POLICY BRIEF

Financial and Fiscal Commission (2021)

Covid-19 and access to water and sanitation

Executive Summary

The ongoing COVID-19 pandemic brings forth the urgency of ensuring improved access to safe drinking water and improved sanitation as it is critical for effective COVID-19 preventive measures such as hand washing, sanitation and overall public health. COVID-19 is an active pandemic that likely poses a serious risk to progress made regarding access to clean drinking water and sanitation, especially in cases where there are existing inequalities in access to certain necessities of life (water, sanitation facilities and food storage). This can create layered vulnerabilities to COVID-19 and can render the preventive measures ineffective or simply counterproductive as a significant proportion of the population does not have access to clean and safe drinking water.

Water service providers in South Africa lack a commercial orientation. As a result, they find themselves locked in a cycle of poor corporate performance – with low coverage of services, huge amounts of non-revenue water and insufficient funding for the maintenance and expansion of their infrastructures.

Finance for the water agenda has been dominated by public budgets. To meet the growing demand, the need for finance is much higher than current national budgets. Commercial finance holds promise, but is constrained by the high-risk profiles of many water investments: deals are small or risky and the creditworthiness of water utilities or municipalities is weak. Access to commercial finance can be enhanced through blended finance, intermediary institutions and, increasingly, local capital markets.

Background

Prior to COVID-19, the global water sector was impacted by five major trends: climate change, which has led to an increase in extreme floods and droughts, challenging the resilience of water and sanitation systems; an increasing proportion of people living in areas facing water stress, which increases supply vulnerabilities; rapid urbanisation, which strains existing water resources and ecosystems;

FINANCIAL AND FISCAL COMMISSION

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The Financial and Fiscal Commission is a body that makes recommendations and gives advice to organs of state on financial and fiscal matters. As an institution created in the Constitution of the Republic of South Africa, it is an independent juristic person subject only to the Constitution itself, the Financial and Fiscal Commission Act, 1997 (Act No. 99 of 1997) (as amended) and relevant legislative prescripts. It may perform its functions on its own initiative or at the request of an organ of state.

The vision of the Commission is to provide influential advice for equitable, efficient and sustainable intergovernmental fiscal relations between national, provincial and local spheres of government. This relates to the equitable division of government revenue among three spheres of government and to the related service delivery of public services to South Africans.

Through focused research, the Commission aims to provide proactive, expert and independent advice on promoting the intergovernmental fiscal relations system using evidence-based policy analysis to ensure the realisation of constitutional values. The Commission reports directly to both Parliament and the provincial legislatures, who hold government institutions to account. Government must respond to the Commission's recommendations and the extent to which they will be implemented at the tabling of the annual national budget in February each year.

The Commission consists of commissioners appointed by the President: the Chairperson and Deputy Chairperson, three representatives of provinces, two representatives of organised local government and two other persons. The Commission pledges its commitment to the betterment of South Africa and South Africans in the execution of its duties.

the emergence of megacities, which adds the challenge of extending water and sanitation services to about 1 billion people living in informal settlements not served by water networks; and aging infrastructure, which has increased pressure to accelerate investments in more advanced markets, following decades of underinvestment (Butler, Pilotto & Mutambatsere, 2021). These trends have also emerged in South Africa, with water droughts being more pronounced in large cities such as Cape Town, which came close to Day Zero during 2018. Dikgang, Murwirapachena and Mahabir (2017) state that South Africa is a water-scarce country, and sustainable solutions should be developed to sustain both its limited water resources, and its industries that are water-intensive.

The current COVID-19 pandemic has also brought to light the urgency of recognising the need for efficiency within the water and sanitation sector, more investments to maintain and expand water and sanitation infrastructure, and fiscal instruments to deal with shocks in the sector.

The pandemic has impacted several sectors of the economy. In the water sector, it led to a change in demand for water: the demand for residential water increased, while the demand for non-residential water decreased. The net effect of the COVID-19 pandemic on total water demand varies from community to community. Certainly, the poor in society suffer the most. Providing water and sanitation services in the context of water scarcity, climate change, high poverty and high inequality, as is the case in South Africa, is a difficult balancing task, which is compounded by the COVID-19 pandemic for the water service authorities (WSAs) and water service providers (WSPs). Nonetheless, well-designed policy instruments, such as water tariff structures that incorporate the principles of fairness, equity, affordability, cost recovery, efficiency, sustainability and political feasibility, could go a long way towards providing good-quality water services in acceptable quantities and equitably for all South Africans.

One of the aims of this study is to ascertain the impact of COVID-19 on access to water and sanitation in South Africa. The second aim is to measure the efficiency of South African water utilities (WSAs, WSPs and municipalities), recognising the need for financing the water agenda. The third aim is to review the feasibility of private-sector participation.

Research findings

1. Access to water

The study shows that access to tap or piped water in a yard has been declining. At the national level, total access declined from 76% in the first wave to 74% in the second wave in 2020. Furthermore, access to tap or piped water during COVID-19 according to provinces shows that the most significant decline in access to tape or piped water during COVID-19 was experienced in Limpopo by 7%, Mpumalanga by 6% and the Eastern Cape by 4%. These are the country's more rural provinces, suggesting that access is disproportionally impacted in rural areas. However, some provinces experienced an increase, including the Free State and KwaZulu-Natal by 1%. The reasons for some households not accessing in-yard water over the same year could be attributed, among others, to a change in employment status, and a change in household income.

