

SUMMARY REPORT

AN ANALYSIS OF DATA INFORMING
THE GOVERNMENT OF KENYA'S
DECISIONS ON COVID-19 PANDEMIC
RESPONSE FOR THE PROTECT

PROGRAM

PROTECT

KENYA

TABLE OF CONTENTS

| | |
|--|-----------|
| LIST OF ABBREVIATIONS | 3 |
| LIST OF FIGURES | 5 |
| LIST OF TABLES | 5 |
| EXECUTIVE SUMMARY | 6 |
| 1. INTRODUCTION | 9 |
| 1.1 BACKGROUND TO THE STUDY | 9 |
| 1.2 AIM OF THE STUDY | 9 |
| 1.3 SCOPE OF THE STUDY | 10 |
| 1.4. METHODOLOGY | 10 |
| 2. LITERATURE REVIEW: DATA AND POLICIES DURING COVID-19 | 11 |
| 2.1 CONTAINMENT MEASURES | 11 |
| 2.2 HEALTH | 12 |
| 2.3 BUDGET RESPONSE | 14 |
| 2.3.1 WHERE WILL THE MONEY COME FROM? | 14 |
| 2.3.2 WHERE IS THE MONEY GOING? | 15 |
| 2.3.3 HEALTH BUDGET AND COVID-19 FUNDS | 16 |
| 2.4 SOCIO-ECONOMIC FACTORS | 18 |
| 2.5 SUMMARY OF POLICIES AND INTERVENTION AREAS | 19 |

| | |
|---|-----------|
| 3. FINDINGS OF THE STUDY | 20 |
| 3.1 DATA INFORMING GOK'S MANAGEMENT OF THE COVID-19 EMERGENCY | 20 |
| 3.1.1 HEALTH DATA | 20 |
| 3.1.2 SOCIO-ECONOMIC DATA | 20 |
| 3.1.3 BUDGET DATA | 22 |
| 3.2 DATA USE - GOK'S RESPONSE PLAN | 22 |
| 3.2.1 HEALTH RESPONSE MEASURES | 22 |
| 3.2.2 SOCIO-ECONOMIC RESPONSE MEASURES | 23 |
| 4. CONCLUSIONS AND RECOMMENDATIONS | 24 |
| 4.1 KNOWN KNOWN | 24 |
| 4.1.1 HEALTH | 25 |
| 4.1.2 SOCIO-ECONOMIC | 25 |
| 4.1.3 BUDGET | 25 |
| 4.2 KNOWN UNKNOWN | 26 |
| 4.3. UNKNOWN KNOWN | 27 |
| 4.4. UNKNOWN UNKNOWN | 27 |

We the People

LIST OF ACRONYMS AND ABBREVIATIONS

| | | | |
|-------|---|---------|--|
| AAS | AFRICAN ACADEMY OF SCIENCES | KNBS | KENYA NATIONAL BUREAU OF STATISTICS |
| AFDB | AFRICAN DEVELOPMENT BANK | KPA | KENYA PORTS AUTHORITY |
| AU | AFRICAN UNION | KRA | KENYA REVENUE AUTHORITY |
| CAJ | COMMISSION ON ADMINISTRATIVE JUSTICE | MCDAs | MINISTRIES, COUNTIES, DEPARTMENTS AND AGENCIES |
| CEMA | THE CENTER FOR EPIDEMIOLOGICAL MODELLING AND ANALYSIS AT THE UNIVERSITY OF NAIROBI | NMS | NAIROBI METROPOLITAN SERVICE |
| CFR | CASE FATALITY RATE | MOH | MINISTRY OF HEALTH |
| CSO | CIVIL SOCIETY ORGANIZATIONS | MTPIII | MEDIUM TERM PLAN III (2018 – 2022) |
| GBV | GENDER-BASED VIOLENCE | NHIF | NATIONAL HOSPITAL INSURANCE FUND |
| GOK | GOVERNMENT OF KENYA | NQCL | NATIONAL QUALITY CONTROL LABORATORY |
| EACC | ETHICS AND ANTI CORRUPTION COMMISSION | NBTS | NATIONAL BLOOD TRANSFUSION SERVICES |
| EU | EUROPEAN UNION | PROTECT | PROTECTING RIGHTS, OPENNESS AND TRANSPARENCY ENHANCING CIVIC TRANSFORMATION |
| ICUs | INTENSIVE CARE UNITS | RMNCAH | REPRODUCTIVE, MATERNAL, NEO-NATAL, CHILD AND ADOLESCENT HEALTH |
| IEA | INSTITUTE OF ECONOMIC AFFAIRS | SDGS | SUSTAINABLE DEVELOPMENT GOALS |
| IMF | INTERNATIONAL MONETARY FUND | SGBV | SEXUAL AND GENDER-BASED VIOLENCE |
| KAM | KENYA ASSOCIATION OF MANUFACTURERS | | |
| KEMSA | KENYA MEDICAL SUPPLIES AGENCY | | |



