

INTERNET ARTICLE

The country's economy needs reliable and safe water supplies

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The South African economy needs reliable, safe water supplies. Those needs have to be met in an increasingly uncertain, volatile and warmer climate.

According to the World Wide Fund Report 2016, a two-degree increase in global temperatures means a four degree increase for South Africa.

Less rain is predicted in the western half of the country and potentially more intense flood events in the east. "Our water resources are the foundation of our water supplies and include catchments, rivers, wetlands and aquifers. If these resources are degraded, downstream investments are left high and dry. And yet, we still plan development without considering this essential 'ecological infrastructure," the report notes.

A water secure future requires that our water source areas, the 8% of our land that generates 50% of our river flows, is afforded special consideration, protection and cleared of thirsty alien vegetation. "We have proven our 'hydro-ingenuity' ever since the first dam was built in 1663."

South Africa has an impressive, but ageing and failing network of engineered infrastructure that has stored and transferred water to where we need it. Most of the surface water that we can reliably use has been allocated, so future growth in storage and supply will need to come from underground. "We have proven that managed aquifer recharge offers an evaporation-proof means of 'water banking'. Some towns are already using this technology. This will be a critical element of a water secure future for many towns and cities."

South Africa has done an incredible job of supplying previously disadvantaged households with water and sanitation during democracy. Difficult underserviced areas remain – in remote rural areas and quickly growing informal settlements – plus we have very little water available to meet additional needs.

The report points out that the country needs to think about water provision differently in remote rural locations, using decentralised systems and point-of-use household treatment technologies to make sure the water is safe to drink. This requires village-level maintenance training and acceptance. "We have proven that new technologies, approaches and management models can work. South Africa has ground-breaking legislation that recognises the importance of the whole water cycle and grants the environment and people a basic right to water."

Alien vegetation clearing programmes that include the private and public sectors, are grappling with the overwhelming challenge of alien vegetation invasion, and creating jobs for the unemployed.

There are many rays of hope in this challenging sector, but South Africans need to urgently focus on bringing these together quickly to ensure a brighter future, notes the report.