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WATER, SANITATION AND HYGIENE FINANCE (WASH-FIN) KENYA

WSP COVID-19 Financial Stress Testing and Mitigation June 2020

INTRODUCTION

Water, sanitation, and hygiene (WASH) is the first line of defense against the spread of COVID-19. It is for this reason the National Emergency Response Committee in Kenya directed water service providers (WSPs) to ensure that all Kenyans had access to water and handwashing facilities. Key in this directive was the requirement that water should be provided for free in informal settlements and public places, disconnected customers would be reconnected, and no disconnections for non-payment of bills would be carried out during the pandemic. The WSPs were also required to follow other directives affecting everyone else, including those on social distancing (Table I).

While these directives serve important public health needs, they have, however, amplified the economic effects of the pandemic on WSPs. Specifically, they have had severe financial impacts on WSPs who rely on fees from customer tariffs, new connections, and reconnections to cover their operations and maintenance costs. In this Technical Brief, WASH-FIN

aims to document how the directive has amplified the financial effects of the pandemic on WSPs. Based on consultations with three WSPs, WASH-FIN found that COVID-19 has increased financial stress mainly due to undertaking new tasks they were not performing prior to the pandemic, while also facing a sharp decline in revenue collection (Box I).

Box I: Funding Gap and Actions

Approximately **KES 155 million (\$1,441,930)** is needed to sustain the three consulted WSPs through the next six months. To reach that amount, the following actions may be considered:

- Preserve cash by delaying all non-essential costs
- Renegotiate loans
- Liquidate assets
- Restructure payroll & staffing costs
- Collect unpaid accounts
- Delay payment to KPLC

Even if all the above actions are taken, an additional cash injection of over **KES 9 million (\$83,725)** would still be required for the three WSPs to ensure service continuity through the next six months.

Table 1: Implications of COVID-19 Policy Response on WSP Operations and Finances

Directive	Implication
No disconnection of non-paying customers	Significant decreases in collections due to non-payment of bills by many customers
Social distancing, including in vehicles	Increased fuel costs as more trips are needed to ferry fewer team members to work sites
Use of Personal Protective Equipment (PPE) and other infection control materials	Cost of procurement of masks and other PPE for WSP employees
	Cost of procurement of hand sanitizer provision at public water points for public use
Establishment of additional water points in towns and in informal settlements	Additional set-up costs for new water points
	In some cases, increased repair and maintenance costs to service increased market use
Curfew and movement restrictions in/out of hotspots	Engagement of temporary workers to complete necessary work within reduced working hours
Trucking of water into informal settlements	Increased transport costs

If no action is taken, all three WSPs assessed are expected to run out of cash by September 2020, and in some cases as early as June 2020. To continue to serve the public, the WSPs must, at a minimum, have enough cash to cover their most basic operational and maintenance costs. Given that they are presently unable to fully collect revenue from most of their customers, additional financial resources will be required to close the gap and ensure they can continue to provide essential services and support the government's public health objective. Mobilizing these resources will require a concerted effort from WSPs and government, with support from development partners.

STRESS TEST METHODOLOGY AND IMPACT OF GOVERNMENT DIRECTIVES

To better understand the financial implications of the current COVID-19 response on WSPs and help prioritize potential response options, WASH-FIN undertook a financial stress testing analysis looking at impacts on liquidity and ability to cover the costs of ongoing service provision. The analysis also identified potential mitigating actions and likely impacts, including actions by the WSPs to improve financial sustainability, as well as actions by government and development partners to support short-term business continuity.

Three WSPs—Nyeri Water and Sanitation Company (NYEWASCO) and Mathira Water and Sanitation Company (MAWASCO) in Nyeri County, and Thika Water and Sanitation Company (THIWASCO) in Kiambu

County—were assessed. NYEWASCO and THIWASCO were selected to represent large WSPs that had previously been relatively well performing, financially stable, and among those best positioned to weather a financial crisis. MAWASCO, though being a smaller WSP, was included to represent those WSPs, which despite not being financially creditworthy, had still procured commercial loans through an Output-based Aid approach. Such WSPs are therefore likely to be significantly impacted by the pandemic.

