

Investing in implementation models for water security and resilience

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As we consider recent water shortages, droughts and flooding, it is evident that the water sector is slow to innovate. And our ability to adapt as citizens is mostly ineffective. In a country where 40% of our water is flushed down toilets, rivers are being polluted at alarming rates, and a significant amount of the precious resource is lost through leaks, both public and private sectors need to acknowledge that traditional approaches are no longer working.



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South Africa is touted as having world-class policies and strategies, yet implementation is far from desired levels. Concepts such as circular economy, water-energy-food nexus and 4IR are useful. Yet, our ability to translate these into tangible impacts, job creation and growth opportunities is sorely lacking. There exists an inherent assumption that water and sanitation institutions are insulated from competition. And, that investment in purely technology will provide sustainable solutions. We no longer have the luxury of having sufficient water (volume and quality) or funding to support conventional service delivery models or technologies, which often consist of the construction of mega infrastructure projects at significant cost (both capital and operational).

Fortunately, climate change is also forcing us to design innovative and off-grid solutions at the same level of service as conventional delivery models and technologies, and at a much reduced cost. New and innovative technologies, matched with alternative commercial models will allow us to meet the needs we are all so desperately striving towards.

Unique partnership models needed

Risks related to translating innovative concepts into change and impact require unique partnership models between government, development finance institutions, academia, innovators, investors, as well as established industry players. All partners need to acknowledge that a shift in gear and in approach is paramount in order to support the transition. Technology and funding are not the biggest issues we are having to deal with to respond to the water security needs of the country. Millions, if not billions, are returned each year to Treasury as state entities are unable to spend. Global and national funds and incentives are set up and not accessed. Why is this the case when everyone has an innovative idea?

Due to the efforts of players such as the Water Research Commission (WRC) and the Department of Science and Innovation (DSI), South Africa is growing the basket of technology to support a range of water and sanitation challenges. Our Achilles heel lies in our inability to develop and test a range of business, commercial, implementation and revenue models alongside capabilities in ensuring technological readiness. Addressing this bottleneck will respond to the constant calls from development agencies, investors and funders to provide the required level of confidence in order for finance and funding to flow towards key areas. Often forgotten, without piloting implementation and commercial models, we are not enabling South Africa's innovators and emerging enterprises the opportunity to build critical skills to catalyse market opportunities.

Communities taking control of their water destiny

The key question often asked is, is there a business case for water and sanitation in South Africa currently? The quick answer is no, there is not. One of the main reasons being the willingness and ability of communities and consumers to pay for water and sanitation services. Unfortunately, the payment for services has also entered the political realm in South Africa, which often makes it very difficult for politicians to promote the payment for services if it impacts on votes. But the urgency to crack this challenge is massive, and the eventual rewards far-reaching and potentially transformative. Years without services and empty promises are starting to force communities to take their water destiny into their own hands.

A number of partners such as the Development Bank of Southern Africa (DBSA), the National Business Initiative (NBI), the Public-Private Growth Initiative (PPGI) and others are currently working in this space. The comfort of grants for entrepreneurs has created a level of dependency in South Africa, and poor revenue collection, payment and contracting at local level have exacerbated the problem. We have underestimated business and market readiness and institutional capacity to procure and contract for the uptake of innovation. Funders and investors should be considering the systemic impact of their efforts and the need to focus on models and mechanisms that will allow for social, environmental and financial returns.

Innovative financing, implementation models needed

To achieve scalability, develop new, and transition to greener industries, requires more than just coordination and cooperation. It requires new and innovative financing and implementation models, not only at local government level, but more importantly at community and off-grid level, where the impact of innovation can be leveraged to maximise impact. It requires a deeper level of commitment and investment into implementation by a range of key players and partners. Blended finance models is one option where investors, including government, measure their return differently, ranging from financial returns, to ESG returns, to development impact returns. South Africans are calling for real solutions that produce real opportunities, and our ability as public and private sectors to jointly implement is imperative.

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