WATER POLICY

How research helped break the deadlock in updating SA's outdated raw water pricing strategy

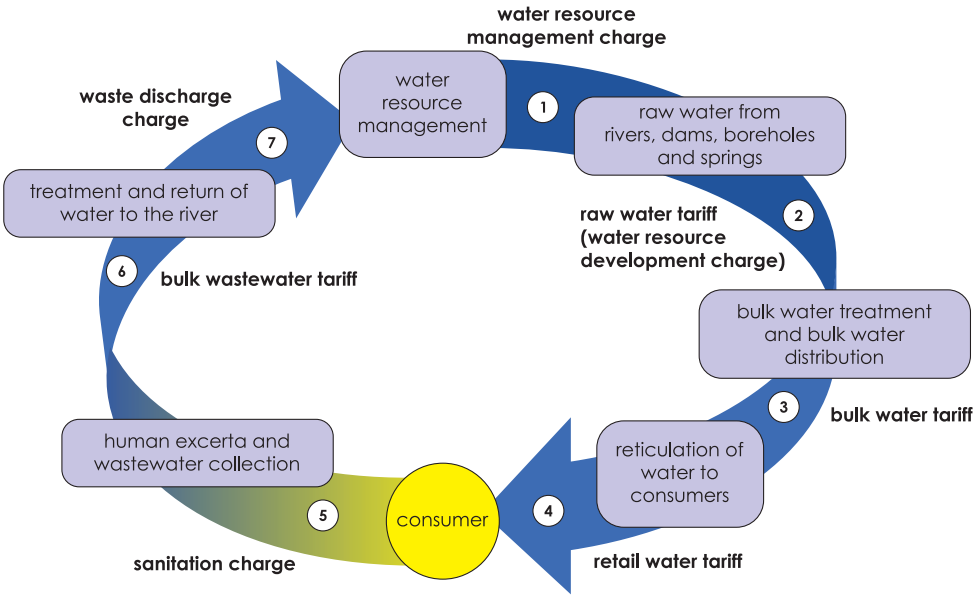
Effective management of South Africa's water, and the ability to use the resource as a tool for pursuing social justice and sustainable development, are closely linked to who pays, and how much they pay for the water. Should a small-scale farmer, for example, pay the same price as a large commercial farming operation? While the details are legally debatable in South Africa, it is widely recognised that the current price tags for raw water do not achieve these goals, reports Petro Kotzé.

Instead, the pricing strategy for raw water – untreated water extracted from water resources, such as rivers and groundwater, water supplied from government waterworks, and the discharge of water into a water resource or onto land – is benefiting select users, while not generating enough income to cover the costs of managing the resource.

A new strategy has been in the works since 2015, but its implementation has been stalled because of disagreements on the finer details. As a result, the outdated strategy of 2007 that it must replace, still stands. The impact on raw water users has been "huge", says John Dini, Research Manager at the Water Research Commission (WRC). "The 15-year-old strategy has become completely stale since so much has changed in the meantime," he notes. The WRC recently commissioned four research projects tailor-made to help move the impasse forward, proving the value of research as a mutual broker to bring different people and groups together.

Pricing raw water in South Africa

The pricing of raw water in South Africa is guided by a strategy enabled under the National Water Act of 1998. Over and above the efficient management of water for equitable and sustainable growth, the correct pricing strategy can support reform in the sector and provide water users with transparency, and predictable water costs. The Act allows for the pricing strategy to be revised and refined according to the needs of the developing country and, after the first pricing strategy was developed in 1999, another followed in 2007. However, this one contained a number of challenges.



South Africa's full water pricing value chain. The Pricing Strategy for Raw Water Use charges focuses on water resource management charges (1) that include waste discharge charges (7); and water resource development / infrastructure, raw water charge (2). In addition, the National Water Resource Pricing Strategy provides for non-consumptive use which includes impeding or diverting the flow in a watercourse; engaging in a controlled activity; or altering the bed, banks, course or characteristics of a watercourse.

