South Africa 2018/19 Water and Sanitation

The Department of Water and Sanitation's (DWS) legislative mandate seeks to ensure that the country's water resources are protected, managed, used, developed, conserved and controlled in a sustainable manner for the benefit of all people and the environment.

The DWS is mandated to develop a knowledge base and implement effective policies, procedures and integrated planning strategies both for water resources and services.

This entails adhering to the requirements of waterrelated policies and legislation, including constitutional requirements, that are critical in delivering on the right of access to sufficient food and water, transforming the economy and eradicating poverty.

Chapter 4 of the National Development Plan (NDP) envisages a South Africa that recognises the importance of secure and equitable access to water and sanitation as catalysts for socioeconomic development. In line with this vision, over the medium term, the DWS will focus on developing and investing in water infrastructure, improving planning in and regulation of the water sector, and monitoring and protecting South Africa's water resources.

According to Statistics South Africa's (Stats SA) General Household Survey (GHS) of 2018, the number and percentage of households with access to piped water had increased since 2006, showing that 13,8 million households had access to piped water in 2018 compared to 9,3 million in 2006. an estimated 46,3% of households had access to piped water in their dwellings in 2018.

A further 28,5% accessed water on site while 12,3% relied on communal taps and 1,9% relied on neighbours' taps. Although generally households' access to water improved, 2,7% of households still had to fetch water from rivers, streams, stagnant water pools, dams, wells and springs in 2018.

A total of 97,7% of households in metros had access to tap water. This type of access to water was most common in the Nelson Mandela Bay (99,9%), City of Cape Town (99,5%), Buffalo City and City of Johannesburg (both 98,8%). Mangaung (90,1%) and City of Tshwane (93,3%) recorded the lowest access amongst metros.

About two-thirds (62,4%) of households rated the water services they received as 'good' in 2018.

Although this is slightly higher than the 60,1% recorded in 2012, it is much lower than the 73,4% approval rating reported in 2006.

The percentage of users who rated water services as average increased from 19,7% in 2006 to 26,2% in 2018. The percentage of households that rated water services as 'poor' increased from 6,9% in 2006 to 11,4% in 2018.

By mid-2019, 2.5% of water in South Africa is directed to mining, 3% to industrial use, 2% goes towards power generation and 61% is taken up by agriculture – leaving 27% for consumption for a population of over 60 million.

Over the medium term, the department plans to finalise and implement the Water and Sanitation Master Plan, which will serve as a roadmap for the integrated planning and implementation of water and sanitation projects across the water value chain.

To ensure that water resources are allocated equitably for socio-economic development, the DWS aims to finalise 80% of authorised water use licence applications within 300 days of receipt over the medium.

Sanitation

Environmental hygiene plays an essential role in the prevention of many diseases. It also impacts on the natural environment and the preservation of important natural assets, such as water resources. Proper sanitation is one of the key elements in improving environmental sanitation.

According to the GHS of 2018, nationally, the percentage of households with access to improved sanitation increased from 61,7% in 2002 to 83,0% in 2018. While the majority of households in Western Cape (93,8%) and Gauteng (91,8%) had access to adequate sanitation, access was most limited in Limpopo (58,9%) and Mpumalanga (68,1%).

In Eastern Cape, households' access to improved sanitation facilities increased by 54,6 percentage points between 2002 and 2018, growing from 33,4% to 88,0%.

Flush toilets that were connected to public sewerage systems were most common in the most urbanised provinces, namely Western Cape (89,1%) and Gauteng (88,6%). Only 26,5% of households in Limpopo had access to any type of flush toilet, the lowest of any province.

In the absence of flush toilets, 70,2% of households in Limpopo used pit latrines, most (37,6%) without ventilation

pipes. In Eastern Cape, 40,3% of households used pit toilets with ventilation pipes.

Approximately 188 000 households (1,1%) claimed that they were using bucket toilets that were supplied and cleaned by their local municipalities, an accusation that municipalities vehemently deny.

Only 0,3% or 48 000 households primarily used ecological toilets, also known as urine diversion/separation or composting toilets. Given the scarcity of water in South Africa, this type of toilet is expected to become much more common in future.

Households' access to improved sanitation was highest in Nelson Mandela Bay (97,1%), City of Johannesburg (96,4%), and Buffalo City (93,4%) and least common in eThekwini (83,9%) and Tshwane (84,0%).

Despite the improved access to sanitation facilities, many households continue to be without any proper sanitation facilities.

The percentage of households that either had no sanitation facilities or that had to use bucket toilets. Nationally, the percentage of households that continued to live without proper sanitation facilities have been declining consistently between 2002 and 2018, decreasing from 12,6% to 2,8% during this period.

