



Corporatization of Water and Sanitation Services in South African Metropolitan Municipalities: A Critical Analysis

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Abstract

Water and sanitation services across the world have for at least two decades been marred with poor performance and failure to collect revenue thus failing to be self-sustainable. Consistent bailouts by parent municipalities and government have been the order of the day. Before then, services such as water and electricity were collecting almost 100% of revenue and were self-sustainable and did not need financial support from municipalities. In many municipalities, especially South African municipalities they became municipal cash-cows and even cross-subsidized other municipal services. There are many challenges that have contributed to almost the collapse of water and sanitation services. Some of the challenges are dysfunctional political environments; ageing infrastructure; backlogs in water and sanitation reticulation caused by overpopulation and urbanization; brain-drain of technical skills; fraud and corruption; poor management and governance structures; operational inefficiencies; etc. Communities do not want to hear about the above-mentioned challenges and all they need is reliable, convenient and sustainable (uninterrupted) supply of water and sanitation services. In reaction to these concerns, especially poor performance of water and sanitation services, the World Bank commissioned a study in 2018 to come up with a Water Utility Turnaround Framework. This Framework has measures to improve operational and managerial capacity (efficiencies) of water and sanitation services. This study then became the basis within which National Treasury in South Africa came up with the Metropolitan Trading Services Reforms. It should be noted that the Trading Services Reforms target transformation of water and sanitation, electricity (energy) and waste management in Metropolitan Municipalities in South Africa however this article will only focus on the turnaround of water and sanitation services. The study therefore critically analyses these Reforms and purported strategy to turnaround the water and sanitation services in South African municipalities.

Keywords: *Corporatisation; Water and Sanitation; Turnaround Strategy; Self-Sustainability; Sustainable Development Goals; Revenue; Cross-Subsidization*

Introduction

Despite the fact that many municipalities have invested so much money in water and sanitation services, the fact remains that sustainable delivery of these services has not been achieved and it is getting worse day by day. In fact, these services have intrinsically become bottomless pits in the sense that all the monies invested in them are systematically lost. In some Metropolitan Municipalities losses have overtaken revenue with water losses being the main contributing factor with some losses (non-revenue water) estimated at 58%. This effectively means that almost 60% of revenue from water and sanitation is lost on a monthly basis and therefore operating at a loss and this has resulted into a situation where parent municipalities find it difficult to sustain these services with constant bailouts. There are a few known challenges (World Bank, 2018) that have resulted to this challenging situation, and they include the following:

- Significant segments of the population in virtually all developing and emerging economies receive few water and sanitation services (WSS) than they would like to receive and often also than they are willing to pay for.
- Improving the performance of water and sanitation services is difficult because the losses affecting their performance are complex and multi-dimensional.
- The infrastructure funding gap is huge and the public sector including government and development agencies have insufficient funds to meet the expected investment requirements (Kolker et al. 2016).
- While the need to attract commercial financing to help close the infrastructure funding gap is clear, the commercial financiers have been reluctant to invest on the water sector because they perceive the risks of investments in the sector to be higher than those of other sectors and more difficult to manage (Bender, 2017).

It has become very clear that municipalities cannot solve this problem alone and need to approach it in a holistic manner. This therefore means that municipalities must tackle the sector's institutional and government shortcomings and also address the operational performance issues as a matter of urgency. National Treasury has introduced Metro Trading Services Reforms which aim at turning around the performance of trading services including water and sanitation services however there is a need to critically evaluate if these reforms are going to be effective or not, noting that they are largely based on the corporatization concept.

Aim and objectives of the study

The main aim of the study was to critically analyse the corporatization of trading services of water and sanitation services in South African Metropolitan municipalities.

The objectives of the study were to:

- Review literature and strategies on the corporatization of water and sanitation services including National Treasury Trading Services Reforms.
- Critically analyse the effectiveness of the National Treasury Reforms with respect to water and sanitation services.

