Pockets of effectiveness (PoEs) are public organisations that function effectively in providing public goods and services, despite operating in an environment where effective public service delivery is not the norm. This project, which investigates PoEs in relation to the politics of state-building and regime survival in sub-Saharan Africa, is being led by Professor Sam Hickey, based at the Global Development Institute, The University of Manchester, in collaboration with Professor Giles Mohan (The Open University), Dr Abdul-Gafaru Abdulai (University of Ghana), Dr Badru Bukenya (Makerere University), Dr Benjamin Chemouni (University of Cambridge), Dr Marja Hinfelaar (SAIPAR, Lusaka) and Dr Matt Tyce (GDI, Manchester). It is funded by the Economic and Social Research Council and Department for International Development with some additional funding from the DFID-funded Effective States and Inclusive Development Research Centre.  
http://www.effective-states.org/research/pockets-of-effectiveness/
Abstract
Although most public water utilities in developing countries perform poorly, some have achieved remarkable turnarounds and now deliver effectively on their mandate. Current analyses of such turnarounds focus on institutional- and organisational-level explanations that ignore the political economy factors that drive public sector performance in developing countries. This study employed the ‘political settlement analysis’ to explain both Uganda’s National Water and Sewerage Corporation (NWSC) turnaround that happened between 1998 and 2004 and why its performance has since been uneven. For the turnaround to happen, Uganda’s dominant ruling coalition, struggling to chart a developmental trajectory with limited domestic resources, agreed to a World Bank-inspired programme for building NWSC’s commercial and financial capabilities in 1998. The botched privatisation move helped bring the political elite, key technocrats and donors into a rare coalition that enabled a six-year programme of harmonised and uninterrupted support for NWSC. Meanwhile, the post-turnaround phase happened under different political dynamics, characterised by a fractious ruling coalition, increased political competition and frosty government–donor relations. The ruling elite turned to the newly effective NWSC for rents and for building its urban popularity. The pressures from this incentivised NWSC leadership to prioritise activities with visible and immediate commercial benefits, at the expense of long-term operational sustainability. These findings suggest that external support for institution building can succeed, where it is aligned with the dominant incentives generated by the local power relations. And how leaders of public organisations manage the changing political context within which they operate is as important as their technical capacity.

Keywords: water utilities, political economy analysis, NWSC, Uganda, pockets of effectiveness


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1. Introduction

Uganda’s national water and sewerage corporation (NWSC) has captured national and international attention for its surprising turnaround from basket case in 1998 to one of Africa’s best performing water utilities since 2004 (Schiffler, 2015). However, research explaining how this turnaround unfolded and the challenges NWSC has faced in sustaining its performance is limited and under-theorised. This is problematic given the centrality of this agency in Uganda’s pursuit of achieving universal access to safe and affordable drinking water under Sustainable Development Goal SDG 6.1.

Over the last two decades, progress on access to safely managed drinking water services has been snail-paced globally. Global access slightly improved from 61 percent in 2000 to 71 percent in 2017 and that of sub-Saharan Africa from 18 percent in 2000 to 27 percent in 2017 (WHO/UNICEF, 2019). The situation is direr in urban settings. Within sub-Saharan Africa, for example, the proportion of the urban population with piped water to their premises reduced from 43 percent in 1990 to 33 percent by 2015, as a majority of the water utilities failed to keep up with rapid population growth and urbanisation (Soppe et al., 2018). Yet some public utilities that perform at high standards have been identified (Berg and Danilenko, 2017; Soppe et al., 2018). In Uganda, NWSC increased water coverage in the urban centres under its jurisdiction from 40 percent in 1999 to 80 percent by 2018 (Mugisha, 2019; Heymans et al., 2016; MWE, 2019). Since 2004, the utility has recorded year-on-year profits, which are ploughed back to expand the water network across Uganda (Mugisha, 2019).

In comparative terms, the analysis of the largest water utilities in the Eastern and Southern African region by ESAWAS² (2018) ranks NWSC second after WASAC (Water and Sanitation Corporation) of Rwanda (see Figure 1). NWSC outperforms its peers on indicators such as non-revenue water (NRW) and operation and maintenance cost coverage. However, ESAWAS also reveals that NWSC does not perform evenly across its mandate. In particular, and along with most counterparts, it struggles to deliver sanitation services effectively. NWSC’s performance is celebrated nonetheless, given that it operates in a context characterised by low national income, rapid urbanisation, as well as weak governance involving high public sector corruption and authoritarian tendencies (Colon, 2014; Mbuvi, 2012). Such features are highlighted as huge stumbling blocks for building effective water utilities (see GIZ, 2019) and public sector agencies more generally in the global South (Roll, 2014).

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² ESAWAS is the Eastern and Southern African Water and Sanitation regulators’ association.
Figure 1: Performance of the large water supply utilities in Eastern and Southern Africa

![Performance chart](chart.png)

Source: Based on ESAWAS (2018:37; 2017:30).

Previous attempts to explain water utility turnaround, and particularly NWSC’s, largely attribute it to institutional and organisational-level factors, such as the role of charismatic leaders and their ability to implement reforms underpinned by New Public Management principles (Baietti et al., 2006; Muhairwe, 2009). However, a number of studies find that the core elements of NPM, such as commercialisation, have contradictory outcomes and fail to fully account for the uneven performance of public utilities over time (Colon, 2014; Tutusaus, 2019). More importantly, there is increased recognition that effective performance has less to do with adopting formal institutional arrangements, but rather ‘the political economy in which water utilities operate’ (Soppe et al., 2018:13). To this end, political economy analysis has been recommended, not only to uncover the underlying drivers of public water utility performance, but also to guide the implementation of reforms seeking to revamp them (Olagunju et al., 2019, Estache, 2019, Harris, Kooy and Jones, 2011). Such analyses go beyond the focus on the formal rules, to draw attention to the informal institutions, which are recognised as the main drivers of actors’ interests and incentives when dealing with public sector agencies in developing countries (Sehring, 2009). The present study draws on a novel ‘political settlement analysis’ (PSA) to explain both NWSC turnaround and post-turnaround performance trajectory.

The rest of the paper is organised as follows: it proceeds by discussing political economy analysis in the water sector, in Section 2. Section 3 describes the study methodology, while Section 4 summarises Uganda’s political context and how its urban water sector is organised. Study findings are presented in Section 5. Sections 6 and 7 apply PSA to explain NWSC performance in the two phases of interest, before Section 8 concludes with some recommendations.

2. The political economy of public water utilities performance

That politics matters in governance and performance of the water sector, as well as understanding reforms therein, is a recent recognition among practitioners and
academics (Sehring, 2009; Warner and Wegerich, 2010). Over the last two decades, a number of frameworks, including the World Bank’s problem-driven approach and DFID’s ‘drivers of change’, have been proposed to aid the systematic analysis of the political economy context in the water sector (Fritz, Kaiser and Levy, 2009). While these approaches usefully aid the identification of country specific processes through which water reform could be achieved, critics find less analytic value beyond the individual cases. This is because such approaches are general ‘platforms’, comprising of varieties of stakeholder analysis tools, which undermines comparability among studies that employ them (Harris et al., 2011; Khan, 2005; McLoughlin, 2012). More fundamentally, as Kelsall (2018) observes, stakeholder analysis tools are unable to grasp how institutional problems and/or policies proposed to address them are influenced by the broader underlying distribution of power among contending social groups on which states in the global South are based. Kelsall (2018) and Khan (2018) suggest that PSA directly address these weaknesses.

2.1 Political settlement analysis (PSA) and implications for water utility reforms

PSA seeks to examine how variations in the configuration of power shape the incentives of ruling elites to commit to development (Khan, 2018). Understanding the character of ruling coalitions involves examining the distribution of power across two dimensions: horizontally, between the ruling coalition and the social/political groups outside it; and vertically, among high- and lower-level factions within the ruling coalition itself (Hirvi and Whitfield, 2015). This produces several variants of political settlements differentiated by the degree of their dominance. ‘Dominant’ coalitions emerge where power is relatively concentrated with a high degree of cohesion within the ruling coalition coupled with weak opposition groups. In such contexts, elites may adopt a longer-term horizon towards questions of economic development and institution building (Hirvi and Whitfield, 2015; Yanguas, 2017). Given their control over lower-level factions and opposition groups, dominant coalitions also have high capabilities to enforce agreed policies. Conversely, ‘weak’ and ‘competitive’ political settlements emerge where ruling coalitions are characterised by internal fragmentation and are vulnerable to losing power to opposition groups. In such contexts, ruling elites tend to be driven by a short-term imperative of political survival (Whitfield and Therkildsen, 2011; Yanguas, 2017). This limits prospects for elite commitment to building stronger public sector agencies, because such a task requires maintaining political support for reforms over longer time horizons (Levy, 2015) in contexts where rulers are hungry for initiatives that pay immediate electoral dividends (Yanguas, 2017). Moreover the high factionalism within weak coalitions challenges collective action and enforcement abilities of the ruling elite (Levy, 2015; Whitfield and Therkildsen, 2011).

