Impact of Covid-19 Pandemic on Investments in the Water Sector in Kenya

Christine Mawia Julius

Athi Water Works Development Agency, Nairobi, Kenya
E-mail: chrisjulius2015@gmail.com

Cite: Julius, C. M. (2022). Impact of Covid-19 Pandemic on Investments in the Water Sector in Kenya. *The University Journal, 4*(1), 13-18.

Abstract

The purpose of this study was to establish the impact of Covid-19 pandemic on water investment financing in Kenya. This paper therefore presents an analysis of the investment financing as prioritized in the water sector since the onset of the Covid-19 pandemic. The study was done through an analysis of the Government of Kenya's capital financing trends in the water sector targeting the counties of Nairobi, Kiambu and Murang'a during the pandemic period. The findings indicate that there was increased funding to the water sector in general. However, most financing was directed towards emergency works geared towards increased access to water for hand washing to curb the spread of the pandemic. In some cases, this resulted to shifting of resources from the long-term planned and ongoing projects to short-term emergency interventions. Such a shift is likely to negatively impact on the progress made towards the attainment of the Kenya's Vision 2030 at the national level and the sustainable development goals at the global level.

Keywords: Investment Financing, Covid-19 Pandemic, Sustainability, Approved Estimates, Supplementary II

Introduction

Covid-19 pandemic started in China in the year 2019 and it was not until early 2020 that the pandemic spread to Africa among other continents (Ezeh et al., 2020). The pandemic caused panic and closure of the economy while medics struggled to understand the pandemic and establish different ways of containing it (Ezeh et al., 2020). Among the identified ways of containing the virus was through constant hand washing with soap, maintaining social distance and covering one's mouth and nose with a mask (van Zanten & van Tulder, 2020). The requirement for constant hand washing laid bare the inadequacy of water in many African countries (Ezeh et al., 2020), especially those that have been lagging behind in terms of access to water (van Zanten & van Tulder, 2020).

Water is a basic human need and a key input into several sectors including agriculture, industrial and health (García-López & Montano, 2020). Despite the prioritization given to water under Sustainable Development Goal (SDG) 6, there has been insufficient access worldwide (OHCHR, 2020; Ezeh et al., 2020). The main reasons cited for the deficiency is lack of commensurate infrastructural development and lack of optimal pricing (Akhona et al., 2021). Cognizant of the facts, governments had put in place strategies to ensure the attainment of the sustainable development goals (SDGs) and other country specific goals, the pandemic has in a great way served as a disruption to such plans (Filho et al., 2020). It called for emergency interventions to ensure increased access to water (OHCHR, 2020). Such

interventions required a significant cash outlay which placed a strain on the available resources forcing governments to re-direct the scarcely available resources to the management of the pandemic (OHCHR, 2020). Such readjustments are viewed as a threat to the long-term plans hence the attainment of the SDGs (van Zanten & van Tulder, 2020).

In order to attain access to water for all, the water sector in Kenya identified key projects as detailed under the Kenya's Vision 2030 flagship projects (GoK, 2019). The projects have been prioritized in the government's budget cycle to ensure adequate financing of the same. The onset of the Covid-19 in the country saw a diversion of resources across sectors and also across projects within sectors (Butler et al., 2020). In the water sector in Kenya, resources were drawn from long-term projects to prioritize short-term emergency projects geared towards ensuring that there is adequate water for hand-washing (OHCHR, 2020). Several boreholes were sunk in the Nairobi's informal settlements supplying free water to the residents. While the access to water was enhanced in such areas, the sustainability of the supply cannot be guaranteed because of the associated supply costs and the fact that the water company continues to lose revenue which would otherwise be collected from the consumers of the borehole water (Butler et al., 2020).

Problem Statement and Hypothesis

Water is a basic human right and an input to various key economic activities. The universal access to water is emphasized under SDG 6 (Filho et al., 2020; van Zanten & van Tulder, 2020). Nations across the world have put in place mechanisms geared towards achievement of the tenets set under the SDGs (van Zanten & van Tulder, 2020). In Kenya, the provisions of the SDGs on water and sanitation are localized under the Constitution of Kenya (2010) and Kenya's Vision 2030 whose target is to ensure access to water and sanitation for all (GOK, 2018). To ensure attainment of the same, the third medium term plan (MTP III) identifies self-financing and investment in the water sector as the key ingredients to achieving the goals set under both the global and national levels (GOK, 2018). This is the case because water service provision is a highly infrastructure intensive sector and therefore requires massive capital financing. The Covid-19 pandemic affected most countries across the globe and required huge capital investments causing a major strain to national budgets especially in developing countries (Ezeh et al., 2020). In some instances, countries were forced to divert resources to the health sector causing a slow down on the earlier planned investments (Ezeh et al., 2020). There was need to therefore undertake a study to establish the influence of the Covid19 pandemic on investments in the water sector in Kenya.

The study was premised on the hypothesis that:

H_0 Covid19 pandemic had no influence on investment financing in the water sector in Kenya.

Literature Review

The disruption caused by Covid-19 has attracted the attention of practitioners in different sectors and scholars alike (Sivakumar, 2021). A number of studies have been showing the impact of covid-19 in economies (OHCHR, 2020); its impact on the attainment of SDGs and other country specific goals (Ezeh et al., 2020; van Zanten & van Tulder, 2020; Filho et al., 2020); its impact on other sectors including agriculture (Dharminder et al., 2019).