Literature review

The need for a Turnaround Framework (World Bank)

Sustainable Development Goal 6

Sustainable Development Goal (SDG) 6 declares the intention of achieving access to clean water and sanitation for all by 2030. At least 78% of the South African households had access to at least the basic level of drinking water in 2024 and this is against the backdrop that already 98% of the country's available water resources is currently used and this then poses a challenge as to how and where the remaining 22% of households will get their water from, given that only 2% of water resources are currently remaining. It also poses a challenge in terms of universal access by 2030, in fact it is clear that this target will not be achieved by 2030. It is more or less the same scenario with access to sanitation services where 76% of South Africans had access to safely managed sanitation meeting hygiene standards. It should be noted that access to flush toilets was around 66% in 2024 and there are still communities that are still using pit latrines. This also presents a challenge for the country to meet the SDG 6 targets by 2030. Despite the improvement in access to drinking water in rural areas in recent years the UN SDG Report suggests that access to drinking water in urban areas has stagnated and, in some cases, even declined. The need to fast-track the delivery of water and sanitation through a Turnaround Strategy is also exacerbated by the desire to meet the 2030 universal coverage target.

Poor performance of water and sanitation services

Performance will not improve unless the vicious cycles in which water services operate are broken (World Bank, 2018). Today over 660 million people worldwide lack access to safe drinking water and over 159 million use surface water (rivers) to survive, risking water-borne illnesses that are often fatal like cholera (UNICEF and WHO, 2015). It is even worse with sanitation where approximately 2.4 billion people lack access to sanitation and 946 million people defecate openly. What is also concerning is that the situation is not improving but deteriorating where lack of access to both water and sanitation is increasing instead of decreasing. Many water and sanitation services have performed poorly even though there has been substantial financial investment into these services. This therefore confirms that it is actually not about lack of funding but about non-performance in the delivery of these services.

Poor governance and accountability

There has been a lot of political interference in the water and sanitation services (utilities) and this has led to low credibility, little or no accountability and limited autonomy. In some cases, water utilities operate for other purposes other than serving customers and these include helping government authorities secure votes by even promising water services to low-income customers below cost and in some cases, politicians use water utilities for personal gain (corruption). The corruption situation has been made worse in the South African context where the advent of the water mafia that is supplying municipalities with water tankers has captured water services. There are allegations of the sabotage of water infrastructure by the mafias (vandalising the water infrastructure). In such environments corruption is entrenched where even job cards are issued without any job and invoices submitted without any job having been done, contracted services escalate because they are an easier vehicle for staff to siphon monies from municipalities; meter readers receiving kickbacks and intentionally logging incorrect readings; bypassing of water meters by officials getting kickbacks in return; political interference in the appointment of staff, etc.

The World Bank (2018) suggests that to transform this political deficit water services functions (utilities) need to recreate the space for credibility, accountability, autonomy and reforms so that they can perform better. Those who are at the administrative leadership helm of these water utilities should create virtuous cycles. When these virtuous cycles are institutionalized, credibility increases further so that

government, customers and other stakeholders become more supportive of measures to perform successfully in the long term. Highly tactical acumen is required to mobilize political leadership, motivate staff and overcome entrenched negative behaviours and incentives (such as corruption) while gradually rebuilding public support and credibility among customers (World Bank, 2018). The following are some of the things to be done by water and sanitation management as part of the turnaround strategy:

- Galvanize political economy and accountability
- Develop the Business Plans
- Increase management accountability and autonomy
- Make and deliver on big commitments
- Build credibility across all stakeholders
- Lead by example
- Deal decisively with inefficiencies and negative incentives like corruption
- Incentivise staff to increase performance
- Acknowledge and publicise every achievement
- Increase financial performance especially cash on hand
- Access commercial finance to support delivery

Insufficient operational and managerial capacity

According to the World Bank (2018) the actions required at a technical level include installing water meters, updating the customer database, implementing a new billing and collection system and using a geographic information system (GIS) to map underground water pipes to improve technical and commercial performance. There is a need to properly sequence these actions to improve operational efficiencies. The Water and Sanitation Turnaround Strategy should be linked to the organizational strategy, and it depends on both the human and financial resources.