Lavers (2018) and Schmidt (2008), however, argue that regardless of the type of ruling coalition, elites may support even difficult development interventions if they are deemed central to paradigmatic ideas such as nation building, modernisation and socioeconomic development that hold the ruling coalition together. This implies that whilst building effective water utilities is theoretically much harder in weak dominant and competitive settlements, such an undertaking can gain traction if it aligns closely
with the paradigmatic ideas. Paradigmatic ideas tend to be stable over extended timeframes, but they ‘are open to change and critical re-evaluation’ (Lavers, 2018: 10). Donor agencies can be an important source of change, given their role not only in identifying and financing new reform ideas, but also in pushing to obtain the necessary political support for them from the political settlement (Schwartz, 2008; Mbuvi, 2012).

3. Study methodology

The question addressed in this study is: what explains NWSC successful turnaround and uneven post-turnaround performance? According to Yin (2014), in-depth case study analysis is the best-suited method for such ‘why’ and ‘how’ questions, since it aids the analysis of events and operation links that require being traced over a period of time, drawing on multiple sources of evidence.

Fieldwork was conducted between October 2018 and March 2019, involving 21 key informant interviews with current and former NWSC staff, board members, donors, government officials from the Ministry of Water and Environment and civil society (see Table 1). The researcher also had access to NWSC resource centres, where useful secondary data in the form of performance reports, strategic plans and other archival materials on the corporation were obtained.

Table 1: Respondent category and other data sources

<table>
<thead>
<tr>
<th>No.</th>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Members of senior management</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>Regional and area managers</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Ministry of Water and Environment</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Board members</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Development partners</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Water sector civil society organisation</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Former staff in senior capacity</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

3.1 Case study selection

This case study was part of a bigger research project on Pockets of Effectiveness in five African countries, including Uganda. NWSC was identified through a mini survey, involving 33 public sector experts who were interviewed to identify the most effective public organisations in Uganda at the start of the project in 2017. Results of the survey ranked NWSC the second most effective public agency after Uganda Revenue Authority (URA) (see Figure 2).

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3 See: http://www.effective-states.org/research/pockets-of-effectiveness/
4 URA was investigated in a separate case study.
NWSC also met the four-point criteria for determining effective public agencies fronted by Roll (2014), namely: national reach; five years minimum persistence of good performance; agency upholds human rights; and relative efficiency in provision of the mandated public good/service. NWSC services cover all the major towns across Uganda; it has maintained relatively high performance for close to two decades under different governance conditions; and water and sanitation services do not raise human rights concerns. However, the criterion of efficiency is a bit contentious. As earlier noted, NWSC only delivers effectively on water (see Table 2), which is half its mandate. Sewerage service coverage has not exceeded 6 percent since the 1990s, an issue that has raised public concern (OAG, 2015). However, research shows that the sanitation challenge is not limited to Uganda; the majority of water utilities in Africa either perform poorly or completely avoid sanitation management (Berg and Danilenko, 2017). Nonetheless, the focus of the current study is the management of safe drinking water.

3.2 Data sources and measurement

We divided NWSC performance into three phases, namely: pre-turnaround (data available from 1996 to 1998); turnaround (1998 to 2004); and post-turnaround (2004 to 2017). In each phase, the level of performance was observed by considering the three dimensions of performance suggested by ESAWAS (2018): quality of service; economic efficiency; and operational sustainability. According to ESAWAS (2018), quality of service examines the extent and assurance of the service; economic efficiency measures the viability of the water utility; while operational sustainability measures operational efficiencies. The three dimensions in total have ten sub-indicators, as listed below.

**Quality of service**

i. Water coverage: proportion of the population in NWSC official area of jurisdiction that is served by water services.

ii. Sewerage coverage: proportion of the population in NWSC official area of jurisdiction with access to NWSC sewerage network.
iii. Hours of service: aggregate average number of hours water is available per day.

**Economic efficiency**

iv. Operational and maintenance cost coverage (OCCR): The level of costs covered by billed amounts or billed revenues as a percentage of operation and maintenance (O&M) costs.

v. Staff cost as percentage of operational expenses: personnel cost as a proportion of O&M cost.

vi. Staff productivity: staff per 1,000 water and sewerage connections.

**Operational sustainability**


viii. Collection efficiency: the collected amounts from the billing.

ix. Non-revenue water (NRW): water produced but not sold due to leakage and theft in a given period.

x. Connections per year: the annual number of new customers added on NWSC network.

Given that Uganda has no independent water utility regulator to provide independent performance data on water utilities, raw data on each indicator was compiled from NWSC sources, especially the annual performance reports. While such a source is vulnerable to favourable reporting, as voiced by Uganda policy makers (Ministry of Water, 2004) and independent analysts (Colon, 2014; Jammal and Jones, 2006), the data helped to show real performance trends which we verified using interviews and other qualitative sources. Our presentation procedure is such that data on each indicator will be presented for each phase and thereafter a performance index (see below) that allows aggregate comparison between phases.

**Water Utility Performance Index**

To enable comparison between the three performance phases, we computed a Water Utility Performance Index (WUPI) for NWSC. Following the criteria in Soppe et al. (2018: 41), WUPI was derived from the above ten indicators by assigning them ordinal values ranging from 1 to 4 to respectively represent poor, fair, good, or very good (see Table 2). The final score for each year is expressed as a percentage of the total possible score from the ten indicators (i.e. score/40 points). It is important to note, our scores are unweighted, as all the sub-indicators were considered on an equal basis.
Table 2: Water Utility Performance Index for NWSC

<table>
<thead>
<tr>
<th>Quality of service</th>
<th>Poor (≤1 point)</th>
<th>Fair (≤2 points)</th>
<th>Good (≤3 points)</th>
<th>Excellent (≤4 points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water coverage</td>
<td>&lt;50%</td>
<td>50-70%</td>
<td>70-80%</td>
<td>&gt;80%</td>
</tr>
<tr>
<td>Sewerage coverage</td>
<td>&lt;1%</td>
<td>1-20%</td>
<td>20-50%</td>
<td>&gt;50%</td>
</tr>
<tr>
<td>Hours of supply</td>
<td>&lt;10 hours</td>
<td>10-15 hours</td>
<td>15-20 hours</td>
<td>&gt;20 hours</td>
</tr>
<tr>
<td>Economic efficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCCR</td>
<td>&lt;1</td>
<td>1-1.2</td>
<td>1.2-1.3</td>
<td>&gt;1.3</td>
</tr>
<tr>
<td>Staff cost as % operational expenses</td>
<td>&gt;45%</td>
<td>40-45%</td>
<td>35-40%</td>
<td>&lt;35%</td>
</tr>
<tr>
<td>Collection efficiency</td>
<td>&lt;70%</td>
<td>70-80%</td>
<td>80-95%</td>
<td>&gt;95%</td>
</tr>
<tr>
<td>Operational sustainability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff/1,000 connections</td>
<td>&gt;15</td>
<td>10 to 15</td>
<td>6 to 9</td>
<td>&lt;6</td>
</tr>
<tr>
<td>Non-revenue water</td>
<td>&gt;40%</td>
<td>35-40%</td>
<td>30-35%</td>
<td>&lt;30%</td>
</tr>
<tr>
<td>Metering ratio</td>
<td>&gt;80%</td>
<td>80-85%</td>
<td>85-95%</td>
<td>&gt;95%</td>
</tr>
<tr>
<td>New connections per year</td>
<td>&lt;10k</td>
<td>10k-20k</td>
<td>20k-30k</td>
<td>&gt;30k</td>
</tr>
</tbody>
</table>

Source: Based on Soppe et al. (2018).

4. Uganda’s urban water domain governance arrangements

The delivery of water services in Uganda’s urban areas has been under government control since the colonial days. At independence the responsibility for water and sewerage service management was briefly entrusted to urban authorities, with every urban centre accorded its own water board (Fredby and Nilsson, 2013). The National Water and Sewerage Corporation (NWSC) was established in 1972, with the merger of three water boards of Kampala, Entebbe and Jinja with the mandate of improving water and sanitation management in the large urban centres of Uganda. The political and economic turmoil that almost crippled all Ugandan government sectors during the 1970s and early 1980s did not spare NWSC either. For example, Amin’s economic war, which led to the expulsion of close to 90,000 Asians in 1972, meant that the infant utility lost a huge portion of its customer base at inception. By the time the current National Resistance Movement (NRM) government came to power in 1986, NWSC systems had decayed (Mbuvi, 2012).

