthermore, it cannot be denied that South Africa is a dry country in a dry continent. In fact, at 450 mm a year the country receives half the rainfall compared with the 800 mm in Europe and elsewhere. The uneven rain pattern purports Europe and Africa as continents on two different planets.

It's against this background that for reasons best known to them, the academics have taken it upon themselves to raise a red-herring on water.

No doubt South Africa is faced with enormous challenges of water scarcity which in some cases have led to unsatisfactory service delivery. The lack of skills and capacity among some municipalities compounds the problem. The treatment of groundwater as a secondary, if not a tertiary option, to surface water is lamentable. The dumping of toxic waste in the country's rivers which pollutes our pristine water resources – is a great source of concern. The brain drain of mainly white engineers from government is also worrisome.

However, there are several programmes that the Department of Water and Sanitation has put in place to deal with the challenges. Through the National Water Resources Strategy (NWRS) the department is harnessing water in support of a strong and vibrant economy. Without electricity we are left destitute but without water we are nothing. There is no life without water. The availability of water (through NWRS) is achieved through effective water resources planning, infrastructure development and effective service delivery. Among the principles that drive the continuous availability of water are:



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- *Water status needs to be elevated as **The** critical resource and primary element of decision making.*
- *Water resources planning and management must be integrated and aligned with all growth and development as well as social and government outcome strategies.*
- *Water is everybody's business. Water management requires active water sector involvement, accountability, commitment and ownership. It will require effective partnerships and teams.*
- *Water management is a complex business which requires improved sector management, governance, control, co-ordination and leadership.*
- *Water is not only a technical business. It also needs to include business principles and approaches such as sustainable management, financial management, service delivery and customer care, institutional arrangements, communication and continuous tactical and strategic planning.*
- *A priority is to invest in people and associated skills and capacity building – from the public to national government.*
- *Improved water sector knowledge, research, monitoring and evaluation are key aspects of the extended business.*
- *The issue of water security has put new emphasis on the concepts of "value chain" and "life cycle". In the planning and the provisioning of water, the challenge in many cases is not just a resource issue but rather a supply and delivery issue. This requires holistic and integrated management and governance.*
- *Water management must be implementation, outcome and impact driven.*

We also need to keep an updated audit of the consumption of water to enable the government to distribute it fairly and equitably. At 62% agriculture consumes the highest amount of water in South Africa. Through the Water Reform Policy Review the department will review the skewed allocation of water among industries and consumers generally. It cannot be that one industry in a water scarce country like ours can be afforded the use of more than half the water resources that are available. The department will invoke the 'use it or lose it' principle' to take away surplus water from those who hoard it.

The 'War on Leaks' project seeks to address the huge amount of water that is lost through pipe and tap leaks primarily in households. Through these leaks the country loses incredibly huge amounts of water that costs R7 billion a year. To offset the loss, the department is in the process of training 15 000 young plumbers and artisans who will be deployed among municipalities to fix the leaks. Last Friday President Zuma launched the project with first batch of 3 000 recruits in Port Elizabeth, Eastern Cape.

The Blue Scorpions, an Enforcement Unit in the department, monitors the enforcement of and compliance to the National Water Act. The unit works around the clock to stop a whole range of culprits who abstract water illegally from the rivers and those who pollute. In terms of the National Water Act no one is allowed to abstract water from any river or dam without a water use license. These range from individuals to farmers, mines, industries to municipalities who



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dump their toxic waste in the rivers. Last year alone the unit issued no fewer than 20 directives (notices) to offenders.

The Lesotho Highlands Water Project was instituted as a bi-national project spanning the borders of South Africa and Lesotho in accordance with a treaty signed in 1986. This almost miraculous engineering feat directs water from the Senqu River System in Lesotho to Gauteng.

Phase 2 of the project will include a pump storage scheme to generate 1 200 MW, associated transmission lines and appurtenant works, by utilising the existing Katse Reservoir as the lower reservoir and a new upper reservoir in the Kobong Valley, or any other similar scheme close to Katse Dam. The pump storage scheme will start generating electricity in January 2018. The estimated cost of the pump storage scheme at 2010 price levels is R7 600 million and will be borne by Lesotho. Lesotho is now seeking a Power Purchase Agreement from Eskom and other large users in the region for the excess power that could be generated. Construction of this dam and related infrastructure will guarantee the desired level of water availability in Gauteng and the Vaal River water supply region in the most cost-effective manner. In parallel with water conservation measures in the Vaal River, it will influence the improvement of water quality and curb illegal water use. Phase 2 water delivery is expected to come on line from June 2020. The new phase will be funded off-budget, meaning funds will be borrowed from financial markets. Apart from being a lifeline for South Africa's economic nucleus, the Lesotho Highlands Water Project is a prime example of what can be achieved when neighbouring countries join forces and work towards a common goal.

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These are but some of the projects by the department that leaves one wondering where this talk of water shedding emanates from.

Sanitation portal at: www.dwa.gov.za