Sustainable business models

Yunus et al. (2010) define a business model as a “simplified representation of the elements and the interactions between these elements that an organization employs for the proposition creation, delivery and capture of value. This is a conventional definition of a business model, and it assumes that the market will have consumers (of water in this case) who can pay for the services provided. It is important to note that in the context of the provision of water and sanitation services, the target group can include populations with limited financial capacity. Therefore, while it is good to have drinking water systems based on standard business models, these models require adaptation to the demographic characteristics of the place to ensure social equity and sustainability (Bocken and Short, 2026; Q. Li et al., 2018; Sousa-Zomer and Canchick Miguel, 2018). A pro-stakeholder definition of sustainable business models is provided by Geissdoerfer et al. (2018) who say they are those that incorporate proactive multi-stakeholder management, monetary and non-monetary value creation for a whole range of stakeholders and maintain a long-term perspective. In line with this, organizations can create value through innovative services that go beyond basic water provision, such as water quality monitoring, system maintenance, community education and training programmes (Duran-Romero and Barquet, 2025). Additionally, sustainable models should consider factors such as affordability, cultural practices, institutional barriers and the needs of different income segments (Fritz et al., 2020).

The Product Service System (PSS) has been proposed as a suitable model for improving water quality at the community level by providing a combination of products and services. Goedkoop et al. (1999) define PSS business model as a system of products, services, agent networks and supporting infrastructures that continuously strives to be competitive, meet customer needs. When it comes to technologies business models should adapt to local conditions. It is therefore important to establish if this

business model can be effective if used by the water and sanitation services in Metropolitan Municipalities in South Africa.

National Treasury Metropolitan Trading Services Reforms

National Treasury (NT), as the custodian of the South African fiscus have expressed a concern that almost R60 billion has been invested into water and sanitation services in Metropolitan Municipalities alone but the service provision is getting worse instead of improving and this becomes wasted financial resources. From the infrastructure point of view, it is clear that there has been underinvestment to municipalities, whereas the dilapidated infrastructure is one of the main contributors to the challenges faced by municipalities such as exorbitant water leaks as a result of ageing infrastructure. For a complete infrastructure replacement of metropolitan municipalities each will require a budget of approximately R10 billion and this is almost impossible to achieve since this amount is almost equal to the total capital budget of one financial year. It is therefore imperative that part of the solution is to invest in water and sanitation infrastructure however municipalities alone will not be able to meet these investments needs and there is a dire need for the private sector to come on board. National Treasury is of the view that a compelling case for change exists for the need of significant changes in the manner that water and sanitation services are managed in municipalities and some of the challenges are as follows:

- Financial performance is very poor, and many cities are not able to collect the cash necessary to manage the business effectively.
- Cities' water and sanitation services are not run as a business and there is no single point of accountability for performance.
- Most cities do not have the necessary technical capability to manage and run an effective water and sanitation business.
- The water operation is highly inefficient with high physical water losses and high non-revenue water.
- Procurement of essential support services is compromised.
- Cities suffer for lack of legitimacy and credibility and are unable to win the trust of customers.
- Cities have been underinvesting in the maintenance and rehabilitation of infrastructure over many years, resulting in a compromised service with an ongoing decline in performance and service outcomes.

Consequences of not treating water and sanitation services as a business

National Treasury provides the following consequences of failing to treat water and sanitation services as a business:

- No clear picture of the true financial position (balance sheet) and financial performance (income statement and cashflow) of the business and hence inability to assess financial performance of the business as a whole in a meaningful way.
- A failure to adequately resource the service in relation to its needs, that is, the capital and operating budgets are typically a product of an annual determination of a maximum increment rather than based on actual business needs.
- An inability to make appropriate trade-offs between capital and operational spending.
- A failure to recognise the specific technical and other competence requirements of the business in recruitment processes.
- Lack of transparency in inter-business costs and performance within the municipality, and absence and/or lack of enforceability of inter-business contracts.
- Decisions based on short-term considerations rather than long-term sustainability of the business.
- Very low flexibility in deployment of resources as a result of strong rules against moving money between budget items within a year and lack of flexibility of how people are deployed.

- An organized culture that is risk averse and that penalizes mistakes whereas innovative business cultures actively encourage experimentation and expect failures as part of this process.
- The absence of clear performance and shareholder (financing) agreements between the shareholder and the business entity.