People unlimited

| | |
|--------|---|
| TB | TUBERCULOSIS |
| UAE | UNITED ARAB EMIRATES |
| UK | UNITED KINGDOM |
| UNICEF | UNITED NATIONS CHILDREN'S FUND |
| UNCT | UNITED NATIONS COUNTRY TEAM |
| UON | UNIVERSITY OF NAIROBI |
| USAID | UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT |
| VCT | VOLUNTARY COUNSELLING AND TESTING |
| WASH | WATER AND SANITATION HYGIENE |
| WHO | WORLD HEALTH ORGANISATION |
| WIBA | WORK INJURY BENEFITS ACT OF 2007 |

LIST OF FIGURES

FIGURE 1: GOVERNMENT OF KENYA'S ORGANIZED RESPONSE TO THE COVID-19 PANDEMIC

FIGURE 2: COMPARISON OF FY 2019/2020 AND 2020/2021 BUDGETS (SOURCE: FY 2019/2020 AND FY 2020/2021 BUDGET STATEMENTS)

FIGURE 3: GOVERNMENT EXPENDITURE (SOURCE: FY 2020/2021 BUDGET STATEMENT)

FIGURE 4: BUDGETARY ALLOCATIONS TO THE MINISTRY OF HEALTH, 2017/18 TO 2020/21 SOURCE: DEVELOPMENT INITIATIVES BASED ON NATIONAL GOVERNMENT BUDGET DOCUMENTS, 2017/18 TO 2020/21)

LIST OF TABLES

TABLE 1: SUMMARY LIST OF EXECUTIVE ORDERS, LAWS AND PROCEDURES SET DURING THE COVID-19 PANDEMIC FROM MARCH, 2020 (SOURCE: KENYA LAW REPORTS)

TABLE 2: CAN WE AVERT THE NEXT CRISES USING DATA?

EXECUTIVE SUMMARY

The Government of Kenya's response to COVID-19 provides an opportunity to interrogate the data being used to inform decision making. The importance of reliable data to address the growing need for data driven decision making cannot be overstated. Effective use of data is one way through which transparency and accountability can be promoted. Thus, transparency over forecasting models and data that is influencing government's strategies remains a critical tool to winning the fight against the COVID-19 Pandemic. Despite this, there are various obstacles that hinder data's utilization, including gaps in mobilising quality, quantity and timely data, lack of gender disaggregation in data and others.

It is against this background that Hivos in a consortium with ARTICLE 19, Internews and the International Center for Not-for-Profit Law (ICNL) is implementing the PROTECT (Protecting Rights, Openness and Transparency Enhancing Civic Transformation) program. In Kenya, the PROTECT program is focusing on exploring opportunities and challenges to civil society working on improving accountability and fighting corruption and will pilot new ways of engagement with duty-bearers, who often exert significant control over citizens' lives.

To this end, a study was commissioned with specific aims to examine the data informing government's decisions on the COVID-19 response in order to:

1. Ascertain the data's reliability and validity;
2. Scrutinize disclosure of government's COVID-19 plans, budgets and revenue raising measures at national and county levels and;
3. Review forecasting models and data influencing strategies to combat COVID-19.

To do this, the study employed action research methodologies that collected and reviewed both qualitative and quantitative data - including key informant interviews in order to contextualize policies. Also, given that COVID-19 has manifested broadly as a **health** and a **socio-economic** issue, the study covered data collected by stakeholders (both state and non-state actors) from March 2020 - when the first incident of COVID-19 pandemic was reported in the country to September 2020.