2. Access to sanitation

The findings show that, in South Africa, 60% of households use flush toilets connected to a public sewage system. Moreover, other common toilet facilities include a pit latrine with a ventilation pipe, which is used by 18% of households, and a pit latrine/toilet without a ventilation pipe, which is used by 14% of households. However, some households do not have proper toilets, so bucket toilets and open defecation are used by 1% of households, respectively. The picture that emerges here is one of a significant number of South African households being without access to hygienic sanitation. This analysis is further broken down by province and the results show that the most common toilet facility in the Western Cape and Gauteng is a flush toilet connected to a public sewage system, which is used by 92.2% and 84.8% of households, respectively.

The results further indicated that, countrywide, 82.7% of households have access to improved toilet facilities, while 17.3% (South African average) are without improved toilet facilities. In the Western Cape, 96.1% of households have improved toilet facilities, followed by Gauteng with 91%.

Other provinces with percentages above the national average include the Eastern Cape and the Northern Cape. Other provinces are below the national average, with the highest percentage of unimproved toilet facilities being Limpopo (36.6%), Mpumalanga (36%) and North West (31.1%).

3. Water and sanitation efficiency analysis

The average bias-corrected efficiency score of the overall sample indicated that an average WSA can decrease its inputs by 49% to perform as efficiently as the benchmarked WSA, while maintaining the same level of output. Furthermore, the results showed that the urban sample performed better than its rural counterpart.

The inefficiency could be attributed, among other reasons, to the fact that, on average, the non-revenue water, as a percentage of system input volume, amounts to 34%. While other WSAs perform significantly well with only 3%, some WSAs perform relatively poorly with non-revenue water, as a percentage of system input, amounting to 83%. Moreover, evidence reveals that some of them can barely cover their operational costs through their revenue, whereby the poorest-performing WSA can only recover 25% of its operating expenditure from the revenue it collects, while the best-performing WSA can collect revenue almost double (192%) its operating expenditure.

4. Private-sector participation

Public-private partnerships (PPPs) offer the South African water sector an opportunity to access private capital and skills to build or upgrade, operate and manage public water and sanitation infrastructure services that are provided and run by WSPs. Access to private finance can speed up the provision of public water services, where WSPs face budgetary constraints. However, the water sector in South Africa attracts the least investment flows, well below other infrastructure sectors.

5. The usefulness of intergovernmental fiscal relations instruments

To become more effective in financing interventions for water services and water security, governments could consider de-risking potential investment deals and lower transaction costs for the investor. This can be done by designing and implementing financial risk mitigation measures to make projects more attractive. Blended finance is increasingly recognised as an important innovative tool to help lower risk profiles and transaction costs with the aim of facilitating the entry of commercial finance for development purposes. Moreover, intermediary institutions can be designed to better connect the interests and capabilities of the water and financing industries.

Conclusion

The realisation of the scale, magnitude and complexity of the water and sanitation problem has compelled the South African government to increase its resolve to face the challenge. This challenge (i.e. the disparities in access to water and sanitation) is recognised internationally, hence the attempts of Sustainable Development Goal (SDG) 6 to achieve universal and equitable access to improved drinking water and sanitation for all by 2030. Although the South African government has done relatively well in addressing this challenge, it is important to track inequalities in access to drinking water and sanitation, particularly during economic shocks such as COVID-19, to assess progress regarding universal coverage under these challenging economic times.

The ongoing COVID-19 pandemic and economic crisis that emerged in 2020 have only highlighted the need to better understand and address the impacts of access to safe drinking water and sanitation services. The pandemic may potentially reverse the gains made since 1994. Moreover, access to water and sanitation is a key determinant for infectious disease control and prevention; thus, limited access creates a challenge for transmission control. COVID-19 resulted in a slight decrease (2%) in access to safe and clean drinking water in South Africa.

In the context of the COVID-19 pandemic, many WSPs may have been slow in responding to residential piped water infrastructure failures. Loss in employment by households reduced the ability of households to resolve piped water infrastructure problems.

The result is that the poorest received the COVID-19 shock on top of existing major water and sanitation service deficits, which points to a potentially overwhelming burden to contain the virus. There is a need to implement crisis emergency measures to enhance access to water and sanitation.

Closing the water sector infrastructure gap will require billions of rands in investment for each year up to 2030, in addition to the cost of maintaining and upgrading the existing networks. Investments in access expansion may decline during COVID-19. Capital expenditure is mostly funded by the national government. Considering funding gaps and budget constraints from government, borrowing and public financing with private capital is required.

The Commission makes the following recommendations:

1. Municipalities (i.e. the South African Local Government Association) should reach an agreement with National Treasury to defer water/sanitation bills for the poorest, postpone tariff adjustments and donate water tanks to informal settlements for the duration of the Declaration of a National State of Disaster.
2. The Department of Water and Sanitation should establish a benchmarking of WSPs using performance indicators (infrastructure, socio-political and financial indicators).
3. National Treasury should ensure that water and sanitation projects also form part of the economic stimulus to help mitigate the impact of the COVID-19 crisis.
4. National Treasury, the Department of Water and Sanitation, and the municipalities should systematically develop water investment by structuring mechanisms to de-risk private investments. However, long-term sustainability depends on the capacity of WSPs, governance mechanisms to safeguard corruption and the ability of the private sector to manage both higher-level government demands and possible public opposition.
5. National Treasury should ring-fence the Opex and Capex grants. This will help close the gap between what municipalities want and what private investors want.

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