Resilient and sound water management as a business

Customers need reliable and safe water and sanitation services and for utilities to do that successfully they need to be resilient to the shocks of the water sector in general. Some of these shocks are climate related such as drought, floods, heat waves, etc. The water and sanitation services systems and operations should not only be alive to these shocks but also adaptable and be agile. There is an expectation that these shocks can be better managed if water and sanitation services are run as business. The water and sanitation business plan can then anticipate these shocks and then provide mitigation to reduce their impact. International experience shows that soundly managed water businesses share the following fine common characteristics (Kingdom and Van Ginneken, 2006):

- Customer-orientation and customer-responsiveness, recognizing that the purpose of the water services business is to serve customers, that customers experience and perceptions matter and that happy customers are paying customers.
- Sound finances as a result of sound financial management accompanied by financial transparency and appropriate tariffs with good revenue management (metering, billing and cash collection, debt management), low levels of non-revenue water and good controls on expenditure, with cost-effective procurement.
- Asset maintenance and operations to maintain the existing asset base.
- New asset creation to meet new demand responding to a changing business landscape and climate resilience.
- Capable and professionalized staff and effective support systems with a suitable degree of managed autonomy, incentivised to perform and with accountability to performance.
- Sound governance and supportive enabling environment, with a clear distinction and separation of oversight and management/operational roles, and with clear processes and mechanisms that promote and protect probity, particularly with respect to finances, procurement and appointments
- Leadership and management with the vision, strategy and execution capacity required to achieve the outcomes required.

The provision of a water and sanitation service is not just a technical and engineering function it requires a whole of business approach. This means all the necessary functions need to be addressed and these include customer services, financial performance, support services, technical services and engineering services. Research should also be elevated to ensure best practices and also water quality at all times.

Setting goals and performance targets

For the water and sanitation Turnaround Strategy to work there is a need to set high but realistic performance targets and National Treasury has set the generic targets. In terms of financial performance, the following targets are set:

- 100% metering
- 98% meter reading every month
- 95% cash collection every month
- Published annual financial statements every year

In terms of communication and technical performance the following targets are set:

- 80% calls answered within 60 seconds
- 25% non-revenue water
- 2% investment into the network annually

Sound governance of water and sanitation services

Sound governance should begin with councillors who are elected to play oversight on the functions of the municipality. If governance is poor, it leads to poor decision-making thus resulting to poor performance and service delivery. National Treasury has identified the following key governance deficits at a political level in municipalities:

- **Absence of leadership at a political level:** In many cases water and sanitation are not considered a priority and can only be remembered when there are supply challenges. Because councillors serve for a short term (5 years) they turn to trump short term decisions and long term investment into infrastructure is not considered a priority. Many municipalities even fail to budget the statutory 8% towards maintenance of infrastructure for the same reasons.
- **Weak oversight by politicians:** Provision of the water and sanitation is a technical function and requires technical knowledge and understanding. Some councillors lack technical skills and knowledge to understand and oversee the function and its operations.
- **Failure to appoint capable management with the requisite qualifications, skills and experience:** It is unfortunate that the appointment of the executives is left with politicians. This has resulted into the proliferation of the appointment of executives who do not qualify to their jobs. In some cases, this has been done to enable political loyalty by these executives which inadvertently leads to corruption and nepotism, where in returning the favour, some of these executives have to award tenders to the companies close to politicians or employ those who are close to politicians. Unfortunately, when such compromised appointments are made in a highly professional environment such as water and sanitation services, those who are qualified and are ignored leave the organisations (municipalities). It is advisable that professionally qualified engineers should be part of the management and executive teams.
- **Political interference in the daily operations:** There have been unfortunately instances where politicians interfere with the daily operations of the services. For example, some councillors will direct where water tankers should deliver water during the times of supply interruptions.

Critical analysis of the proposed water and sanitation services reforms

Poor performance of water and sanitation services

The World Bank (2018) has successfully identified the global challenges that are the causes of poor performance of water and sanitation. What is lacking in the World Bank Report is the root causes of these challenges. The majority of the challenges are caused by the global financial meltdown as a root cause. Whilst the World Bank Report (2018) proposes a turnaround of the water and sanitation services, the revival of the global economy is crucial to ensure that all countries are developed to such an extent that they can easily finance the provision of services.

Poor governance and accountability

Whilst it is true that there is a lot of political interference in the provision of water and sanitation services, the World Bank and National Treasury Reports do not address the rationale or root cause of political interference. At the heart of political interference is corruption which has engulfed organs of state including utilities. It will be futile to come up with a turnaround strategy without properly addressing corruption in the water sector. When it comes to accountability, politicians have always shifted

accountability to the officials especially executive management. The National Treasury Reforms should state clearly how and to whom should politicians account for provision of water and sanitation services.

