

HOW CAN AFRICA'S WATER COMPANIES BOOST THEIR RESILIENCE WHEN FACING HEALTH CRISES?

Fadel Ndaw

Senior Water and Sanitation Specialist, World Bank



Fadel Ndaw has over 30 years' experience in water and sanitation. He holds an engineering degree from the National School for Water and Environmental Engineering in Strasbourg, France. In April 2019 he was appointed senior water and sanitation specialist at the World Bank office in Côte d'Ivoire. From 2012 to 2018 he worked for the World Bank in Burkina Faso and Egypt. In 2011 and 2012, before joining the World Bank, Mr. Ndaw worked for the African Water Association of Utilities as coordinator of the Water Operators Partnership Africa (WOP-Africa), a program based in the offices of Rand Water in Johannesburg.

During the 15 years from 1996 to 2011, Fadel Ndaw played a major role in Senegal, helping to implement reforms to the urban water and sanitation sector and acting as coordinator of the water sector project (PSE), the long-term water project (PLT) and the Millennium Development Goals program (PEPAM).

The current global pandemic has again highlighted the importance of access to reliable water sources as part of on-going efforts to combat the virus and prepare for future pandemics. On the African continent, 70% to 80% of illnesses can be linked to poor water quality and inadequate sanitation systems. Water companies have grappled with multiple constraints in the face of the emergency created by the COVID-19 pandemic. They have been forced to adapt in order to continue operating and supplying people with drinking water. This article seeks to analyze the main problems encountered by water companies in Africa during the crisis, and suggests paths for further reflection that will help them become more resilient so that they are ready to face new pandemics in the future.

INTRODUCTION

The COVID-19 pandemic has placed massive strains on Africa's water utilities. Water companies have had to deal with falling incomes, higher costs, notably for inputs such as chemicals and spare parts, and the need to maintain quality of service while also setting up emergency systems for providing clean water to the most vulnerable groups and members of society. Hand-washing is universally recognized as one of the most important basic measures for attenuating the risk of coronavirus contamination, but it is equally true that providing a constant supply of safe water to everybody during the emergency phase of this crisis has proved to be a massive challenge.

WATER COMPANIES IN AFRICA HAVE ROLLED OUT EFFICIENT STRATEGIES TO HELP DEAL WITH THE CRISIS

Many towns and cities across Africa have had to enact emergency measures to limit contamination and risk of infection. Close to 60% of the population of sub-Saharan Africa lives in shanty towns and informal settlements, where the risk of community transmission is very high. The lack of basic services and infrastructure, particularly for health and hygiene, and widespread reliance on collective installations such as standpipes and public latrines, where it is difficult to maintain social distancing, have helped to drive accelerating rates of infection and made it harder to contain the spread of the virus.

The municipality of eThekweni on South Africa's east coast has a population of 3.8 million, with 27% of its residents living in informal districts. The municipality supplies 520,000 rural and urban customers with water and sanitation services. During the crisis, the water company faced difficulties in supplying informal districts with particularly high population densities. Frequent interruptions to water supplies were noted as a result of illegal connections caused by high levels of poverty and unemployment. The decision was taken to pause work to cut off illegal connections and switch the

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focus to supplying no-cost services and repairing leaks. Dedicated rapid-reaction teams were set up to respond to demands. The water company was able to guarantee that water was available to all residents thanks to (i) continuity of supply through the use of tanker trucks and storage tanks in areas without water supply, and (ii) identification of clusters, which were given emergency water supplies.

SOCIAL MEASURES ORDERED BY GOVERNMENTS HAVE NEGATIVELY IMPACTED THE CASH POSITION OF WATER COMPANIES

In Senegal, the government decided to help households pay their water bills for March and April 2020, providing a total of 3 billion CFA francs (\$5 million) to approximately 670,000 consumers. In several countries, governments also ordered the suspension of water bills for all or part of the population. However, costs arising from such a suspension and the accumulation of unpaid water bills can have lasting repercussions on water companies' financial viability. In the short term, there is a high risk of interruptions to continuity of service as a result of a failure to cover operational costs such as water treatment chemicals and spare parts.



In Uganda, the National Water and Sewerage Company (NWSC) saw a significant fall in the rate of water bill payments by its users, down from 98% in January 2020 to 61% in March 2020. This was a consequence of government measures banning the disconnection of water supplies in the event of nonpayment of the water bill. To tackle this situation, NWSC took the following steps to mitigate the impact of these policy measures:

- the government committed to: i) settle its outstanding debts; ii) provide subsidies for operating costs.
- commercial loans for priority needs, for example chemicals and reagents, and payment of outstanding debts to chemicals suppliers to ensure continuity of supplies.