Efforts to rehabilitate NWSC were spearheaded by actors brought together by the need to address the challenge of access to drinking water in the urbanised areas. For the period 1986 to 2006, these actors fell into two broad categories: actors with an international dimension; and those with a national dimension. International actors, particularly donors, had a big influence on the sector through their funding, ideology and technologies (Colon, 2014; Eberhard, 2002). The World Bank positioned itself in the urban water sector not only as a financial superpower, but also as a ‘knowledge bank’ and expert in reforming the water sector (Colon, 2014). There were also a few, but influential, international private water companies in the 1990s and early 2000s, whose interest was to manage urban water services on a commercial basis (Eberhard,
After 2004, Uganda’s dependence on foreign aid reduced (Hickey, 2013) and this somehow reduced donors’ influence over reforms in the urban water sector.

Within the national dimension, the responsibility for the urban water sector fell under the Ministry of Water and Environment. One of the ministry’s three directorates, the Directorate of Water Development (DWD), was charged with providing overall technical oversight for the planning, implementation and supervision of the delivery of urban water and sanitation services across the country. DWD categorised urban areas as either ‘small towns’, with between 5,000 and 15,000 residents, or ‘large towns’, with over 15,000 inhabitants (Kitonsa and Schwartz, 2012). NWSC was established as a semi-autonomous public agency to manage the large urban centres across the country (Muhairwe, 2011). In the small towns outside NWSC’s jurisdiction, DWD negotiated public-private-partnership contracts with indigenous private-for-profit operators.

Having given this background, in the next section we present findings showing how NWSC transformed into a successful public agency. Whereas our interest is in the turnaround and post-turnaround phases, we present the pre-turnaround phase to provide a baseline for the analysis.

5. NWSC transformation: From basket case to an effective public agency?

5.1 The pre-turnaround phase

As noted in the previous section, soon after NRM takeover in 1986, NWSC activities heavily depended on the support of international aid agencies. Between 1987 and 1997, donors financed two major projects on water supply and sanitation rehabilitation, valued at over USD 100 million (World Bank, 1998). These initiatives enhanced NWSC water production and distribution systems to the extent that by 1998 the utility had excess capacity (Schiffler, 2015) while operations were extended from three towns in 1986 to 12 towns in 1998 (World Bank, 1998). Progress on the infrastructural front notwithstanding, the World Bank admitted that its support ‘did not transform the NWSC into a financially viable authority that could in the short to medium term guarantee sustained operations and expansion of the services to the population in the project towns’ (World Bank, 1998: not paginated). As summarised in Table 3, quality indicators were particularly poor: by 1998, NWSC water coverage reached 40 percent of the population; sewage services coverage was negligible at 2 percent; and water supply was grossly intermittent at about 12 hours a day. Performance on economic efficiency indicators was inconsistent. NWSC’s collection efficiency stagnated at 60 percent, implying that four in ten customers defaulted. Operational sustainability indicators were improving, but at a slow pace. The proportion of non-revenue water reduced from 68 percent to 60 percent, number of staff per 1,000 connections from 40 to 34, and the proportion of water connections with meters from 52 percent to 78 percent. More concerning, however, was the slow growth in the number of new water connections
per year. Taken together, NWSC water utility performance index (WUPI) for the three years data for this period is available was around 30 percent (see Table 3).

### Table 3: Pre-turnaround performance

<table>
<thead>
<tr>
<th>Quality of service</th>
<th>1996</th>
<th>1997</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water coverage</td>
<td>40.5%</td>
<td>40.5%</td>
<td>40.5%</td>
</tr>
<tr>
<td>Sewerage coverage</td>
<td>2.0%</td>
<td>2.4%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Hours of supply</td>
<td>8.0</td>
<td>9.0</td>
<td>12.0</td>
</tr>
<tr>
<td>Economic efficiency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating cost coverage (ratio)</td>
<td>1.23</td>
<td>1.18</td>
<td>1.24</td>
</tr>
<tr>
<td>Collection efficiency</td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Staff cost as percentage of operating expenses</td>
<td>51</td>
<td>58</td>
<td>45</td>
</tr>
<tr>
<td>Operational sustainability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff/1,000 W&amp;S connections</td>
<td>40</td>
<td>37</td>
<td>34</td>
</tr>
<tr>
<td>NRW</td>
<td>68.5%</td>
<td>65.1%</td>
<td>61.0%</td>
</tr>
<tr>
<td>Metering ratio</td>
<td>52.1%</td>
<td>62.6%</td>
<td>78.1%</td>
</tr>
<tr>
<td>New connections per year</td>
<td>2,235</td>
<td>5,003</td>
<td>2,743</td>
</tr>
<tr>
<td>NWSC-WUPI</td>
<td>30.0</td>
<td>27.5</td>
<td>32.5</td>
</tr>
</tbody>
</table>

The World Bank attributed the poor performance to weaknesses in government supervision, which condoned managerial laxity in NWSC (Colon, 2014; World Bank, 1998). To salvage the corporation, donors recommended major institutional reforms that centred on promoting market-based practices, such as private sector participation in urban water service delivery (World Bank, 1998). In agreement with donors' observations, in 1998 government constituted a new board of governors (henceforth board) and a new CEO with a wealth of public-private sector experience.

### 5.2 The turnaround phase (1998-2004)

Several analysts agree that NWSC turnaround started from the time Dr Muhairwe was recruited in 1998 and was completed by 2004, at the time when government ditched plans for privatisation and instead extended the management contract of the management team comprised of government employees (see Heymans et al., 2016; Kitonsa and Schwartz, 2012). Below we summarise the main reforms Dr Muhairwe initiated.

Muhairwe commenced his tenure by promising to reverse NWSC’s financial deficit within the first 100 days (Muhairwe, 2009). Within this period, his team paid attention to improving revenue collections, while at the same time undertaking cost-cutting measures. To improve revenue collections, NWSC management undertook vigorous information campaigns on radio, TVs, print and electronic media to share with the public the work being done by the corporation. Management reasoned that once customers and the public were better informed about the corporation’s activities, there would be greater appreciation for new customers to join and willingness for existing
ones to pay for the services rendered. In 1999, customer help desks were introduced in all NWSC branches to supplement these customer care initiatives. Cost-cutting measures involved rationalising NWSC activities that saw non-core activities like security, catering and vehicle repair and maintenance offloaded. NWSC instead outsourced these services from private-for-profit operators (Muhairwe, 2009). This move enabled NWSC to reduce its employees by 50 percent within just three years. Respondents claimed that those staff members who remained were motivated, better remunerated and their productivity improved as they focused on the organisation’s core business.

Another initiative involved testing different water utility management models. Between 1998 and 2004, public and private-for-profit management models of delivery were rolled out side by side to identify one with a comparative advantage. The private-for-profit model was trialled with two different international water companies that managed Kampala, while the rest of NWSC towns were under a team of public sector employees led by Muhairwe (Muhairwe, 2009). The first contract for Kampala was awarded to a German water company, Gauff, for the period 1998 to 2001. Following unsatisfactory performance, NWSC management contracted the French company, ONDEO Services, for the period 2002 to 2004. Meanwhile, the aggressive marketing and customer management initiatives by Muhairwe’s team helped to ensure that towns under public sector management matched the performance of Kampala under the control of international private companies (Jammal and Jones, 2006). The experience from this experiment also helped the leadership of NWSC to learn the art of negotiating contracts, which it successfully adapted to negotiate performance contracts that the government introduced in 2000 (Heymans et al., 2016).

Muhairwe’s team operationalised the performance contracts with government by decentralising NWSC, such that the service areas/towns became semi-autonomous business units. NWSC headquarters became the contract management unit responsible for asset holding and performance monitoring. The management teams in towns acted like private operators responsible for management, operation and maintenance services, revenue collection and rehabilitation and extension of the water networks in their jurisdiction (Banerjee and Morella, 2011).

These reforms dramatically improved NWSC performance in all the three performance areas (see Table 4). The only indicator that did not substantially improve was the sewerage coverage. NWSC’s WUPI more than doubled from 32 percent in 1998 to 71 percent in 2004.