On data sources: Health data informing the COVID-19 response is sourced from administrative data (for example testing results from public/private health facilities, the Kenya Health Information System 2¹) various surveys (derived from random samples) as well as data from the World Health Organization. Socio-economic data has been collected by the Kenya National Bureau of Statistics - notably two surveys on Socio-Economic Impact of COVID-19 on Households Report (Wave 1 published on 15th May, 2020 and Wave 2 published on 30th June, 2020). Macro-economic statistics have also been collected - drawing from trade information generated by Kenya Revenue Authority and Kenya Ports Authority during import and export process. Recall also that the budget for FY 2020/2021 was read during the pandemic and this information has been vital in highlighting not only how much will be spent on the pandemic but also where the money will come from.

Non state actors such as the Kenya Private Sector Alliance, AMREF Health Africa and the University of Nairobi have also championed generation of primary data to inform responses to COVID-19 at institutional level and beyond.

¹ <https://hiskkenya.org/dhis-web-commons/security/login.action>

The table below highlights key responses by government during the COVID19 pandemic.

Table: Summary of government policies and interventions.

| Intervention area | Current policies and interventions |
|--|---|
| Building Resilient Health Systems | <p>Government procurement and manufacture of PPEs. This is being driven by:</p> <ol style="list-style-type: none"> 1. Private sector (e.g. Manchester outfitters); 2. Government (e.g. Kitui County Textiles Centre, Rivatex); 3. Government is at an advanced stage in the assembly and manufacture of ventilators in Kenya; 4. Government is advocating for Home based care - 90% of patients in hospitals are asymptomatic and can be managed from their homes. This frees up resources to care for other ailments. 5. Listing of essential medicines for Kenya, 2019 published in July 2020; 6. National Antimicrobial Stewardship Guidelines aimed at curbing spread of antimicrobial resistant infections - in collaboration with the global community, published in July 2020; 7. The Ministry of Health developed protocols to temporarily retain retired anesthetists and ICU staff to support the medical staff assigned to dealing with serious COVID-19 cases in the Counties; 8. Establishment of quarantine facilities in county government hospitals with each county to have at least 300 beds capacity - as set by government. |
| Inclusive and Integrated Crisis Management and Multi-Sectoral Response | <ol style="list-style-type: none"> 1. Nationwide Curfew to remain in force for a further 60 days from 29th September 2020; 2. The closing time for restaurants and eateries was amended from 8pm to 7pm beginning 27th July, 2020. On 29th September 2020 the closing time was changed 10:00 p.m; 3. Bars that were ordered to shut down on 28th July 2020 have now been opened (as per 29th September, 2020) 4. Partial lock down - through cessation of movement in Nairobi, Mombasa, Kwale, Mander and Kilifi counties in April 2020 and subsequent lifting of the ban in July, 2020; 5. That any government Institutions including all sporting facilities, stadia and educational institutions and other Government facilities, upon designation by the Cabinet Secretary for Health as a public health facility, shall be availed to the Ministry of Health for Isolation and Quarantine purposes. |
| Socio-Economic Impact and Recovery | <ol style="list-style-type: none"> 1. Provision of classification and a full list of essential services in Kenya. 2. Waiver/reduction of some classes of Income Taxes and reduction of VAT rate from 16% to 14% until January 2021. |

Overall, the data and reports highlighted in both the health, budget and socio-economic data discussion are published online (on websites and through webinars) and the links have been provided in section 2 of this study.

On disclosure: The study finds that there is not enough proactive disclosure on budget implementation; that is, the data that is actually needed to solve specific problems related to the value for money for public funds. Consequently, even though budgets and plans have been made public, the lack of transparency in procurement data and processes has led to the current situation where some Ministries, Counties Departments and Agencies stand accused of purchasing goods at inflated costs and in some cases goods that were never delivered. Consequently, non state actors such as the media, Transparency International Kenya have played a leading role as infomediaries by publishing information² and highlighting these bad practices and triggering demands for accountability.