A suspension of billing may have long-term repercussions on many people's willingness to pay, and the political sensitivity of the issue may further complicate future debt recovery efforts.

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AFTER THE CRISIS, WATER COMPANIES WILL NEED TO RAMP UP THEIR RESILIENCE

In order to successfully navigate this bill repayment and construction phase, as well as to guard against future pandemics, it is vital that Africa's water utilities establish resilience policies to protect the supply of water, sanitation and hygiene services to all the people they serve. Several options are available to them.

ESTABLISH MEASURES TO ACCELERATE ACCESS TO WATER FOR THE LEAST WELL-OFF

Africa needs to invest massively in its water and sanitation sectors over the coming decade if it is to meet the sixth Sustainable Development Goal. However, the countries of Africa commit a maximum 0.5% of their GDP to this sector, and only allocate a tiny portion of international aid to it. This vital problem of access to drinking water becomes all the more acute in the light of the continent's fast-growing urbanization. By 2050, three-quarters of Africa's 2.2 billion people will be living in cities and shanty towns. Vast megacities such as Lagos (23 million inhabitants) or Kinshasa (12 million inhabitants) as well as around a hundred other cities with a million or more residents, will see their populations double in the coming years. This means that water companies need to plan ahead, working in close collaboration with city planners

to harmonize interventions, particularly with a view to restructuring spontaneous and low-income districts. The challenge is to find innovative solutions for supplying drinking water and managing water services — including recourse to community-based local private operators, as occurs in Ouagadougou, Burkina Faso — in areas with high population densities where, with most residents working in the informal sector, their unpredictable incomes prevent them from paying a water bill every two or three months.





GUARANTEE THE LONG-TERM FINANCIAL VIABILITY OF WATER UTILITIES

A recent World Bank study of the performance of water companies in Africa showed that half the continent's water utilities do not have sufficient income to cover their operating and maintenance costs. This points to the need to strengthen the operational capacities and resilience of public and private water companies so that they are able to provide water of good quality, in sufficient quantity and at a price that is politically and socially acceptable, all while remaining financially viable. Making state aid conditional on meeting performance targets that are tangible, transparent, verifiable and within the service supplier's control can help to avoid inefficiencies associated with traditional forms of subsidy. Key performance indicators, established by governments or regulators, can include standards for continuity of service, decreases in the volume of non-billed water use, renewal of pipe networks and meters, or handling of consumer complaints.

Water companies can also improve their post-COVID-19 reconstruction by identifying benefits from the circular economy in terms of wastewater and stormwater reuse and recourse to public-private partnership models as ways to boost efficiency.

Prompt payment of outstanding sums owed by governments can be an efficient and rapid-impact way to ensure continuity of service. In the Democratic Republic of the Congo, nonpayment of amounts owed to water company REGIDESO are a longstanding problem, totaling \$176 million as of March 2020. A partial payment of the outstanding amount, approximately \$30 million, was scheduled to enable the company to cover its losses during the three-month crisis.

ADOPT NEW TECHNOLOGIES TO BOOST WATER SECURITY

What is the best way to use new technologies to ensure efficient interventions during a health crisis and for debt management and recovery? It is important to remember

that water companies in Africa are often hamstrung by a lack of these types of technologies and data. Most water companies do not have sufficiently robust basic data on topics such as the volume consumed by any one household, usage habits, physical and commercial water losses, and identification of the poorest households and districts with the patchiest service. Data governance is often inadequate, meaning that up-to-date data are unavailable for measuring impacts during crises such as the COVID-19 pandemic. Any analysis not based on credible up-to-date data can misdirect any current or future response. Use of geospatial mapping to identify at-risk zones and people impacted can also help to set up effective emergency actions. It is clear that countries like Singapore and South Korea, with efficient spatial data infrastructure, have seen better results in terms of fighting infection.

Switching to the use of smart meters and updated electronic registers of poor and vulnerable people would also allow these customers to pay their water bills via cellphone at shorter intervals, reflecting their irregular incomes.

CONCLUSION

The COVID-19 crisis has placed additional strain on a sector whose work is critical to responding to the pandemic, while simultaneously shrinking one of its main sources of finance. Lessons learned from past economic crises show that water infrastructure received lower funding as a consequence of lower levels of public investment. With little political will to devote a portion of budgets earmarked for kick-starting national economies to the water sector, and in the absence of any adaptation by water companies to the new context in terms of setting up innovative strategies for responding to the current health crisis and preparing for those around the corner, there is a risk of amplifying existing deficiencies in terms of access to safely managed water services, thereby compromising the long-term viability of the entire sector.