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5 Interview with former member of NWSC senior management, January 2019.
6 Interview with human resource management official, November 2018.
7 Interview with former member of NWSC senior management, January 2019.
8 In 2001, NWSC entered a new PPP with a French water Company, Ondeo services Uganda Limited (OSUL). As was the the case with Gauff, OSUL managed Kampala, while NWSC retained the other 14 areas/towns.
The politics of building effective water utilities in the global South: A case of NWSC

Table 4: NWSC performance during the turnaround phase

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water coverage</td>
<td>40.5%</td>
<td>41.7%</td>
<td>50.8%</td>
<td>55.4%</td>
<td>54.9%</td>
<td>35.6%</td>
<td>62.6%</td>
</tr>
<tr>
<td>Sewerage coverage</td>
<td>2.4%</td>
<td>2.9%</td>
<td>1.0%</td>
<td>4.4%</td>
<td>3.9%</td>
<td>15.6%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Hours of supply</td>
<td>12.0</td>
<td>12.0</td>
<td>15.0</td>
<td>18.0</td>
<td>20.0</td>
<td>21.0</td>
<td>22.0</td>
</tr>
<tr>
<td>Economic efficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical efficiency</td>
<td>47.7</td>
<td>54.5</td>
<td>56.5</td>
<td>57.4</td>
<td>59.6</td>
<td>60.8</td>
<td>61.8</td>
</tr>
<tr>
<td>Collection efficiency</td>
<td>60</td>
<td>61</td>
<td>75</td>
<td>85</td>
<td>92</td>
<td>92</td>
<td>100.1</td>
</tr>
<tr>
<td>Operational sustainability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff/1,000 W&amp;S connections</td>
<td>34</td>
<td>26</td>
<td>20</td>
<td>16</td>
<td>12</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>NRW</td>
<td>61.0%</td>
<td>53.5%</td>
<td>47.9%</td>
<td>63.4%</td>
<td>61.0%</td>
<td>61.9%</td>
<td>62.7%</td>
</tr>
<tr>
<td>Metering ratio</td>
<td>78.1%</td>
<td>81.3%</td>
<td>85.1%</td>
<td>86.2%</td>
<td>91.9%</td>
<td>94.9%</td>
<td>96.6%</td>
</tr>
<tr>
<td>New connections</td>
<td>2,743</td>
<td>3,043</td>
<td>4976</td>
<td>6,798</td>
<td>7,764</td>
<td>11,548</td>
<td>14,045</td>
</tr>
<tr>
<td>NWSC-WUPI</td>
<td>32.5</td>
<td>40.0</td>
<td>48.8</td>
<td>51.3</td>
<td>62.5</td>
<td>61.3</td>
<td>71.3</td>
</tr>
</tbody>
</table>

5.3 The post-turnaround phase (2004 to 2018)

The post-turnaround period can usefully be divided into two parts: the 2004-2011 phase, which was a continuation of Muhairwe’s leadership; and the period 2012 to present under a new CEO. Some argue that such leadership changes have serious implications for the performance of public agencies (Jammal and Jones, 2006; Roll, 2014).

5.3.1 NWSC post-turnaround phase 1 (2004 to 2011)

The good performance by Muhairwe’s team incentivised government to extend the public sector management model with a second performance contract covering the period 2004 to 2006 (Schiffler, 2015). The new contract allowed Muhairwe to regain the control over Kampala that had been used to experiment with private sector management during the turnaround phase. Muhairwe’s team used the opportunity to consolidate the reforms introduced during the previous phase. For example, the team operationalised the new performance contract with government by cascading contractual obligations to its service areas, including Kampala. The annual area
performance contracts with area teams were upgraded to two years 'internally delegated management contracts' (Kayaga, 2008).

The customer service programmes initiated during the turnaround phase were strengthened too. In 2004, NWSC became the first public agency in Uganda to operate a call centre dedicated to resolving customer complaints. NWSC also introduced periodic customer satisfaction surveys to gauge the quality of its services from the customer’s point of view (Mugisha, 2019; Schiffler, 2015). Through these surveys, management got feedback on issues like responsiveness in resolving complaints, responsiveness in carrying out new connections, water reliability, water pressure, water quality, timely and accurate water bills, and the convenience of the bill payment process.

Another initiative that greatly boosted NWSC’s financial position was that in 2008 government exempted NWSC from the loans obtained from donor agencies during the 1980s and 1990s (Schiffler, 2015). Muhairwe’s team persistently complained to government that if NWSC were to repay with its internally generated revenue, it would remain with no resources for reinvestment, let alone meeting operation and maintenance expenses. Therefore, in February 2008, Parliament passed a resolution to convert NWSC outstanding loans, amounting to UGX 154 billion (US$47 million), into equity (Hansard, 2008). This gave NWSC a clean balance sheet that made it qualify for credit from commercial providers. For instance, in 2010, NWSC obtained a commercial loan of US$2 million to finance the extension of the Ggaba intake plant (Berg and Danilenko, 2017: 81).

Despite these initiatives, however, the performance of NWSC during this period was mixed. As observed by Schiffler (2015) and the performance on several indicators, including water coverage, sewerage coverage, and non-revenue water, plateaued. According to Table 5, performance on three indicators worsened: service reliability with regards to hours of water supply declined from 23 hours to 20 hours per day in 2011; the number of new customers steadily declined after its peak in 2006; and staff costs increased from 36 percent to 41 percent. Only three indicators improved or maintained high performance during this phase, namely: metering ratio; staff per 1,000 connections; and collection efficiency. This stagnation in performance led to Muhairwe’s acrimonious exit of NWSC in 2011 (Schiffler, 2015). This is also reflected in the WUPI: having reached 83 percent in 2006, it declined to 73 percent in 2008, before climbing back to 81 percent in Muhairwe’s final year at NWSC.

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9 Interview with former member of NWSC senior management, January 2019.
Table 5: NWSC performance during post-turnaround phase 1 (2004-2011)

<table>
<thead>
<tr>
<th>Quality of service</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water coverage</td>
<td>69.0%</td>
<td>70.0%</td>
<td>71.0%</td>
<td>72.0%</td>
<td>72.5%</td>
<td>73.5%</td>
<td>74.9%</td>
</tr>
<tr>
<td>Sewerage coverage</td>
<td>7.3%</td>
<td>7.0%</td>
<td>6.7%</td>
<td>6.4%</td>
<td>6.0%</td>
<td>6.4%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Hours of supply</td>
<td>22.0</td>
<td>23.0</td>
<td>23.0</td>
<td>23.0</td>
<td>23.0</td>
<td>22.0</td>
<td>20.0</td>
</tr>
<tr>
<td><strong>Economic efficiency</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating cost coverage (ratio)</td>
<td>1.26</td>
<td>1.31</td>
<td>1.34</td>
<td>1.24</td>
<td>1.35</td>
<td>1.4</td>
<td>1.36</td>
</tr>
<tr>
<td>Collection efficiency</td>
<td>89</td>
<td>90</td>
<td>92</td>
<td>92</td>
<td>99</td>
<td>100</td>
<td>96</td>
</tr>
<tr>
<td>Staff cost as percentage of</td>
<td>36.0</td>
<td>36</td>
<td>35</td>
<td>40</td>
<td>43</td>
<td>41</td>
<td>41</td>
</tr>
<tr>
<td>operating expenses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operational sustainability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff/1,000 W&amp;S connections</td>
<td>9</td>
<td>6.4</td>
<td>7.1</td>
<td>6.5</td>
<td>6.3</td>
<td>6.1</td>
<td>5.9</td>
</tr>
<tr>
<td>NRW</td>
<td>33.8%</td>
<td>29.9%</td>
<td>32.6%</td>
<td>33.7%</td>
<td>35.8%</td>
<td>35.8%</td>
<td>34.7%</td>
</tr>
<tr>
<td>Metering ratio</td>
<td>97.6%</td>
<td>98.6%</td>
<td>99.1%</td>
<td>99.6%</td>
<td>99.7%</td>
<td>99.6%</td>
<td>99.8%</td>
</tr>
<tr>
<td>New connections per year</td>
<td>22,218</td>
<td>28,521</td>
<td>24,522</td>
<td>23,305</td>
<td>22,222</td>
<td>25,633</td>
<td>23,332</td>
</tr>
<tr>
<td>NWSC-WUPI</td>
<td>73.8</td>
<td>82.5</td>
<td>78.8</td>
<td>73.8</td>
<td>75.0</td>
<td>76.3</td>
<td>81.3</td>
</tr>
</tbody>
</table>

5.3.2 NWSC post-turnaround phase 2 (2012 to 2018)

When Muhairwe exited NWSC, Silver Mugisha, an engineer whose managerial experience was honed in NWSC, was appointed to replace him in 2013. Mugisha launched ambitious projects to rapidly expand NWSC coverage to the different parts of the country (see Mugisha, 2019). One such prominent project was code-named 100% Service Coverage Acceleration Project, estimated to cost UGX 213 billion in three years (2017-2020), with NWSC and government contributing 58 percent and 42 percent, respectively (Mugisha, 2019; SCAP100, 2016). Consequently, NWSC rapidly extended from 28 towns in 2013 to 253 towns at the end of 2019 and from serving 3.84 million people in 2013 to 16.8 in 2019 (MWE, 2019). NWSC recorded slight improvements on four indicators (number of new connections, water coverage, operating cost coverage, and metering ratio). However, it declined on three (hours of supply, collection efficiency, and non-revenue water). Water supply became unreliable, with actual availability reducing from 20 hours per day in 2011 to 18 hours per day in 2017 (see Table 6). Relatedly, the majority of the towns are not commercially viable; NWSC annual reports since 2013 consistently indicate that only seven big towns are able to meet their operational/production costs. Management of sewerage services, staff costs and staff productivity remained unchanged in relation to what Muhairwe left.

10 Senior official, MWE December 2018.
Similar to the previous period, NWSC’s WUPI declined for a few years before bouncing back to above 80 percent in 2016.