On using data to avoid the next crisis (and to forecast): The study finds that the government has been in crisis mode and largely implementing emergency responses, to cope with short term impacts of COVID-19 pandemic. The main areas of policy intervention have focused on 3 areas:

1. Crisis management that is inclusive and that takes a multi-sectoral approach; at the start, Kenya knew there would be challenges in containing the pandemic through detection, diagnosing and caring for patients if the

caseload spiked suddenly. This exposes the need to deploy more funds especially to the subnational level for longer term investments in health (not just the fight against COVID-19) given that existing system gaps and financial constraints are known and that more ICUs, hospital beds and isolation centres are required to cope with the case load.

2. Building resilience in health systems: From the analysis of the health sector, the responses from the government need to focus on increasing investments in healthcare systems and infrastructure. Further, the government will also need to collaborate with the private sector to leverage the private healthcare resources. Government may further need to reign in on pricing in order to make COVID-19 therapies more affordable and accessible to Kenyans.
3. Socio-economic recovery: Many Kenyans are still in the dark as to the intended purposes of these rules and protocols and have therefore opted to flout them because they deny them of livelihood options. There was need to better involve citizens as well as use data for a pragmatic and prioritized approach to identify the data that needs to be collected to inform where to invest in and when to optimize what is existing.

This is all summarized in a descriptive model in Section 4 that outlines the functional dynamics of the knowns and unknowns in understanding data demand and supply issues that will be valuable to model and forecast - any forthcoming crises in the short or long term.

² See the tool <http://actionfortransparency.org/covid-19/aid/>

1 INTRODUCTION

1.1 BACKGROUND TO THE STUDY

Hivos in a consortium with ARTICLE 19, Internews and the International Center for Not-for-Profit Law (ICNL) is implementing the PROTECT program.

The program is working on shifting the paradigm from unequal and closed societies towards free and open societies with civil society including media organisations, being able to help people to hold governments to account. In Kenya, the PROTECT program is focusing on exploring opportunities and challenges to civil society working on improving accountability and fighting corruption and will pilot new ways of engagement with duty-bearers, who often exert significant control over citizens' lives.

Effective use of data is one way through which transparency and accountability can be promoted. However, there are various obstacles that hinder data's utilization, including gaps in mobilising quality, quantity and timely data, lack of gender disaggregation in data, among others. The Kenya government's responses to COVID-19 provides an opportunity to interrogate the data being used to inform decision making. Despite a growing understanding of (COVID-19), more evidence is needed for successful continued prevention and treatment of infections. The importance of reliable data to address the growing need for data driven decision making cannot be gainsaid. Transparency over forecasting models and data that is influencing government's strategies remains a critical tool to winning the fight against the COVID-19 Pandemic.

1.1 AIM OF THE STUDY

The aim of this study is to examine data informing government's decisions on the COVID-19 response to determine its reliability ³ and validity ⁴.

The study also aims to:

1. Source for and examine the data informing government's management of the COVID-19 emergency response funds from various sources to determine accountability, transparency and robust public engagement, value for money and prevention of corrupt practices. This includes the data informing the introduction of economic policies such as the cash transfer program.
2. Scrutinize disclosure of government's COVID-19 response plan, estimated budget and planned revenue raising measures and spending data audits to facilitate the tracking and reporting of emergency response expenditures both at the national and county government levels; and,
3. Scrutinize the forecasting models and data that is influencing the government's strategies, policies and expenditure including its COVID-19 response/, estimated budget, planned revenue raising measures.

³ Reliability entails reflections on whether results can be replicated.

⁴ Validity entails reflections on whether the results are trustworthy and meaningful. Internal validity relates to how well a study has been conducted (its structure) and external validity relates to how applicable the findings are to the real world.

1.3 SCOPE OF THE STUDY

The COVID-19 pandemic has led to a massive impact on our society that manifests adversely as a health, social and economic problem. This study makes a similar approach – focusing on health as well as socio-economic sectors and the data uses therein. This is broken down as follows:

1. The health sector data as available on the Kenya Health Information System (KHIS2⁵). Further interviews with representatives at the national and subnational level will provide additional contexts. This also includes other sources of credible information that contribute to the National Statistical System such as academia and Ministries, Counties, Departments and Agencies (MCDAs) involved in generating both administrative data and surveys⁶.
2. Socio- Economic data
 - a. From the KNBS Survey on Socio Economic Impact of COVID-19 on Households (Wave 1⁷ and Wave 2⁸), this further studies the socio-economic impact of the COVID-19 in Kenya by examining data from 2 KNBS studies so far – with a view to examine trends and match these to any government fiscal policies and decisions to date;
 - b. Public budgets⁹ are regarded as the foremost governments' policy documents. This study will also interrogate GoK budget lines associated with the COVID-19 responses that have been proposed at the national and county levels. The aim will be to understand whether there has been public participation in policy development and whether evidence has driven budget line absorption.