For one, it gives a blanket subsidy to some water user groups. Dini explains that the 2007 strategy introduced caps on the water resource management and infrastructure charges for certain sectors such as agriculture and forestry. The tariffs do not necessarily reflect the cost of producing or managing the water, but they were artificially kept at a certain level to gradually introduce the then-novel costs to the affected sectors. It became an implicit subsidy from the fiscus to agriculture and forestry, Dini says, but was seen as a temporary measure. Over time, it has resulted in substantial under-recovery of costs.

The 2007 strategy thus makes it impossible for the Department of Water and Sanitation (DWS) to set charges that reflect the full cost of delivering water, and this results in insufficient revenue for water resource management and sustainable infrastructure asset management. It also fails to provide a robust method to generate revenue for the development of social infrastructure – those that meet the basic water supply requirements of municipal users in rural areas – and economic stimulus infrastructure – which provides for future economic water use or development.

Furthermore, the DWS now has to make subsidy decisions that should rightfully be made by other departments, such as the Department of Agriculture, Land Reform and Rural Development, given that the activities fall under their oversight. Over and above that, the 2007 strategy does not provide enough protection for the poor against water prices that increase due to infrastructure development.

Sizani Moshidi, Chief Director for Economic and Social Regulation of the DWS, says this is particularly relevant to the agricultural sector. "At the moment, our farmers are all paying the same rate for water, whether they are small-scale growers, medium-scale growers or commercial growers," she says, "but they have cried foul." She adds that more concerns from water users include that the 2007 strategy provides for municipalities and industry, for example, to pay the same price for water.

The new pricing strategy benefits.

User Group	Improvements to the previous strategy	
	Equity	Application of business principles
High assurance users	Ensures that those users who get the highest assurance of supply pay for the privilege	
Industrial users	Ensures that users who use water for commercial purposes pay the full cost of water	
Municipal users	Subsidises the water resource-related costs of providing a basic water supply, which are not covered in the equitable share	Ensures the costs of providing water to the municipality above 50 L per person per day for the indigent population are fully covered by water use charges
Agricultural users	Phases in water charges for resource poor farmers over ten years to enable them to establish themselves effectively before having to pay the full costs Phases in the future infrastructure build charge to commercial farmers over ten years to enable them to adjust to the increase in tariffs	Ensures that commercial agriculture users pay the full cost of water with transparent and targeted subsidies determined by DAFF and Treasury in relation to national agricultural objectives

The agricultural sector is one of those more seriously affected by the outdated water pricing strategy, with certain farmers crying foul.

The 2015 draft revised pricing strategy sought to correct these and other challenges. It also, for example, considered the financing of the nine Catchment Management Agencies to be established. However, the consultation process prompted numerous comments that highlighted queries, issues, and concerns. Eventually, an impasse developed between the departments of the Minister of Water and Sanitation, whom the Act provides with the power to set the price, and the Minister of Finance, with whom agreement must be reached. "When we did the first round of consultations in 2015, our colleagues at National Treasury were not happy with some of the elements in the strategy," Moshidi says and, after years of negotiation, meetings and revisions, the process eventually reached a deadlock.

We needed an independent voice to cut through the disagreements, Moshidi says.

Last year, the DWS and National Treasury approached the WRC with four specific issues that they could not find common ground on, which led to a stalemate in finalising the strategy. "If we could not agree with each other on these four issues, we would never reach concurrence," Moshidi says. "The four most contentious issues required a little bit more evidence to be to be generated, to support the choices," Dini says. Based on these, the WRC commissioned four research projects.

Four dealbreakers are unpacked with research

The first issue related to the implementation of the Waste Discharge Charge System (WDCS), an economic instrument to support water quality management developed in response to the poor water quality of strategic catchments. In development for over a decade, implementation of the system is critical to improving the quality of our water resources. The new strategy provides the framework for implementing the WDCS, but further work was required to clarify and strengthen its expression through the strategy.