Data for the assessment was collected through interviews and consultations with management, and discussions with key stakeholders, including the regulator WASREB. The data collected included management accounts by Quarters 1-3 of 2019/20, audited accounts from 2017/2018 and 2018/2019, printed ledger balances as of April 30, and 2020 closing cash balances for April. Data collection was a relatively time-consuming activity requiring numerous follow-ups with the WSP leadership as they were extremely busy with the COVID-19 response.

Utilizing this information, three scenarios (base case, best case, and worst case) were developed to test the result of the COVID-19 related financial and operational stressors (see Appendix I for more details). An assessment of these scenarios, as well as potential mitigating factors for a range of financial outcomes over a six-month period, was undertaken by developing a high-level financial model. Most importantly, the dates at which the WSPs would run

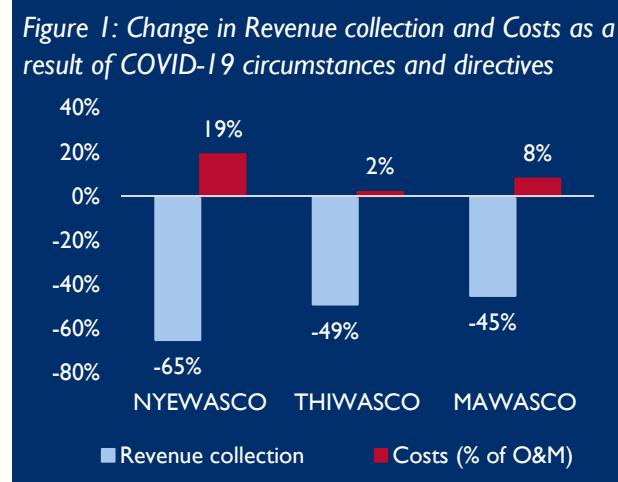
negative cash balances and risk interruption of services, i.e., their “cash runway” was predicted.

ASSESSING FINANCIAL STRESS

Collection of billed revenue has significantly decreased, while costs have increased.

By far the most sudden and debilitating result of the pandemic and the associated government directives has been plummeting collection efficiency of the WSPs. All three WSPs previously had collection efficiencies of over 85 percent, but all saw a reduction to less than 50 percent in April, with additional reductions forecasted for May 2020.

At the same time, WSP operating expenses increased. The three WSPs saw monthly costs rise between 2 percent to 19 percent above typical operations and maintenance (O&M) costs (Figure 1).

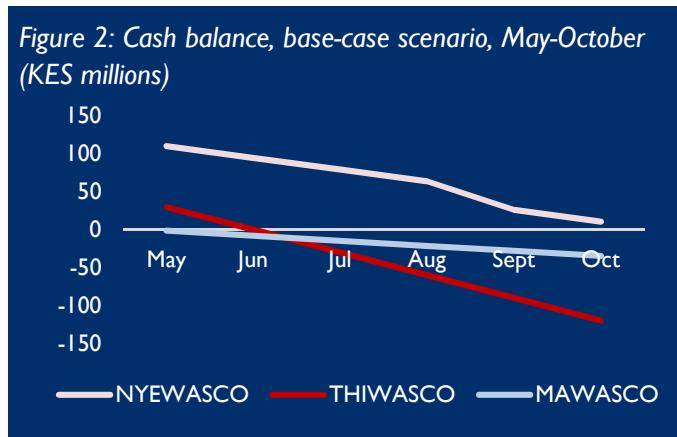


These costs include installing handwashing stations and trucking in water to fill these tanks, mainly in informal settlements. Some WSPs were also pumping more than usual and operating on peak demand almost all the time, thereby increasing the cost of pumping and related repair of burst pipes. Transport costs are higher due to social distancing and they must also provide personal protective equipment (PPE) for their staff. In addition, WSPs are expected to provide behavior change messages, as well as liaise

with and support other stakeholders helping with the WASH response.