The premise is that when the government openly publishes data and models that underpin public decisions, the public is reassured that the actions of the governments are based on scientific data, rather than political convenience and that this is done in a transparent manner.

The study covered data collected by stakeholders (both state and non-state actors) from March 2020 – when the first incident of COVID-19 pandemic was reported in the country to September 2020. Only the budget information is drawn from earlier due to the annual cycle of the budget planning and implementation process.

1.4 METHODOLOGY

The study employed action research methodologies that collected and reviewed both qualitative and quantitative data. These included desk review of documentation as well as key informant interviews in order to ascertain and link data sources to policies.



⁵ <https://hiskenya.org/dhis-web-commons/security/login.action>

⁶ See the Center for Epidemiological Modelling and Analysis at the University of Nairobi (CEMA) dashboards:

<https://cema.africa/kenyahealthdatatrends>

⁷ <https://www.knbs.or.ke/?p=5896>

⁸ <https://www.knbs.or.ke/?p=5983>

⁹ Ideally, in Public Finance Management (PFM) public budgets record all the resources that will be collected by the government and the different ways they are to be deployed within a given period of time.

2 LITERATURE REVIEW: DATA AND POLICIES DURING COVID-19

2.1 CONTAINMENT MEASURES

The first case of COVID-19 in Kenya was confirmed on the 12th March 2020¹⁰. It was the first case to be reported in the country since the beginning of the pandemic outbreak in China in December 2019. This was through the National Influenza Centre Laboratory at the National Public Health Laboratories of the Ministry of Health; but the first patient subsequently recovered. To prevent a country wide outbreak of COVID-19 (also informed by information on Figure 1 below), the government implemented actions that were designed to reduce exposure to the disease through measures that included self-quarantine, quarantine of people who had travelled from high risk countries (and subsequently all travelers), and any other high risk cases reported by the public.

The Government of Kenya (GOK) encouraged people to stay and work from home and effected a nationwide curfew putting in place a national dusk till dawn curfew beginning 27th March 2020 (5:00 a.m. to 7:00 p.m.)¹¹. These were later reviewed to start from 9:00 p.m. to 4:00 a.m. at the beginning of June, 2020¹². Other measures included closure of schools, churches, restaurants and entertainment places as well as limiting social gatherings (for example, only close family members attending funerals)¹³. Counties also put in place different measures that included the closure of public fresh-produce markets, asking businesses and traders to ensure there was water and soap in premises as well as advocating for hand washing and physical distancing in social places including encouraging use of high alcohol content sanitizers (at least 60% alcohol).

On 6th April 2020, in addition to the nationwide curfew, the President announced the cessation of all movement by road, rail or air in and out of the Nairobi Metropolitan Area and the counties of Kilifi, Kwale and Mombasa; movement in and outside the affected four counties¹⁴, was restricted and supervised by the National Police Service¹⁵. On May 16th, movement restrictions were imposed into and out of Kenya through the Kenyan-Tanzania and Kenyan-Somali international borders, with exceptions for cargo vehicles.

On 6th July, 2020, the President ordered a lift on the ban on the cessation of movement into and out of the Nairobi Metropolitan Area, Mombasa County, Kilifi County and Mandera County¹⁶. Domestic air travel resumed on 15th July 2020 under strict Ministry of Health and Transport guidelines¹⁷; international flights subsequently resumed on 1st August 2020¹⁸. On 7th July, 2020, the Cabinet Secretary for Education instructed that basic education institutions would reopen in January 2021 with universities and colleges resuming in September 2020 after meeting strict COVID-19 regulations and public health protocols.