The second issue is related to the classification of social and commercial infrastructure. The 2015 draft pricing strategy makes provision for water resource infrastructure to be classified as either social or commercial, in essence determining the funding model and the implication for the raw water user charges. However, the strategy lacked the appropriate theoretical basis required to define such water resource users, as well as clear and objective guidelines to classify the social and commercial components of large raw water projects.

The third research project tackled the public interest functions of water resource management activities. The 2015 draft pricing strategy affirms the principle that DWS will provide financial support for core national and public interest functions undertaken by water management institutions, the cost of which cannot be recovered fully through water use charges. To finalise the strategy, it was necessary to strengthen the way in which the public interest functions of water resource management activities are defined and quantified.

The last issue on the table was the Future Infrastructure Build Charge (FIBC), introduced in the 2015 draft pricing strategy. Replacing the Return on Assets Charge included in previous drats, the FIBC is a progressive instrument designed to fund the development of social and economic development stimulus infrastructure, by providing for the costs of investigating, planning, designing, constructing and pre-financing new infrastructure and improving existing infrastructure. The researchers focused on further developing the concept, its purpose and calculation.

The studies were submitted to the DWS and National Treasury in December 2021 and, while at the time of writing this article the two departments were yet to formally share opinions on their findings and suggestions, Moshidi says, based on their interactions so far, they are now "fairly aligned" on the issues.

Dini too says he is comfortable stating that they broadly achieved their objectives. "It's a good lesson to learn for researchers," he says, in reference to the process they followed, and their results. According to the stipulations of the Terms of Reference for the four studies, for example, the final reports included proposed text that could be directly included in the draft strategy. The documents were written in formats more similar to pieces of policy advice than traditional academic outputs, Dini says. Feedback included that the work was very much client-focused, he says, which was extremely helpful to the officials on the receiving end. "If you put yourself in the mind of the people who have to work through the policy document, you can make it far easier for them, and put yourself in a much more powerful position," Dini says.

Petro Kotzé

Raw water includes water extracted from water resources such as groundwater.

Petro Kotzé

The updated strategy also supports for improved water quality management in South Africa.

Onwards to the finish line

The updated draft strategy has been now been made available for public comment again (the deadline for comment is 3 November) and, Moshidi says, this process has thrown new curveballs their way, particularly surrounding the concept of equity. However, she is of the opinion that this is a good development. Different than the first round of public consultations, this time, they are also meeting in so-called rural areas, after they found that the voices of resource-poor farmers and forest growers were not adequately represented in the agricultural organizations the department previously consulted with, and were not able to attend previous meetings often held in urban areas.

"Now we are getting a different picture again," she says. For example, these farmers have pointed out that the ten years over which water charges for resource-poor farmers are phased in are not enough to establish themselves effectively before having to pay the full costs. "They have asked us to consider the concept of equity, differently, from a resource-poor perspective," she says, "which was not part of the discussions in 2015."

"We might have to go back to the drawing board again," she says adding that this might entail approaching the WRC for help once more. "What I have learned with the four studies is the actual value of an independent viewpoint in a discussion," she adds.

Still, Moshidi is positive that any coming challenges will be manageable since the largest stumbling blocks are already out of the way. "Ultimately, we have thought very long and hard about the principles and objectives at stake, what equity is, what fairness is, what efficiency is, as well as the issue of predictability, that will be introduced with a multi-year tariff." Once the strategy is approved, it will be implemented at the start of the new financial year.

"We're on the right track," Moshidi says but, admits that the draft strategy does not address all challenges related to the pricing and payment of water in South Africa. For one, the department is addressing serious administrative challenges, such as cleaning up the invoicing system. Furthermore, the strategy still does not clarify and provide solutions for non-payment and debt management. This question will be addressed as part of a broader process taking place regarding the pricing of all water (raw, bulk, and retail) in South Africa, and whether this responsibility should lie with an economic regulator for the water sector.

Dini says that in support, the WRC is in the process of developing a prioritised research agenda for economic regulation in the water sector. "There remains a need for a systematic assessment of knowledge gaps and research needs across the entire water pricing chain," he says. Moshidi agrees. "We cannot regulate without strong research," she concludes.