

Water and Sanitation in the News

South Africa to build six new dams

South Africa plans to build or expand six dams over the next decade to address the long-term water and sanitation needs of the country. The dams identified by the government include the dam on the Mzimvubu River in Eastern Cape, the expansion of the Clanwilliam Dam in Western Cape, the Nwamitwa and Tzaneen dams in Limpopo, the Hazelmere Dam in KwaZulu-Natal and the Polihali Dam in Lesotho, which will provide water to Gauteng.

This emerged during a meeting of the Presidential Infrastructure Co-ordinating Commission (PICC) convened by President Jacob Zuma at the Union Buildings in Pretoria on 30 April. Deputy President Cyril Ramaphosa, members of the Cabinet, premiers, metro mayors and leaders from the South African Local Government Association attended. This follows the opening of the Giyani Water Treatment Works in Mopani District Municipality, in Limpopo on 31 October 2014, and the opening of the R3-billion, 347-million cubic metre De Hoop Dam in Sekhukhune, in Limpopo, on 24 March 2014. The Spring Grove Dam near Rosetta in KwaZulu-Natal was opened in November 2013...

Source: *South Africa Info*, 05 May 2015

Context

The building of more dams in South Africa certainly forms an important part of the strategy in satisfying the increasing water demand of the South African economy and its population in the near future. However, on its own not a long-term solution as South Africa's current freshwater resource status has been described as being under immense pressure as the country's freshwater resources, including those from rivers, manmade dams and groundwater sources, had practically already been fully allocated by 2005. Concerning the future demand for water, it has been predicted that South Africa will suffer serious water shortages in 2020. Further, given the current state of water distribution infrastructure, where 37% of water is lost through leaks and burst pipes, means that investing huge amounts in bulk water infrastructure, while not making the same commitments to water infrastructure at local/municipal levels, will be ineffective over the long run.

Besides water quantity challenges, South Africa will also need to increase investments in water treatment (water

quality) infrastructure and management systems. According to a recent global study by the International Food Policy Research Institute (IFPRI) and Veolia, the world is on a path toward rapidly deteriorating water quality in many countries. The first-of-its-kind study indicates that up to 1 in 3 people will be exposed to a high risk of water pollution in 2050 from increased amounts of nitrogen and phosphorous. Up to 1 in 5 people will be exposed to a high risk of water pollution reflected by increased levels of biochemical oxygen demand (BOD). Even using the most optimistic socio-economic models, water quality is projected to rapidly deteriorate over the next several decades which, in turn, will increase risks to human health, economic development and thousands of aquatic ecosystems in developed and developing economies alike. The most rapid increases in exposure to pollutants will occur in low- and lower-middle income countries due to higher population and economic growth.

Sustainable solutions exist for cities and industry, including more aggressive investment in wastewater treatment, increased recycling and reuse, green infrastructure, the establishment of markets for nutrient credit trading, governance models based more on watersheds and less on traditional political borders, and improved home design to minimize pollution.

Source: *PRNewswire*, 07 May 2015; *UNISA*, 15 April 2014



The **Municipal Assistant™** system has proven to be one such sustainable solution - by helping water service authorities perform the effective and efficient management of available water supplies and related infrastructure assets. It has been successfully implemented in 54 sites in Southern Africa where it assists users with optimal water demand management, as well as critical operational and process functions related to the proper treatment and distribution of water and waste water.

CONTACT US:

Tel: +27 (0)21 887 7161

Fax: +27 (0)21 887 7162

WAMTech are specialists in implementing technology systems for improved governance, focussing on Water and Public Health Information Systems

Visit our websites:

www.wamsys.co.za

www.municipalassistant.co.za

www.ewisa.co.za