On 28th July, 2020, the President extended the nightly curfew and banned alcohol sales in restaurants and amended their closing time to 7.00 p.m as part of a bid

¹⁰ <https://www.health.go.ke/first-case-of-coronavirus-disease-confirmed-in-kenya/>
¹¹ <https://www.theeastafrican.co.ke/tea/news/east-africa/kenya-goes-into-dusk-to-dawn-curfew-as-contact-tracing-expands-to-1-000-1439314>

¹² <https://allafrica.com/stories/202006080376.html>

¹³ PSCU (2020). President Kenyatta Urges Kenyans To Observe Government Directives On Coronavirus. [viewed 7 April, 2020]. <https://www.president.go.ke/2020/04/07/president-kenyatta-urges-kenyans-to-observe-government-directives-on-coronavirus/>

¹⁴ On 22 April 2020, Mandera county was also added to the list of partially locked down counties for 21 days after two siblings travelled from Kilifi County to Mandera causing a rapid spread of COVID-19 and prompting the government to partially lock down the county. <https://nation.africa/kenya/counties/mandera/covid-19-mandera-officially-on-lockdown-after-cases-increase-491464>

¹⁵ <https://www.aljazeera.com/news/2020/04/covid-19-kenya-bans-travel-nairobi-areas-200406163601579.html>

¹⁶ <https://www.aa.com.tr/en/africa/kenya-lifts-ban-on-travel-amid-surge-in-covid-19-cases/1901447>

¹⁷ <https://www.aa.com.tr/en/africa/kenya-resumes-domestic-flights-amid-rise-in-virus-cases/1911256>

¹⁸ https://www.kaa.go.ke/press_release/cs-ministry-transport-issues-communique-resumption-international-air-travel/

to halt a steep rise in coronavirus cases for another 30 days¹⁹. On 26th August, 2020, the 5.00am to 9.00 p.m curfew remained in place with closing of restaurants extended to 8.00 p.m²⁰.

As of 29th September 2020, the curfew hours were extended to 11:00 p.m. to 4:00 a.m²¹ but the ban on sale of alcohol in bars and restaurants was lifted - with closing times extended to 10.00 p.m. Places of worship were reopened but in a phased manner, in conformity with applicable guidelines developed by the Inter-Faith Council of Kenya. Only a maximum of one-third (1/3) of maximum sitting capacity are to be allowed at each worship place which must not be more than one hour in duration. Worship shall not include congregants under the age of 13, above the age of 58, or persons with underlying health conditions. Sunday schools and madrassas will remain suspended until further notice. Bereaved families can now bury their loved ones with dignity without involving public health officials. Funerals and weddings can be attended by up to 200 people - with all abiding by Ministry of Health protocols²².

2.2 HEALTH

The Kenyan Government, through the Ministry of Health, has put in place a robust approach to address the COVID-19 pandemic. As part of the response, the Ministry of Health has constituted a National Taskforce on COVID-19 Response²³ chaired by the Permanent Secretary – Ministry of Health - to evaluate the evolving risk and advise the government on appropriate measures for preparedness, prevention and response in order to mitigate the public health impacts of the COVID-19 pandemic.

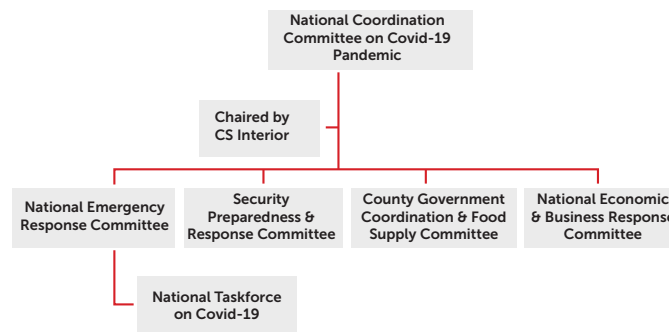


Figure 1: Government of Kenya's organized response to the COVID-19 Pandemic

¹⁹ <https://www.aljazeera.com/news/2020/07/kenya-extends-coronavirus-curfew-restricts-alcohol-sales-200728052517832.html>

²⁰ <https://www.the-star.co.ke/news/2020-09-21-uhuru-extends-curfew-to-give-new-directions-after-national-conference>

²¹ The Twelfth Presidential Address On The Covid-19 Pandemic On Monday, 28th September, 2020 At Kenyatta International Convention Centre (Kicc), Nairobi

<https://www.president.go.ke/2020/09/28/the-twelfth-12th-presidential-address-on-the-covid-19-pandemic-on-monday-28th-september-2020-at-kenyatta-international-convention-centre-kicc-nairobi/>

²² <https://ke.usembassy.gov/covid-19-information/>

²³ The National Taskforce on COVID-19 reports to the National Emergency Response Committee chaired by the Health Cabinet Secretary. The National Emergency Response Committee is one of four streams that report to the National Coordination Committee on the Response to Coronavirus Pandemic that is chaired by the Interior Cabinet Secretary. The others are the Security Preparedness and Response Committee, the County Government Coordination and Food Supply Committee, and the National Economic and Business Response Committee.