It is obvious that officials will ultimately account to politicians however there are areas such as consequence management where officials find it very difficult to take accountability because of a number of reasons. In some cases, water services employees have been shot and killed on duty when trying to deal with corruption in the sector. Unfortunately, the National Treasury Reforms do not acknowledge this real challenge in the sector. It therefore stands to reason that the water and sanitation services Turnaround Strategy should include mechanisms to protect the employees who are fighting corruption in the sector or at least mechanisms to deal with corruption.

The World Bank Report (2018) recommends that water and sanitation management should galvanize political economy to support the turnaround strategy. Whilst this is a noble idea, the fact of the matter is that political problems are highly unlikely to be solved by government but need to be solved by political parties themselves. National Treasury recommends autonomy for the management of water and sanitation services. What is not clear are the parameters and boundaries of that autonomy. In a municipal environment, which is highly regulated, it is extremely difficult for officials to take policy, governance and even administrative decisions without consulting politicians and in some cases consulting political structures (committees) that have authority to take decisions on some of the strategic matters. It may be a good idea to unpack the meaning and parameters of this “autonomy”.

Insufficient operational and managerial capacity

Both the World Bank and National Treasury acknowledge that the water sector has lost a lot of technical skills. There has been an exodus especially of professional engineers to countries like New Zealand and Australia. The gap identified in the Turnaround Strategy is that firstly there is no acknowledgement and statement of the causes of this brain drain and probable solutions. Secondly the turnaround strategy assumes that the country has enough technically and professionally qualified engineers to take up the responsibility to lead the water sector. Whilst that might be true at face value the question is how many of these engineers will be comfortable to work in the water sector given the very hostile environment which is characterized by corruption, gripped by fear of the water mafia and constant killings of officials. The other challenge is that most of the water and sanitation executives are appointed by politicians and the process may compromise merit.

Research Methodology

The study used critical analysis to analyse corporatization of water and sanitation services in South African municipalities. The study also used the framework analysis in critically analysing the water and sanitation services turnaround strategy.

Research Findings

The research found that both the World Bank Report (2018) and National Treasury Metropolitan Trading Services Reforms have the following gaps:

- Inability to trace and spell out explicitly the root causes of the poor performance of the water and sanitation services, for example, the contribution caused by global meltdown of the economy and stagnant economic recovery especially in the underdeveloped and developing countries are not acknowledged.
- Inability to identify and spell out the root causes of political interference in the water sector.
- Political accountability is not fully defined and to whom politicians should be accountable during the implementation of the turnaround strategy is not explained.

- Lack of safety of employees who are working in the water sector is not included in the strategy.
- There is no mention of how to deal with corruption in the turnaround strategy whereas there is evidence that it also contributes a lot to the failures of the provision of the water and sanitation services.
- The word “autonomy” is used without properly contextualizing it and unpacking areas of autonomy to be exercised by the water and sanitation management.
- The turnaround strategy does not acknowledge how toxic and polluted the water sector is thus failing to provide mechanisms for officials to deal with toxicity of the environment.

Recommendations

The following are the recommendations of the study:

- The Turnaround Strategy should trace and spell out explicitly the root causes of the poor performance of the water and sanitation services.
- It should identify and spell out the root causes of political interference in the water sector.
- Political accountability should be fully defined and state to whom politicians should be accountable during the implementation of the turnaround strategy.
- Safety of employees who are working in the water sector should be included in the strategy.
- Mechanisms to deal with corruption should be explicit.
- The word “autonomy” should be properly contextualised and unpacked.
- The toxic and polluted environment that the water sector finds itself in should be dealt with as part of institutional change.

Conclusion

The main aim of the study was to critically analyse corporatization of water and sanitation services in South African Metropolitan Municipalities. The literature review provided the background and need of the development of the water and sanitation services turnaround strategy. This was done by way of evaluating the World Bank Report (2018) and the National Treasury Metro Trading Reforms. The study did find a few gaps that need to be attended to for more effective implementation of the turnaround strategy.

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