### Table 6: NWSC performance during post-turnaround phase 2 (2002-2017)

<table>
<thead>
<tr>
<th>Quality of service</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water coverage</td>
<td>77.4%</td>
<td>77.8%</td>
<td>75.2%</td>
<td>73.4%</td>
<td>78.3%</td>
<td>78.0%</td>
</tr>
<tr>
<td>Sewerage coverage</td>
<td>6.4%</td>
<td>6.4%</td>
<td>6.2%</td>
<td>6.0%</td>
<td>8.4%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Hours of supply</td>
<td>20.0</td>
<td>20.0</td>
<td>19.0</td>
<td>18.0</td>
<td>18.0</td>
<td>18.0</td>
</tr>
<tr>
<td><strong>Economic efficiency</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating cost coverage (ratio)</td>
<td>1.22</td>
<td>1.36</td>
<td>1.27</td>
<td>1.2</td>
<td>1.35</td>
<td>1.38</td>
</tr>
<tr>
<td>Collection efficiency</td>
<td>95</td>
<td>96</td>
<td>96</td>
<td>105</td>
<td>97</td>
<td>93</td>
</tr>
<tr>
<td>Staff cost as percentage of operating expenses</td>
<td>39</td>
<td>40</td>
<td>40</td>
<td>44</td>
<td>41</td>
<td>39</td>
</tr>
<tr>
<td><strong>Operational sustainability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff/1,000 W&amp;S connections</td>
<td>5.6</td>
<td>5.3</td>
<td>5.9</td>
<td>6.3</td>
<td>5.8</td>
<td>5.7</td>
</tr>
<tr>
<td>NRW</td>
<td>34.2%</td>
<td>35.1%</td>
<td>33.0%</td>
<td>31.2%</td>
<td>28.0%</td>
<td>33.5%</td>
</tr>
<tr>
<td>Metering ratio</td>
<td>99.7%</td>
<td>99.9%</td>
<td>99.8%</td>
<td>99.6%</td>
<td>99.6%</td>
<td>99.9%</td>
</tr>
<tr>
<td>New connections per year</td>
<td>21,637</td>
<td>28,086</td>
<td>33,982</td>
<td>38,836</td>
<td>40,712</td>
<td>52,700</td>
</tr>
<tr>
<td>NWSC-WUPI</td>
<td>81.3</td>
<td>80.0</td>
<td>78.8</td>
<td>75.0</td>
<td>83.8</td>
<td>82.5</td>
</tr>
</tbody>
</table>

#### 5.4 Comparison of performance between the three phases

Plotting the NWSC WUPI on a graph enabled comparison of performance between the three phases (see Figure 3). Results indicate that whilst NWSC pre-turnaround performance was around 30 percent, by 2004 the corporation had reached 70 percent. Performance improvements peaked at 83 percent in 2006, dropping to 73 percent in 2008. Since then, WUPI hovered between 75 percent and 83 percent, even after the exit of the turnaround CEO in 2011.

In the next section, we seek to identify the underlying political economy factors for NWSC’s turnaround and uneven performance in the post-turnaround period. The political settlement framework outlined in Section 2 guides our analysis.
6. The politics of NWSC turnaround

On assumption of power in 1986, the NRM government was keen on avoiding the politics of exclusion that rendered predecessor governments vulnerable to coups, countercoups and civil wars (Lindemann, 2011). Its leaders made deliberate attempts to forge a government and governance system that would accommodate Uganda’s diverse social-political groups and interests (Golooba-Mutebi and Hickey, 2016). These moves resulted into a relatively dominant ruling coalition with President Museveni as its dominant leader, with the implementation of important policies or reforms only gaining traction with presidential blessings. As documented in their wartime manifesto, the ‘Ten Point Programme’, the ruling elite shared an ideological commitment to ‘improvement of social services’ and promotion of ‘modernisation’ as strategies for reconstituting state–society relations soured by decades of post-independence authoritarian rule (Piron and Norton, 2004). Whilst these paradigmatic ideas provided fertile ground that the elite could use to rally political support for transforming NWSC, the elite was not immediately committed to utility reforms.

In 1987, government solicited for the support of international donors for the purposes of restoring public services that had been disrupted by the war (Ogeda, 2006). In turn, donors, particularly the World Bank, were eager to respond to the government’s call because this fitted well the goals of the International Drinking Water Supply and Sanitation Decade (1980-1990) and the global programme for Health for All (HFA) by the Year 2000 (Colon, 2014; Ogeda, 2006). Yet, as discussed in Section 5.1, the performance of NWSC during this period was unsatisfactory. It is argued that up until

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1998, government commitment to the reforms was half-hearted because of ideological differences between the ruling elite and donors with regards to the urban water sector reform approach. Donors sought to curtail involvement of the state in direct delivery and funding of urban water, claiming the urban population had capacity to pay and that private-for-profit providers were best suited to deliver services effectively and efficiently (Colon, 2014; Eberhard, 2002). For its part, the NRM leadership had a socialist orientation and believed that effective service delivery necessitated active state intervention (Piron and Norton, 2004). However, several developments that occurred between the mid-1990s and 1998 converged to trigger the president into providing full political backing to the institutional reforms in NWSC.

6.1 Impact of the 1996 presidential elections

It may be argued that the NRM did not commit to NWSC transformation because up to 1996 it ruled without being subjected to the pressures of electoral competition. The 1996 elections were won under the campaign slogan ‘peace, unity, democracy and modernisation’, in which the president pledged to tackle poverty to its core and lead Uganda into a modern society. Government’s post-election development strategy, the Poverty Eradication Action Plan (PEAP), focused on addressing the poor- and under-provision of basic services, including education, health and water, as key interventions in improving the quality of life of the poor (Piron and Norton, 2004; Williamson, 2003). However, while government prioritised and allocated more resources to the water sector more broadly, a closer inspection of the first PEAP (1997-1999) reveals that this was only true for the rural sub-sector. During this period, the urban sub-sector remained under ‘traditional fragmentation and project interests’ of donors (Williamson and Kizilbash Agha, 2008: 69). Therefore, electoral competition did not (immediately) generate political priority for NWSC. In fact, Williamson and Kizilbash Agha (2008: 75) argue that the projectised management of NWSC initially ‘served to isolate the urban sector from more intense demand on performance from other sector stakeholders, especially domestic ones’.

6.2 The 1998 crisis financial in NWSC

The turning point that secured presidential attention (and support) for NWSC came in 1998, when two separate reports exposed to President Museveni the gross managerial weaknesses that threatened the very existence of the corporation. The first was the World Bank report about its support to NWSC for the period 1987 and 1997 (World Bank, 1998). The report showed that little improvement in performance had been registered, despite investments in excess of USD 100 millions. It detailed how NWSC was on the verge of bankruptcy because its customer base and revenues were shrinking, and the loans from development partners had matured with no readily available funds to service them (World Bank, 1998). The World Bank pinned the slow performance improvements on lax management, coupled with the absence of adequate supervision on the side of government. It warned that further delays by government in addressing these issues threatened sustainability of the existing services and ability of the utility to extend operations to additional urban areas (World Bank, 1998).
These observations were corroborated by a confidential report authored and sent to the president by a couple of NWSC senior staff in 1998, detailing what they believed were the causes of the utility’s underperformance. This dossier (essentially a product of an internal power struggle between Engineer Onek and a couple of senior managers, who wanted to discredit him, so that the president did not renew his contract as CEO) showed how managerial inefficiencies were costing the corporation billions of shillings, particularly through the high rate of non-revenue water (NRW). According to a key informant, ‘They [Onek’s subordinates] used the percentage of NRW to estimate its annual monetary value. That time the figure came to around 12 billion Uganda shillings’. It is said that this revelation shocked the president into action: ‘To a layman like the president, losing 12 billion was huge that time’. Therefore, the ruling elite was convinced that ‘the Corporation had no future unless something was done’ (Muhairwe 2003: 4; original emphasis).

Consequently, Onek’s contract was left to expire in August 1998, but equally his rivals were not considered for the top job. In so doing, the president appears to have concurred with the Bank’s diagnosis that what NWSC needed was commercial and financial management capacity, as opposed to engineering/technical capacity that Onek’s rivals possessed. Hence Dr Muhairwe was headhunted to join NWSC. The World Bank had also proposed that the long-term solution to NWSC woes was comprehensive private sector participation with a "lease contract" as primum facie the minimum option to be sought’ (World Bank, 1998: 9). The elite took a pragmatic decision to consider NWSC for privatisation, as the government had no resources of its own to sustain it (GIZ, 2019: 23) and this task was assigned to the Ministry of Finance.