The most rapid decline over this period was observed in Eastern Cape (-33,0 percentage points), Limpopo (-18,2 percentage points), Free State (-14,6% percentage points) and Northern Cape (-13,9 percentage points).

About one-fifth (23,2%) of households were concerned about poor lighting while 17,7% complained about inadequate hygiene. Although washing hands after using the toilet is vital to control infectious diseases, 16,4% of households also complained that there was no water to wash their hands after they had used the toilet. Other complaints included long waiting times (12,6%), threats to their physical safety (11,9%), and improper or inadequate enclosure of toilets (8,9%).

Personal hygiene

Although more than three-quarters (76,2%) of households indicated that their members usually wash their hands with soap and water after they had used the toilet, only two-thirds (67,5%) said that they had easy access to hand washing facilities with soap.

Gauteng is the only province in which the percentage of households that had access to hand washing facilities actually exceeded the percentage of households whose members usually washed their hands (81,2% compared to 78,2%).

Washing hands and having access to appropriate facilities were highest in Western Cape (96,3% and 83,9% respectively), and lowest in Limpopo (57,8% and 35,9%) and Mpumalanga (61,6% and 51,5%).

National Water and Sanitation Master Plan (NWSMP)

To ensure a more coordinated approach to water and sanitation management, planning, implementation, monitoring and evaluation, the DWS has developed the NWSMP.

The NWSMP points out the priority actions required until 2030 and beyond to ensure the water security and equitable access to water and sanitation services for all in South Africa.

It was developed in partnership with all relevant organs of state and water sector stakeholders, to give effect to local, national, regional, continental and international water and sanitation delivery targets and commitments.

Dams and water schemes

The country has more than 500 government-owned dams spread across all nine provinces. They range in storage capacity from a volume of 5 500 million m³ of water down to 0,2 million m³ of water.

South Africa uses about 10 200 million m³ of water a year from its major dams. The majority of water consumption can be attributed to drinking, irrigation, electricity, mining processes and industrial processes.

Bucket Eradication Programme

In keeping with the aspirations of the NDP, steady progress is being made towards eradicating the bucket toilet system in both formal and informal areas across South Africa.

Role players Water boards

The primary activity of water boards is to provide water services (bulk potable and bulk waste water) to other water services institutions within their respective service areas. They may perform other activities under conditions set out in the Water Services Act of 1997. There are 15 water boards in South Africa, with the three largest being Rand Water in Gauteng, Umgeni Water in KwaZulu-Natal and Overberg Water in the Western Cape.

Catchment management agencies (CMAs)

The main responsibilities of CMAs are to manage water resources at catchment level in collaboration with local stakeholders, with specific focus on involving local communities in the decision-making processes, in terms of meeting basic human needs, promoting equitable access to water, and facilitating social and economic development.

Water-user associations (WUAs)

WUAs are cooperative associations of individual water users who wish to undertake water-related activities at local level for their mutual benefit.

Water Research Commission (WRC)

The WRC has a vital role in water research by establishing needs and priorities, stimulating and funding research, promoting the transfer of information and technology, and enhancing knowledge and capacity building in the water sector.

It also focuses on water resources management, waterlinked ecosystems, water use and waste management, and water use in agriculture.

Water Trading Entity (WTE)

The DWS is responsible for the regulation of water use in South Africa by ensuring that water is allocated equitably and used beneficially in the public interest, and is also required to create a register of all water users in the country.

The National Water Act of 1998 provides for cost recovery on services rendered by the department to water users. It is against this background that the department created the WTE within its administration.

The main function of the WTE is development, operation and maintenance of specific water resources infrastructure and managing water resources in specific water management areas.

Trans-Caledon Tunnel Authority (TCTA)

The TCTA is a state-owned entity specialising in project financing, implementation and liability management.

It is responsible for the development of bulk raw-water infrastructure. It also provides an integrated treasury management and financial advisory service to the DWS, water boards, municipalities and other entities that are linked to bulk raw-water infrastructure.

Komati River Basin Water Authority

The Komati Basin Water Authority was established in terms of a treaty between South Africa and Eswatini. The aim of the authority is to manage the water resources of the Komati River basin sustainably.

The authority is responsible for financing, developing, operating and maintaining the water resources infrastructure in the basin, comprising the Driekoppies Dam in South Africa and the Maguga Dam in Eswatini.

Water Tribunal

The aim of the Water Tribunal is to hear appeals against directives and decisions made by responsible authorities, CMAs or water management agencies about matters such as the issuing of licences to use water.

It is an independent body and can hold hearings anywhere in the country.

