water & sanitation

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INTERNET ARTICLE

Groundwater must play a role to supplement surface water – Director General tells international water conference

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Ground water can go a long to supplement the surface water to alleviate water challenges, the Director General of the Department of Water and Sanitation, Ms Margaret-Ann Diedricks in Pretoria on Monday.

Speaking at a five-day conference of the Water Resources Group (WRG), Diedricks said that there was an over-reliance on surface water at the expense of groundwater that could play a pivotal role to alleviate South Africa's water woes.

The conference is held under theme "2030 WRG Knowledge Exchange" to develop partnerships that can assist governments to accelerate actions and to increase water sustainability and water efficiency. It also raises awareness about water scarcity challenges and to find possible solutions among high level decision-makers as well as to support in-country activities

She told delegates from East Africa, India, Mongolia, Bangladesh, Peru and Mexico among others, that South Africa, together with her neighbours were experiencing the difficulties of climate change through the drought that has destroyed crops and livestock in its wake since 2014.

"There has to be definite change of mindset with regards to the general over-reliance on surface water while there is an abundance of groundwater that can be used for basic needs," added Diedricks.

She said the use of recycled water for industries and irrigation would go a long way towards helping to supplement surface water that had been dried up by the drought. There were no ready-made solutions to the current water crisis but countries had to adapt.

Her statement comes three years after delegates at another groundwater conference in Durban heard that more than 420 towns in the country were largely dependent on groundwater and 80% of rural villages were dependent entirely on this rare water resource.

From a groundwater governance point of view, municipalities lacked the human resource capacity to effectively implement groundwater governance provisions. It was also said that often there was no funding explicitly allocated to groundwater management in the municipal budget.

Dr Shafick Adams, a groundwater specialist at the Water Research Commission (WRC) estimated the total volume of available renewable groundwater to be between 10 - 343 million m3/annum (7 500 million m3/annum under drought conditions). Current use was estimated between 2 000 – 4 000 million m3/annum. Groundwater, if managed correctly, had the potential to significantly add to the country's water supply mix.

It was wrong, Dr Adams argued, for groundwater to be treated as a step-sister to surface water as the two complemented each other. Groundwater is fairly cheap and fast to develop,

most of the ground water is of potable quality and the areas where qualities are below standards have been mapped. In addition ground water can reduce the strain of high water demand from surface water resource; either as a sole supply source or by way of augmenting the already out stripped surface resources.

Zama Siqalala of the Strategic Water Partners Network told WRG delegates that the agriculture industry was the biggest consumer of water in South Africa yet it contributed a mere 3% to the country's GDP. It was about time that the industry resorted to the water use efficiency principles in order to minimize its water use, she said.

By Themba Khumalo