KONRAD ADENAUER STIFTUNG

South Africa's Water Crisis: Between Physical Scarcity and Governance Failure

by Annika Huber

South Africa is facing a serious water crisis that has intensified significantly in recent weeks. In the province of Gauteng, many households were left without running water for days. Countless people had to stand in long queues at public water tanks just to obtain enough water for cooking. But it is not only private households that are affected. Many agricultural businesses have been forced to reduce their production because the available water supply is no longer sufficient to irrigate fields and farmland. These developments are not isolated local incidents; they now appear nationwide. Numerous municipalities are attempting to prevent what is known as *Day Zero* - the point at which the regular water supply collapses and water becomes available only at strictly rationed distribution points. Even touristically important regions along the Garden Route were on the brink of this tipping point at the end of January 2026.

There is no doubt that water is essential for survival, social stability, and economic prosperity, making it a fundamental pillar of national development. Against this backdrop, the issue of water security is increasingly central to the country's future. An unreliable water supply impacts not only the population's quality of life but also the nation's economic performance and its attractiveness to international investors. Even more alarming is the projection that by 2030, South Africa's water demand will be around 17% higher than the available supply.[1]

Given these developments, the question arises: how did the current water crisis emerge, and which factors structurally and persistently contribute to it in South Africa?

[1] https://www.circulareconomy.co.za/wp-content/uploads/2021/11/8.-Water_CE-Briefing-Note.pdf

A distinction is generally made between two types of water scarcity: physical and economic. Physical water scarcity occurs when a region lacks sufficient natural water resources to meet existing demand. South Africa faces a range of structural challenges in this regard, exacerbated by climate change, rapid population growth, and increasing water demand due to urbanisation.[2]

The country is among the 30 driest in the world: the average annual rainfall is only around 450 mm[3], nearly 50% below the global average of 860 mm.[4] In addition, rainfall is unevenly distributed across regions, and evaporation rates are high. As a result, South Africa is hydrologically dependent on a few strategically important water sources. Unlike many international metropolitan and economic centres located near major river systems or coastlines, Johannesburg and Pretoria lie in a water-scarce region.
This geographical reality makes the area heavily dependent on external water resources. A substantial share of the urban drinking water supply is imported from the highlands of Lesotho through the Lesotho Highlands Water Project, which provides approximately 780 million m³ of water annually - equivalent to the estimated annual consumption of 9.5 million people.[5]

While physical scarcity poses considerable structural challenges, it is only part of a much larger problem. In reality, the current water crisis is primarily a governance issue. Increasingly, experts refer to economic or human-made water scarcity, a condition not driven by natural limits but by failing state institutions, deteriorating infrastructure, and insufficient accountability in water management.

One particularly striking indicator is the high level of *Non-Revenue Water (NRW)*. Water that is treated at considerable cost but never reaches consumers due to leaks, burst pipes, faulty metering systems, or illegal connections. According to the *National State of Water Report 2024*, around 47.4% of treated drinking water in South Africa is lost, of which 40.8% is considered

[2]https://www.dws.gov.za/Projects/National%20State%20of%20Water%20Report/Documents/National%20State%20of%20Water%20Report%202024_Final%20(002).pdf
[3] https://www.gov.za/about-sa/geography-and-climate
[4] https://www.gcis.gov.za/sites/default/files/21%20Water%20and%20Sanitation%202022-23.pdf
[5] https://www.gov.za/news/media-statements/water-and-sanitation-closure-lesotho-highlands-water-project-17-mar-2024

avoidable.[6] In just the eight metropolitan municipalities[7], this resulted in an economic loss of 8.66 billion rand in the 2023/24 financial year.[8]

The causes include ageing and failure-prone infrastructure, inadequate monitoring, corruption, and systemic weaknesses in the management of the water sector.
Rand Water, South Africa's largest water utility, illustrates how little investment has been made in hydrological infrastructure in recent years. The company supplies over 11 million people in Gauteng and parts of Mpumalanga and the North West province across an area of roughly 18,000 km². Its [9]3,300-kilometre pipeline network - some sections dating back to 1907 — was designed for completely different demographic and industrial conditions and is now severely overstretched. Necessary modernisation has been largely neglected in recent years.[10]

On the municipal level, the situation is further aggravated by the lack of accurate mapping of water infrastructure. No one knows exactly which pumps and pipelines connect to which reservoirs or water towers, nor the age or condition of these systems. This lack of transparency complicates maintenance and makes long-term planning nearly impossible.[11]
According to the *National Water Act*, municipalities are legally obligated to maintain water infrastructure, minimise losses, comply with quality standards, and report malfunctions or risks immediately. Because many municipalities have neglected these obligations for years, 56 of the country's 257 municipalities have now been charged with violating the Act. The government aims to enforce accountability and address the governance failures that significantly contribute to the current water crisis.[12]

South Africa's water crisis is further intensified by criminal networks exploiting the fragile supply situation. The nationwide reliance on water tankers, originally intended as temporary emergency solutions, has created a lucrative market in which so-called *tanker mafias* operate.

---

[6]https://www.dws.gov.za/Projects/National%20State%20of%20Water%20Report/Documents/National%20State%20of%20Water%20Report%202024_Final%20(002).pdf
[7] Buffalo City, City of Cape Town, City of Ekurhuleni, City of eThekwini, City of Johannesburg, Mangaung, Nelson Mandela Bay, Tshwane
[8]https://www.treasury.gov.za/publications/other/The%20state%20of%20local%20government%20finance%20and%20financial%20management%20as%20at%2030%20June%202024.pdf
[9] https://www.gov.za/about-sa/wateraffairs#:~:text=The%20DWS%20planned%20to%20establish,related%20infrastructure%20across%20the%20country.
[10] https://www.dailymaverick.co.za/article/2026-02-24-sas-water-crisis-is-institutional-before-it-is-environmental/
[11] https://mybroadband.co.za/news/science/629992-man-who-predicted-south-africas-water-system-collapse-shares-a-devastating-message.html
[12] https://www.sanews.gov.za/south-africa/president-ramaphosa-chair-national-water-crisis-committee

These groups sabotage infrastructure, manipulate tender processes, extort municipalities, and sell water illegally at massively inflated prices. Corruption at the municipal level worsens the situation, with public contracts awarded in exchange for bribes and repairs deliberately delayed. Gauteng and KwaZulu-Natal are particularly affected, as rising demand, stagnating modernisation, and repeated supply failures increase reliance on tanker services.[13]

Due to growing supply shortages, President Ramaphosa declared water provision a top priority in his February 2026 State of the Nation Address. Through the newly created *National Water Crisis Committee* and an investment pledge of 156 billion rand over the next three years, the government aims to stabilise the water sector through centralised crisis management, major infrastructure investments, and stricter governance reforms at the local level.[14]

However, despite this political push, it will likely take years to overcome the deeply entrenched supply deficits. It is also becoming increasingly clear that water governance cannot be secured solely through executive action. It requires coordinated collaboration among engineers, technical specialists, municipal finance experts, scientists, civil society, and innovations in water management.
How the ongoing water crisis will influence the upcoming local elections in late 2026 remains uncertain. What is clear is that the public is increasingly holding political leaders responsible for the worsening situation. Water is not only a vital resource but a constitutional right and where this right is consistently unmet, political pressure inevitably intensifies, bringing questions of accountability into sharp focus.

[13] https://newlinesinstitute.org/global-security-mil-priorities/weaponizing-water-mafias-in-south-africa/
[14] https://www.sanews.gov.za/south-africa/president-ramaphosa-chair-national-water-crisis-committee