In a base-case scenario, without external support, WSPs will run out of cash between May and November.

The base-case estimation suggests that as the impact of COVID-19 persists, between May and October 2020, WSPs will continue to meet the additional costs, and as compounding economic strain continues to burden most customers, collection efficiency will be further reduced. If additional costs remain at 2 percent to 19 percent above normal O&M expenditure, collection efficiency persists at the same rate as the WSPs estimated for April, and no external support is provided, these WSPs will likely run out of cash by the end of November (NYEWASCO), June (THIWASCO), and May (MAWASCO) (Figure 2).¹



Even in the best-case scenario, without additional support, WSPs will face major financial stress over the next six months.

In the best-case scenario, WSPs still bear the extra costs of responding to COVID-19 but can find ways to improve collection efficiency above April estimates. WASREB anticipates that a 50 percent collection efficiency can be achieved by, among others, consistent communications and customer outreach strategies, including clarifying that the directive for free water provision applied only to customers in informal settlements. This would enable the WSPs to collect from customers that are not in informal settlements. However, even with these

¹ Unless otherwise noted, all assumptions and model inputs are kept constant from pre-COVID-19 information and financial positions.

changes, MAWASCO and THIWASCO will have cash on hand to sustain operations only until May and June, respectively. NYEWASCO will be able to sustain itself beyond November (Figure 3).

Figure 3: Cash balance, best-case scenario, May–October (KES millions)



If the worst-case scenario prevails, the WSPs will run out of cash in June (THIWASCO), May (MAWASCO), and September (NYEWASCO).

The worst-case scenario assumes a deterioration of collection efficiency to 20 percent and continued growth in the COVID-19 related expenditure, such that the two percent to 19 percent change, to date, doubles to 4 percent to 38 percent of typical O&M costs. This continued increase in costs is related to some likely scenarios, including continued expenditures on capital investments in new water points, tanks, etc., and increased cost of water treatment chemicals as global and local supply chains continue to be strained due to travel restrictions and lockdowns. The cash runway in the worst-case scenario is similar to the base-case, highlighting just how dire even the most likely case is (Figure 4).

Figure 4: Cash balance, worst-case scenario, May–October (KES millions)



² For all presented analyses of mitigating actions, the underlying assumptions for WSP collection efficiency and

Without positive cash flow, WSPs will be unable to sustain their operations. At the very least, they must be able to procure water treatment chemicals, pay staff, and keep the lights and pumps running to continue abstracting and delivering water.

Certain maintenance cannot be deferred indefinitely, or it risks degrading service or assets, and more severe consequences from pipe bursts.

MITIGATING FINANCIAL STRESS

To assess measures to mitigate the financial stress WSPs are facing in the short-term, this analysis further quantified the effects of a range of potential supportive intervention options.²

While collection efficiency may not be fully within the control of the WSPs, improving it has the potential to be the most significant mitigating action.

The request by the government for WSPs to ensure adequate water supply to all, especially in the informal settlements, generated some confusion in terms of what the WSPs could and could not do in so far as collections were concerned. This was a major contributor to the declining collection ratios as WSPs were unsure what to do. The resulting drop in revenue and potential for unsustainable financial stress for the WSPs, led government to clarify its directive, emphasizing that the request was for the WSPs to provide free water only to informal settlements. Even though WSPs were also asked not to disconnect customers, there are still many customers who are able to pay. It is on this basis that WASREB has been encouraging all the WSPs to engage their customers and explain why their bill payments are critical to keeping the WSPs afloat and for continued service delivery. WASREB estimates that with intensive customer engagement, most WSPs should be able to collect at least 50 percent of their billings. Whilst this will not fill the financial gap fully, it would nonetheless go a long way in mitigating the financial shortfalls being experienced by the WSPs.

costs represent the aforementioned “most-likely case scenario.”