In the US for example, a study was undertaken to determine which states had imposed disconnection moratoriums to increase access to water during the pandemic (Warner et al., 2020). The study established that access to water was critical in health management and it required a more integrated approach as opposed to being relegated to water utilities and municipalities (Warner et al., 2020). The study which was done through logit regression analysis had its focus on the linkage between affordability and access to water during the pandemic and failed to address the influence of the pandemic on investments in water asset development.

According to Ezeh et al. (2020), Covid-19 laid bare the need for increased investment in social security, agriculture, water and education. The study sought to establish the lessons learned from the covid-19 pandemic across Africa through gap analysis on the SDG milestones while targeting environment and food security (Ezeh et al., 2020). The study was done through a theoretical review of the activities undertaken by different countries in response to the pandemic and failed to consider investment re-adjustments made by different nations across Africa.

Some studies have concentrated on the role of Covid-19 in bringing out the gaps in water supply, the increased demand and the need for an integrated approach in water management (Sivakumar, 2021). Others have been done on the policy interventions undertaken by different countries across the globe (Amaechina et al., 2020; Sivakumar, 2021). According to Sivakumar (2021), water researchers and practitioners alike need to find solutions to sustainable water storage and distribution infrastructure development; this is an awakening brought about by covid-19 pandemic. While a number of studies have done in Kenya linking Covid-19 to water and sanitation activities, most of the studies have however focused on the availability of water for hand washing and other domestic use in low income areas (Donde et al., 2021; Amaechina et al., 2020)

From the foregoing, most studies undertaken on the influence of Covid-19 pandemic have concentrated on its effect on SDGs (Ezeh et al., 2020; Filho et al., 2020; van Zanten & van Tulder, 2020). The few studies that have been done linking covid-19 and water has been done while considering the influence of the pandemic on the supply of water (Butler et al., 2020); and its influence on the revenue earning capacity of the water utilities (Butler et al., 2020). There is therefore limited research on the influence of the pandemic on investments in the water sector, a gap that this study sought to fill.

Methodology

This study was undertaken using descriptive analysis, through a review of the budgetary changes affecting Athi Water Works Development Agency being the asset developer covering Nairobi, Kiambu and Murang'a counties in Kenya. The Agency was considered the most appropriate for this study because it covers the Nairobi metropolis which was the first county to be affected by the Covid-19 pandemic; it had the highest rate of infection and has most crowded informal settlements. Data was collected on the budgetary allocations, as presented in the printed estimates, for projects prioritized in the budget before covid-19 and the changes effected in terms of prioritized projects and allocations to those projects.

In order to establish the influence of Covid-19 on investments in the water sector, a variance analysis was undertaken to establish the capital financial resource allocation for the various

projects under implementation by the Agency before and after the country reported the first case of Covid-19.

Results

The variance analysis shows that the capital budget for the agency increased by Kshs. 5.787 billion in second supplementary budget compared to the initial approved budget. Additionally, 71% of this increase related to Government of Kenya funding while only 29% relates to donor funding. These findings are illustrated in Table 1.

Table 1: Budget Adjustment Analysis

	Approved Estimates 2020/21 (GoK, 2016)	**Supplementary II 2020/2021 (GoK, 2021)**	**Budgetary Change 2020/2021**	**% change**
Total Capital investment Budget	17,591	23,378	5,787	
Donor Funded budget allocation	13,854	15,526	1,672	29%
GoK Funded Budget allocation	3,737	7,852	4,115	71%

A further analysis of the budgetary change for GoK project financing showed that there was a reallocation of up to Kshs. 1.612 billion from long-term projects. Kshs. 1.521 (94%) of the reallocated resources was invested in Covid-19 intervention projects as shown in Table 2 below.

Table 2: Nature of Budgetary Change

Nature of change	**Change in Millions of Kshs**
Investment in Covid 19 related projects	1,521
Resources shifted from other projects	(1,612)

Discussion

The results indicate that there was an increase in financing during the second supplementary budget, with government of Kenya financing up to 71% of the sectorial budget increase while development partners financed 29% of the budgetary increase. This was the scenario because the Government had to make quick re-adjustments to its budget in order to ensure a timely response to the Covid-19 pandemic. Adjustments in the development partner financing would require more time and the government seeks a no objection. Further analysis shows that up to 94% of the budgetary re-allocations were invested in Covid-19 response projects. The shift of the government resources was necessitated by the need to initiate and prioritize Covid-19 response projects.

Conclusion

The results show that Covid-19 had an influence in the funds flow into the water sector and also resulted to change in project financing prioritization. Finances were shifted from pre-planned projects in order to address the emergency demands of the pandemic. Such a shift is likely to negatively impact on the progress made towards the attainment of the Kenya's Vision 2030 at the national level and the SDGs at the global level. It is therefore important for the government to ensure a proper integration of both long-term and short-term investments and to also ensure that the sustainability of the interventions is factored in.

This study has a limited scope as it only covered one infrastructure development agency within the sector and for only one financial year which may affect the ability to generalize the study. The author therefore recommends the need to undertake a similar study while considering the sector as a whole.

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