6.3 The catalytic role of donors

To allay fears that public enterprises were being cheaply sold to foreigners, the Ministry of Finance and the World Bank agreed to first restore the viability of NWSC. They agreed on a rehabilitation programme with specific actions (see below) for government and donors to ‘strengthen the operational and financial standing of NWSC to achieve the most attractive and competitive lease proposals’ (World Bank, 2001: 15). To forestall government reneging on its commitments, donors tied access to foreign aid to the implementation of the agreed upon preparatory actions. It should be recalled that the momentum for privatising NWSC peaked at the time Uganda was preparing to receive an estimated USD 2 billion from the Highly Indebted Poor Country’s debt relief initiative. Under this programme, donors would approve government’s spending plans upon fulfilling agreed upon ‘prior actions’ documented in the annual Poverty Reduction Support Credit (PRSC) proposals. According to the World Bank,

12 Interview, former NWSC senior staff, February 2019.
13 Interview, former NWSC senior staff, February 2019.
14 Interview with former NWSC senior staff, January 2019.
15 Interview with former NWSC senior staff, January 2019.
16 Each annual poverty reduction support credit was funded to a tune of USD 150 million. International Monetary Fund (2000).
‘Each individual PRSC in the series is provided based on the up-front completion of a set of prior actions that demonstrate satisfactory progress with the country’s social and structural reform agenda in support of its poverty reduction strategy’ (World Bank, 2001: 8).

Our review of Uganda’s PRSCs reveals that NWSC-related prior actions were in four consecutive PRSCs from 2000 and 2003 (see summary in World Bank, 2009). Below we highlight the main prior actions and how they affected NWSC performance.

The first action point was for government to settle its outstanding debts arising from the non-payment of water and sewerage management services provided by NWSC. By 1998, government owed NWSC an estimated UGX 12 billion in unpaid bills (World Bank 1998). To help NWSC recover this debt, Uganda’s first PRSC required government to clear its arrears and subsequently make prompt payments for the services it consumed (World Bank, 2001). Indeed, in 2000, government paid UGX 5 billion, followed by UGX 1.78 billion in 2001 (World Bank, 2003). In addition, a memorandum of understanding was signed between the Ministry of Finance and the NWSC, committing government to settle the outstanding balance and to put arrangements in place to prevent future accumulation of arrears (World Bank, 2009). One respondent familiar with this matter alluded to how the finance ministry implemented this:

‘The Ministry of Finance instructed government agencies that they must adequately budget for their bills … this money was ring-fenced, it could not be reallocated for anything else … we were even advised to install prepaid water meters on the bulk consuming agencies like hospitals, the police, and the army. The message to all those big government facilities was that, yes you have to pay’.17

This move significantly improved NWSC’s financial position: our statistical evidence shows NWSC’s collection efficiency jumped from 60 percent in 1999 to 75 percent in 2000 and 85 percent in 2001. The revenues mobilised helped NWSC management to meet its tax obligations, as well as clear creditors who were threatening legal action and/or sabotaging the corporation’s operations for non-payment (Muhairwe, 2011). The tax body, for instance, had threatened to shut NWSC head office, while the electricity company had plans to cut off the treatment plants (Schiffler, 2015). Such actions would grind the utility’s water supply and other activities to a complete halt.

The second action point called for establishing a systematic mechanism for setting water tariffs. By 1998 the water tariff, which had been fixed in 1994, was insufficient after losing 45 percent of its value to inflation and depreciation of the currency (Isingoma, 2005; Schwartz, 2008). Yet NWSC attempts to increase water prices had been consistently blocked by politicians. In the second poverty reduction support credit (2001), one of the ‘prior actions’ was that government institutionalises a system for

17 Interview with former NWSC senior staff, January 2019.
regulating water prices to protect NWSC tariff against inflation and political interference (World Bank 2003, 2009). To this end, the Ministry of Finance obtained Cabinet and parliamentary approval for ‘indexation’ of NWSC tariff in 2002 (Isingoma, 2005; Berg and Danilenko, 2017). Isingoma (2005: 167) illustrates how, in its first year of implementation, the tariff indexation enabled NWSC to cover operation and maintenance costs and in 2003 it was able to meet operational costs plus depreciation. But perhaps the main benefit of indexation was the protection it offered the ‘real tariff’ value against exogenous factors like inflation (Isingoma, 2005; Schwartz, 2008).

The third action was in relation to strengthening government’s oversight over NWSC. Donors attributed the poor managerial practices in NWSC during the pre-turnaround period to the weak monitoring and supervision provided by the Ministry of Water (Colon, 2014; World Bank, 1998). Therefore, the first PRSC required government to tighten its oversight function by signing performance contracts with NWSC management (World Bank, 2001). Given organisational weaknesses in the parent Ministry of Water during this time, the finance ministry assumed de facto powers of supervising NWSC (Colon, 2014). In 1999, finance drafted the first performance contract between government and NWSC and appointed its trusted officers as representatives on its governance structures, namely, the board and the performance contract review committee. These measures ensured that NWSC management maintained its focus on improving the financial health of the agency ahead of the transition to private sector management (World Bank, 2001). Besides strengthening supervision, performance contracts were significant in institutionalising market practices within NWSC. The key performance indicators set were in relation to the number of water subscribers, revenue turnover, staff productivity, billing and bills collection, and proportion of non-revenue water. To achieve these targets, NWSC management had to improve its commercial operations to maximise revenues, while keeping costs at minimum.18 Whereas this approach had inherent contradictions that negatively affected NWSC investments in physical infrastructure (see next section), it was successful in achieving immediate revenue improvements (Colon, 2014; Tutusaus, 2019).

The fourth action was on the side of donors and it involved supporting NWSC to downsize. With a total of 1,800 employees in 1998, NWSC had poor staff productivity at 34/1,000 connections. This figure was far higher than the average of 10/1,000 for African utilities during that time (World Bank, 2001). The World Bank advised NWSC to rationalise its operations to get rid of the ‘non-essential’ staff and offered to fund severance payments for the retrenched staff through the Privatisation and Utility Sector Reform project (Muhairwe, 2009; World Bank, 2006). As illustrated in Figure 4, this retrenchment programme enabled NWSC to cut staff numbers by 50 percent, which improved the staff productivity indicator to 12/1,000 connections by 2002 (Heymans et al., 2016).

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18 Interview, NWSC regional manager, November 2018.
However, some observe that staff reductions were cosmetic, because the laid-off personnel ended up being rehired through outsourcing arrangements (Colon, 2014). As one respondent noted: ‘Those cuts were only on paper, but not in reality … the cost just shifted and hidden under operation expenses of the plants’.\(^{19}\) Moreover, this ‘casualisation’ of the NWSC workforce had serious negative implications, because workers employed without contract were susceptible to petty corruption and making illegal connections to make ends meet (Colon, 2014).

6.4 The role of technopolis

Within government, the programme for putting NWSC operations on a strong financial footing had clout, because the president delegated it to the powerful Ministry of Finance, at the time described by Harrison (2001: 664) as the ‘ministry that serve[d] as a conduit between the state and donor/creditors’. The finance ministry officials skillfully handled the mistrust from parts of the bureaucracy and the political elite concerned about the intentions and effects of allowing donors’ advice to privatise the water utility, on the one hand, and, on the other, gave assurances to the donors that government would keep their side of the bargain. In particular, the permanent secretary in the Ministry of Finance ‘had substantial political weight’ (Williamson et al., 2003: 24) and used his control of the national budget to ‘ensure that Ugandan urban water sector followed the World Bank’s advice’ (Mbuvi and Schwartz 2013: 379). With political power and resources, the ministry was able to enforce greater government intervention in NWSC affairs, in terms of paying for the services consumed and enhanced monitoring and supervision, both of which had ceased when the weaker Ministry of Water was in charge (Colon, 2014). And the tying of government access to the lucrative HIPC aid initiative on implementing the prior actions for NWSC turned the Ministry of Finance into more of a reform champion for water sector reforms than the parent Ministry of Water itself (O’Meally, 2011; Williamson et al., 2003). Ministry of Finance technocrats used conditionality to remind

\(^{19}\) Interview, Ministry of Water official, January 2019.
the elite on the need to maintain political commitment for reform and to sanction potential detractors.

Besides the finance ministry, the targeted recipient of support, NWSC, in 1998 got a reform-minded and ‘political savvy’ CEO (Heymans et al., 2016: 23). He prided himself on mastering the art of navigating the ‘bureaucratic maze’ of government to push through the interests and programmes of his organisation (Muhairwe, 2009: 300). His enthusiasm, exhibited in willingness to implement changes beyond the recommended reforms, earned him the confidence of the president, finance ministry and donors (Heymans et al., 2016).

7. The political economy of the post-turnaround phase

The politics and political economy factors that drove NWSC performance in the turnaround phase markedly changed in the post-turnaround period. This was particularly in relation to the shifts in Uganda’s the political settlement.