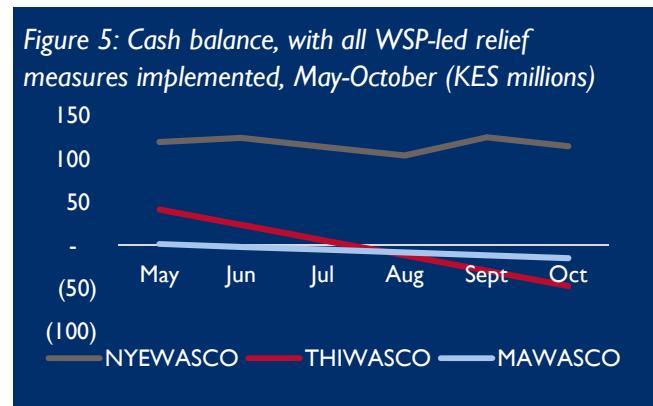
Internal cash preservation, liquidation of assets, and debt restructuring can help to mitigate financial stress, but it will not be enough.

WSPs can also take other actions beyond improved collections. As early as April, most WSPs had already implemented some minor cost cutting measures, especially around staff training and travel. A more aggressive form of cash preservation would involve cutting or deferring all non-essential expenditures such as fees and licenses, board expenses, and additional administrative costs. In that case, NYEWASCO and THIWASCO would gain a month of liquidity, while MAWASCO would still become cash-negative in the same month, but the deficit would be more moderate, with a shallower decline in subsequent months. Although highly unlikely due to socio-political considerations, if it was needed, WSPs could also restructure their staff to reduce payroll by among approximately 30 percent. Potential actions could include cutting everyone's salary equally by 30 percent, cutting higher earners by more than 30 percent and lesser earners by less than 30 percent, or laying off a certain number of people whose salaries and benefits add up to 30 percent of staff costs as of March 2020. This would further flatten the negative cash flow curve. This would, however, not be enough to affect the month in which the WSPs first cross over into a negative balance, as it would buy only one more month of cash-positivity for each of the three WSPs. Even though staff restructuring would be very difficult, the fact that most WSPs have unsustainably high staff to connection ratios means that it may still be worth keeping as a possible option, especially if the COVID-19 pandemic persists.

In some cases, WSPs have assets that could be liquidated to support their cash position. Of the three WSPs engaged in this analysis, only NYEWASCO indicated this as a viable option as they have a fixed deposit account being saved for repayment of an existing bank loan due in September 2020. If they liquidate this account in May, as well as enact the previously mentioned expenditure and payroll cuts, their cash position will be greater in all months projected, and the date when they will cross over into negative balance will happen sometime after the last month of this analysis' projections.

Both NYEWASCO and MAWASCO have ongoing debt obligations. With renegotiation of terms, such that only the interest is payable, NYEWASCO could extend their cash runway by at least two months, and MAWASCO by one month.

While important, these WSP-led actions alone will not suffice to keep them afloat through this crisis; **they will need external support**. If all these WSP-led actions were taken, NYEWASCO would have enough cash for at least six months but would still face a long road to financial recovery, given all the deferred payments. THIWASCO and MAWASCO would run out of cash in August and June, respectively (Figure 5).



Electricity bill deferral and payment of outstanding government debt will help to extend the cash runway of WSPs.

Two levers that the government can use to mitigate the financial stress of the WSPs would be deferral of electricity bills and payment of outstanding government debt.

Electricity is a key cost for NYEWASCO and THIWASCO, making up 30 percent to 40 percent of O&M costs. The Ministry of Water Irrigation and Sanitation has agreed with the Ministry of Energy that Kenya Power Limited should not disconnect the WSPs during the pandemic. Discussions are expected to be held at a later date to work out how the power company will get its dues and settle its own water bills. The WSPs are, therefore, able to defer their electricity bills to a later date. This results in NYEWASCO gaining one extra month of liquidity and THIWASCO two extra months, compared to no electricity bill relief. For WSPs like MAWASCO, which have minimal electricity costs due to extensive

use of gravity systems, this type of relief would not have a material impact.