During this period, the cohesiveness and dominance of the NRM, Uganda’s ruling coalition, declined. One factor that caused this was the exit of some high-ranking elites from the broad-based government, who proceeded to form political organisations that posed a credible threat to President Museveni’s hold on power in 2001 (Golooba-Mutebi and Hickey, 2016). Second was the return to a multiparty political dispensation in 2005, which not only added layers of elite factions with less attachment to the founding ideologies of the NRM, but also raised the bar for political competition with opposition groups (Reuss and Titeca, 2017). These developments changed the broader orientation of the ruling coalition from pursuing long-term socioeconomic development, characteristic of the 1986-2000 era, to a focus on short-term political survival, as, for instance, evidenced by the elite’s increasing deployment of populist and personalised development policies (Golooba-Mutebi and Hickey, 2013; Kjaer and Joughin, 2019). Given its newly acquired status of good performance, NWSC presented opportunities for promoting the political interests of the elite. Respondents reported that NWSC received unprecedented attention from the president during this time: ‘The president would call us many times to ask about the situation in Kampala area, especially with regards to his [populist] initiatives for the urban poor’.20 In this section, we illustrate how these political settlement dynamics affected the other key political variables and the implications of this for NWSC performance.

7.1 Reduced role of international actors

From around 2004, the cordial government–donor relationship characteristic of the 1990 era started becoming strained. For most donor agencies, this was a result of government’s lax handling of governance and corruption, which prompted occasional suspension or complete withdraw of aid (Lister et al., 2006). For the World Bank, however, three additional developments influenced it to abandon its stance on the NWSC privatisation programme, to the extent that Uganda’s PRSCs from 2004 did not

20 Interview with a former senior staff of NWSC, February 2019.
contain NWSC-related ‘prior actions’. First was the shift in the government’s development strategy, away from the poverty agenda that prioritised public expenditure on social sectors to a focus on activities for promoting economic growth, as reflected in Uganda’s PRSP for the period 2004-2006. Second, in 2004, government announced that NWSC ‘will not be privatised [because of] its good performance over the years’ (Olaki, 2004: not paginated). The government argued that NWSC presented an alternative model for improving the performance of public sector organisations, rather than privatising them as per World Bank’s recommendations (Olaki, 2004; Schiffler, 2015). Third, there were changes in the global water market, whereby leading private water companies lost interest in investing in Africa (Mbuvi, 2012; Schwartz, 2008). As the World Bank’s interest in NWSC reduced, the alliance between donors, rulers and technopols that had enabled the turnaround progressively crumbled.

7.2 Diminished influence of the technopols

With the ruling elite keen on maintaining power by all means, the Ministry of Finance technopols were unable to insist on strict supervision of NWSC and this was reflected in the deteriorating performance of the corporation. The final evaluation of the third performance contract between NWSC and government (2006-2009) gave NWSC management a negative assessment – the first of this kind since performance contracts were introduced in 2000 (Colon, 2014: 290). The evaluation noted that NWSC not only failed to reduce non-revenue water, but also to collect its bills for which government agencies were the leading defaulters (GTZ, 2009).

Prior to this evaluation, and following World Bank’s loss of interest in the urban water sector, the finance ministry agreed to relinquish supervisory roles for NWSC back to the Ministry of Water. In the course of implementing the NWSC third performance contract (2006-2009), the German agency for technical cooperation (GTZ) funded senior officials from the Ministry of Water to attend capacity building programmes to prepare them for the transition. In 2009, the Ministry of Water officially regained its control, with its Directorate of Water Development (DWD) firmly in charge of the development, negotiation and monitoring of the fourth performance contract (2009-2012) on behalf of government (Colon and Guerin-Schneider, 2015). As reported by a Ministry of Water official:

‘GTZ helped us to regain control over the supervision of NWSC and negotiation of the performance contracts. The Ministry of Finance had no problem with that. In fact, they told us they had usurped our powers simply because we were not able to play that role and yet there was emergency to save NWSC’.\(^{21}\)

However, despite the capacity building programme by GTZ, DWD remained a relatively weak agency, with less clout in government compared to the Ministry of Finance. According to respondents, NWSC was too powerful for its supervisor and often ignored their counsel. The agency would only comply when DWD got the funders, rather than government, involved: ‘we would bring the issue to the attention of donors like GTZ.

\(^{21}\) Interview, Ministry of Water official, January 2019.
That is the only way we would put pressure on them [NWSC]. Therefore, for the most part of the 2009-2012 period, NWSC wasa ‘self-regulating’ entity, as DWD struggled to find its feet. To date, DWD remains a small unit manned by poorly equipped technocrats dealing with ‘a powerful operator [NWSC] that only cares about preserving its autonomy and financial viability.’

7.3 Electoral competition in the post-turnaround period

‘Water is a vote catcher, whoever supplies it in the quantities and qualities required, is certainly regarded by politicians as very important. Our previous performance and the pro-poor approach we were taking put us under a sharp political spotlight…’

After two decades of no-party politics, in 2005 Uganda officially returned to a multiparty political dispensation, which increased political competition between the ruling party and its rivals. The above quote, by a retired NWSC senior, illustrates how the ruling elite saw NWSC projects as an avenue through which it could build its popularity to the urban electorate. Rather than aiming to cause overall improvements in service delivery, as the democratisation thesis would predict, the ruling elite made electoral pledges targeting specific groups, such as the inhabitants of informal settlements. In the run-up to the 2006 presidential elections, President Museveni pledged that, if elected, every village in the informal settlements of Kampala would get at least one public standpipe (Fredby and Nilsson, 2013). This pledge obliged NWSC to install 1,255 standpipes in 2006 alone, far more than the total of 600 standpipes that the 2003-2006 corporate plan had targeted for three years (NWSC, 2003). To make the link between the intervention and the politics clear, standpipes responding to the presidential campaign pledge were painted yellow, to symbolise ruling party colours (Fredby and Nilsson, 2013) and NWSC applied a 10 percent discount on an already subsidised standpipe tariff (World Bank, 2014). A more problematic implication was that, due to the politicisation of this project, customers felt that water was a political gift from the president and therefore free of charge. Thus, while NWSC registered a 58 percent increment in new connections (from 14,045 in 2004 to 22,218 in 2005), the majority were low-income customers, who either paid less or completely defaulted on their water bills. This could explain the decline in collection efficiency from 98 percent in 2004 to 89 percent in 2005 and 90 percent in 2006 (NWSC, 2006). In 2008, NWSC even established a dedicated ‘pro-poor unit’, to popularise the old-fashioned ‘pro-poor’ technologies throughout the country, but, more importantly, to encourage lower-income customers to pay.

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22 Interview, Ministry of Water official, December 2018.
23 Interview, Ministry of Water official, December 2018.
24 Interview, donor representative, December 2018.
25 Interview with a former senior staff of NWSC, February 2019.
7.4 Post-turnaround leadership transition crisis

NWSC was thrown into a leadership vacuum when, after 13 years at the helm, Muhairwe exited the corporation in 2011. Similar to what happened in 1998, when Eng. Onek left, the transition to a new leadership was acrimonious. As carefully documented by an investigative journalist Mujuni (2013), the vacancy was opened up to the public, and a consultancy firm, KPMG, shortlisted six strong candidates. The close contest, however, was between two senior NWSC staff, Eng. Alex Gisagara and Eng. Silver Mugisha. In a space of two years, two boards, two water ministers, the Ministry of Public Service, and the inspectorate of government all failed to agree on a single candidate. To protect the organisation from the building confusion, President Museveni intervened in this matter on the invitation of the minister for water. He sided with the water minister that Eng. Mugisha should be appointed the next CEO, even though the board had preferred Eng. Gisagara. The president reasoned that Mugisha had performed better than Gisagara in those interviews conducted by independent agencies, namely KPMG and the public service commission, while his competitor was preferred by the board, of which, as the acting CEO, he was a member and this therefore suggested a conflict of interest.

NWSC's mixed fortunes since 2013 are closely linked to the special relationship between the new CEO and the president that emerged out of the selection process. On the one hand, NWSC management claims that it uses presidential involvement to protect itself from capture and persistent rent seeking of lower-level elite factions. Here management is able to deflect some burdensome rent seekers by suggesting that the president, whom everyone knows talks to the new CEO regularly, is closely watching developments in NWSC. However, considering the way NWSC strategies are focused on popularising the president and the ruling party, it looks like the CEO is under an obligation to show gratitude to the appointing authority. Below, we illustrate how NWSC management supports the ruling elite through extension of its services and aiding rent extraction.

**Populist extension of NWSC services**

Soon after his appointment as NWSC CEO, Mugisha, together with the NWSC board, sought audience with the president in 2013. NWSC leadership explained to the president that it could help achieve his manifesto pledges in the water sector if government agencies paid up their bills to allow the corporation to get resources needed for investment. This meeting proved timely to the elite, because people/voters in towns outside NWSC jurisdiction were demanding that the corporation should manage their water systems. Happy with management proposals, the president ordered the finance ministry to clear NWSC arrears emanating from government consumption (see Otage, 2014). He also advised NWSC to install pre-paid meters on government facilities, so that they pay in advance before consuming the services. His intervention explains the improvements in NWSC collection efficiency in financial year

26 Interview with NWSC senior management, October 2018.
27 Senior officer NWSC, November 2018.
28 Interview with DWD oficial, December 2018.
2014/15 and 2015/16 (see Table 6). For its part, NWSC embarked on the rapid expansion of water coverage, from 28 towns in 2013 to 253 towns at the end of 2019, and from serving 3.84 million people in 2013 to 16.8 in 2019 (MWE, 2019). To maximise political capital for the ruling elite, NWSC management received strict directives that important events, such as groundbreaking ceremonies and commissioning of new projects, had to be officiated by members of the ruling elite.29

On the surface, this looked like a win-win deal, in which NWSC promises political capital to the ruling elite via water extensions in return for political backing and increased financial allocation to the utility. However, the deal had underlying negative implications for NWSC performance. Whereas water has been extended to more towns, actual availability reduced from 20 hours in 2013 to 18 hours per day since 2016 (Table 6). This suggests that NWSC should have consolidated its presence in the existing towns, as suggested in Uganda’s second National Development Plans (see GoU, 2015: 203), before extending to new ones. Relatedly, the majority of the towns are not commercially viable, as only seven big towns are able to meet their operational costs. While in the short run smaller towns with high production costs are cross-subsidised by big towns, experts fear that the arrangement will soon become unsustainable. As noted by one informant, ‘They [NWSC] are ok with 200 towns. They can receive a few more which are not commercially viable. Thereafter it will be unsustainable; they will sink’ 30 In addition, the urgency required to implement presidential pledges overrides the formal procedures requiring the Ministry of Water to certify the water production infrastructure and distribution network of towns before handing them to NWSC. A Ministry of Water official revealed, ‘we are currently compromised because of pressures and directives from State House’.31 Last, but not least, NWSC service coverage is now based on the town’s access to, and bargaining with, the ruling elite, as opposed to water needs. This is causing inequalities in the distribution of resources across Uganda, with the western region of Uganda, where the majority of the ruling elite, including the president, originate (Lindemann, 2011), disproportionately benefiting in comparison to others. The region with 28 percent of the Ugandan population has 47 percent of NWSC towns (see Figure 5).

29 Interview with DWD oficial, December. 2018.
30 Senior official MWE, December 2018.
31 Interview with Ministry of Water oficial, January 2019.
Figure 5: Distribution of NWSC towns across Uganda’s five regions

Source: Author’s compilation, based on Ministry of Water annual report (MWE, 2019).

Facilitating the extraction of rents

As aptly observed by Heymans et al. (2016: xv), ‘as utilities succeed in providing better service, they gain more resources and become more tempting targets for predation, whether for personal or political gain’. The special relationship between the appointing authority and NWSC management made rent extraction easier in the corporation. Through interviews, we learnt that NWSC management reserves about 20 percent of the corporation’s resources, ‘to buy the goodwill of the politicians’. This means that NWSC operations only depended on 80 percent of the amounts reflected in the official budgets. Whilst this is definitely a huge chunk to be spent on ‘unproductive’ activities, respondents indicated that Ugandan public sector agencies where CEOs fail to apply the so-called ‘twenty-eighty’ rule greatly underperform, compared to the compliant agencies:

‘Ugandan public agencies where executive directors insist on following procedures 100 percent not only fall out with their political principals, their productivity also tends to be low’.

It therefore follows that deploying 20 percent of the resources to meet political demands enables real production to be much stronger than it would otherwise be. This approach resonates with recent observations by political economy analysts that in developing country contexts like Uganda, where informal institutions guide the conduct of government, business development success happens where actors ‘work with the grain’ (Booth, 2011; Kelsall, 2012).

7.5 Post-turnaround coping strategies

To survive in the post-turnaround political economy context, the incentive for NWSC management has been to engage in activities that maximise visibility and returns within

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32 Interview, member of NWSC senior management, October 2018.
33 Interview, member of NWSC senior management, October 2018.
the shortest time, while parsimoniously funding the productive infrastructures (Colon and Guerin-Schneider, 2015). Visible projects are needed to create opportunities ‘where the President would do the inaugurations’;34 but make NWSC management ‘forget about the buried pipes’35 – whereby it underinvested in the unseen but critical underground water distribution systems. Relatedly, given that NWSC leadership has been mindful of maintaining the corporation in good financial health, it relies on low-cost methods of implementation.36 According to informants, ‘The water network had to extended quickly, but at low cost to keep the budget as low as possible’,37 leading to the proliferation of ‘spaghetti networks’38 (Mutikanga, 2012). Our interviews with NWSC engineers indicate that the new leadership under Eng. Mugisha has maintained this modus operandi:

‘We are again expanding not using the best of professional technical approach’.39

‘We are expanding the supply using pipes that are so small that they will not cope with the demand in the next five years’.40

The repercussions of relying on such low-quality water networks emerge in the long run with increased water losses, reduced service reliability and poor water quality. The deterioration in quality and reliability of service causes disquiet among NWSC customers,41 whose willingness to pay diminishes, while others resort to illegal water connections (Colon, 2014; Mugisha, 2019). Given these circumstances, NWSC cannot achieve beyond 85 percent WUPI scores.

8. Conclusions and recommendations

This study set out to explain Uganda’s public water utility successful turnaround from a moribund utility to one of Africa’s best utilities, and to understand why its performance in the post-turnaround period has been uneven. Whilst NWSC’s transformation has previously been attributed to organizational-level factors, such as the role of charismatic leaders and their adherence to New Public Management principles, such a focus fails to account for the utility’s varied performance over time. Instead, the political settlement analysis used in this study identifies the important political economy factors that conditioned NWSC’s turnaround and subsequent performance. Findings show that for the turnaround to happen, Uganda’s dominant ruling coalition, struggling to chart a developmental trajectory with limited domestic resources, accepted donor funding tagged on undertaking specific actions for strengthening NWSC’s commercial and financial performance, in preparation for its privatisation. ‘Prior actions’ undertaken

34 Interview with Ministry of Water official, January, 2019.
36 Interview with Ministry of Water official, January, 2019.
37 Interview with NWSC engineer, December 2018.
38 Spaghetti networks are poor quality water networks characterised by several small pipes that keep multiplying on the same section as demand grows.
39 Interview with NWSC senior staff, December 2018.
40 Interview with NWSC engineer – Kampala water, January 2019.
41 Interview with NWSC engineer, December 2018.
by government, such as the indexation of the tariff to inflation, settlement of arrears and timely clearance of subsequent bills, enabled the newly recruited business-oriented managing director, William Muhairwe, to secure the resources necessary for NWSC to regain its legitimacy and survive as a public organisation.

The political dynamics that enabled the turnaround significantly changed during the post-turnaround period, due to the return to multiparty politics and growing factionalism within Uganda’s ruling coalition. The ruling elite saw NWSC’s activities and enhanced revenues as avenues for meeting its political survival needs. The imperative to comply with these political expectations incentivised NWSC management to prioritise those activities that could achieve short-term goals, which compromised developing the utility’s capabilities for long-term sustainability.

Therefore this study makes the point that the performance of water utilities is highly influenced by the degree of their compatibility with the informal institutional context in which they operate. This finding has important implications for international efforts seeking to achieve universal access to water in developing countries through reforming water utilities. In every targeted country, utility reforms should commence with a thorough understanding of the dominant incentives generated by the nature of ruling coalitions. The political settlement analysis used here offers great promise in advancing our knowledge of the workings of such informal institutions and their interactions with formal ones.

This study dispels the widely held view that improving the functionality of water utilities depends on privatising them. Instead, our findings suggest that maintaining water utilities as public agencies has critical benefits. It was the upholding of government support that enabled NWSC to build capacity and to start focusing directly on extending services to economically disadvantaged urban residents. The latter would be difficult under private sector management, where investment decisions are primarily focused on profit maximisation.
The politics of building effective water utilities in the global South: A case of NWSC

References


SCAP100 (2016). ‘100% water service coverage acceleration project in all villages (cells) under NWSC’. Kampala: National Water and Sewerage Corporation.


A major challenge for achieving poverty reduction is that the capacity of states to deliver development is in short supply, particularly in Africa.

However, ‘pockets of effectiveness’ (PoEs) offer important clues concerning how developmental forms of state capacity might emerge and be sustained in difficult contexts.

Pockets of effectiveness (PoEs) are public organisations that function effectively in providing public goods and services, despite operating in an environment where effective public service delivery is not the norm. Recent research on PoEs has suggested that both external (e.g. political context) and internal factors (e.g. organisational leadership) shape their performance. However, this emerging subfield of governance research lacks a comparative study which systematically identifies how PoEs emerge and are sustained in different contexts and sectors, and the role that domestic and international actors can play in this. Specifically, we are seeking to understand the political and bureaucratic logics that shape the emergence and performance of PoEs. Our research questions are:

1. How do pockets of effectiveness emerge and how are they sustained within different types of context and sector?
2. What role has been and could be played by domestic and international actors in support of this?