Payment of outstanding government debt will help to extend the cash runway of WSPs.

All three WSPs have significant outstanding debt from government customers, with NYEWASCO having the highest around KES 60 million (\$558,165). If NYEWASCO was able to collect on this long-standing debt it would extend their cash runway by at least two months. The amounts owed to THIWASCO and MAWASCO were smaller and made no significant impact on the financial projections.

Ultimately, the WSPs will need a cash injection to enable them to weather the crisis and continue to provide essential services.

Based on this analysis, with no mitigating factors, MAWASCO and THIWASCO will need approximately KES 35 million (\$325,596) and KES 120 million (\$1,116,330) respectively, to continue

operations through October 2020. Assuming all mitigating factors are taken—collecting as much as possible, extreme internal cash preservation, asset liquidation, debt restructuring, long-standing debt collection, and delayed payments of electricity bills—MAWASCO and THIWASCO will still need approximately KES 7 million (\$65,119) and KES 2 million (\$18,606) respectively to sustain operations through October 2020.

It is understood that the Government of Kenya is due to receive support from development partners aimed at providing liquidity support to WSPs. As shown by this analysis, this liquidity support is very much needed and will likely be required for all the WSPs in the country. This cash injection, if given in the form of a pure grant or a repayable grant with a long grace period, depending on the financial position of the WSP, will be critical for sustaining water and sanitation service provision while ensuring that public health measures are being met in Kenya.

WATER, SANITATION, AND HYGIENE FINANCE (WASH-FIN)

The five-year, \$40 million Water, Sanitation, and Hygiene Finance (WASH-FIN) project is funded by the United States Agency for International Development (USAID) and began in October 2016. Implementation is led by Tetra Tech with support from Open Capital Advisors, Segura Consulting, and Global Credit Rating. Focus countries include Cambodia, Kenya, Mozambique, Nepal, Philippines, Senegal, South Africa, and Zambia. For more details, visit <https://www.globalwaters.org/WASH-FIN>.

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APPENDIX I: SCENARIOS CONSIDERED IN THIS ANALYSIS

Range of scenarios capturing primary financial impact of COVID-19 on WSPs:

	Worst Case	Base (Most likely) Case	Best Case
Collection Efficiency	20 percent	Based on WSP expectations for April 2020 (first full month post-COVID-19), usually between 30 and 50 percent.	50 percent. Based on WASREB's projections on collection efficiency, as listed in "WSP Liquidity Pilot WSPs for Stress Testing."
Expenditure Changes	Expenditure doubles from base case to reflect additional strain. (This is twice the increase between typical expenditures and base case expenditures, <i>not</i> twice the total expenditures, i.e., if the base case is over 4 percent of typical expenditures, worst case would be over 8 percent.)	Based on WSP projections of expenditure increases and decreases in April, relative to typical monthly expenditures before COVID-19.	Same as base case

Range of possible mitigating actions to be implemented by the WSPs and non-governmental partners:

1. Cut or defer all non-essential costs. Essential costs are considered to be payroll, chemicals, KPLC electricity bill, security, travel and logistics, and some admin costs.
2. Reduce payroll by 30 percent of what it normally is. This would be a difficult and sensitive decision, requiring the input and approval of several stakeholders, but it was raised in the WSP interviews as a viable option, so it has been quantified in this analysis.
3. Liquidate available assets, as defined by the WSPs.
4. Renegotiate credit facilities with banks so that either principal alone, or principal and interest together are deferred for the period of the analysis.
5. Explore refinance of debt over longer terms or at renegotiated rates.

Range of possible mitigating actions to be implemented by government partners:

1. Partially (20 percent) or completely subsidize KPLC electricity bills.
2. Both federal and county governments to clear outstanding past due accounts with WSPs (as WASREB requested in its advisory dated April 1, 2020). This analysis assumes that 50 percent of outstanding government debt would be cleared in June 2020, and the other 50 percent in July 2020.