In May 2020, Nairobi Metropolitan Service (NMS) launched a free COVID-19 mass testing programme across all the 17 sub-Counties in Nairobi. More than 3,000 Nairobi residents turned out for the free COVID-19 mass testing during the period²⁴. According to NMS, these tests were aimed at mapping out hotspots in Nairobi in order to guide where more efforts would be needed in terms of directing public health measures in order to detect cases and stop community transmission by isolating positive cases. However, people remained fearful of the stigma of being found positive – by their families, neighbours, community and even employers. For example, it was reported on 10th August, 2020 that a landlord in one of the estates in Nakuru town issued an eviction notice to a family after they tested positive for COVID-19²⁵.

Unfortunately, in mid July 2020, the government closed 20 centres across the country that were collecting samples for testing and instead shifted focus to caring for confirmed COVID-19 patients for admission and care. This was largely attributed to unsustainability of mass testing by the government; subsequently, the Kenya Medical Research Institute (KEMRI) issued a statement that it would moving forward focus on targeted samples in their laboratories countrywide²⁶ and released a Targeted Testing Strategy for COVID-19 in Kenya²⁷.

Whereas Kenya has a total of 64,181 hospital beds across board (public, faith based/NGO, private for profit), only 37,216 (58%) of these beds are in hospitals that have oxygen supply²⁸. While Kenya has 537 ICU beds, it only has 256 ventilators; therefore, when ventilators are considered, ICU beds do not actually have the accompanying equipment to provide care for COVID-19 critically ill patients²⁹. It means that the capacity of Kenyan hospitals to absorb increases in caseload due to COVID-19 is constrained by the lack of availability of oxygen.

²⁴ NMS also conducted fumigation in the city but which later halted due to lack of funds

²⁵ <https://www.nation.co.ke/kenya/counties/nakuru/lee-stop-stigma-on-covid-19-patients-1916578>

²⁶ <https://www.pd.co.ke/news/blow-to-covid-19-fight-as-government-abandons-testing-44287/>

²⁷ <https://www.health.go.ke/wp-content/uploads/2020/07/Targeted-Testing-Strategy-for-COVID-19-in-Kenya.pdf>

²⁸ Barasa EW, Ouma PO, Okiro EA (2020) Assessing the hospital surge capacity of the Kenyan health system in the face of the COVID-19 pandemic. *PLoS ONE* 15(7): e0236308. <https://doi.org/10.1371/journal.pone.0236308>

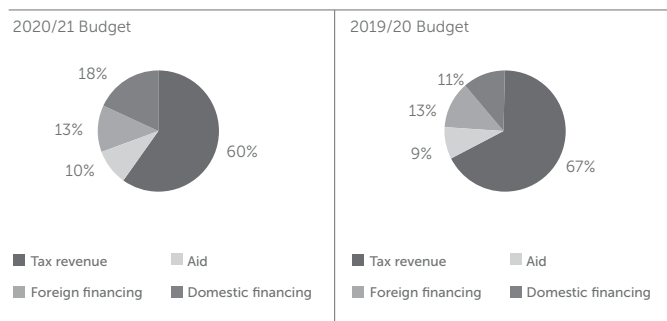
²⁹ Ibid



2.3 BUDGET RESPONSE

2.3.1 Where will the money come from?

In the FY 2020/2021 Budget Statement, the Cabinet Secretary has set out proposals to incur a total of KShs 2.8 trillion (~USD 26 billion) in expenditure and net lending for the 2020/2021 fiscal year. With tax revenues dipping (from 67% in 2019 to 60% in 2020 owing to reduction in tax rates/receipts) it is anticipated that domestic borrowing and aid and or public debt by the government will increase in the FY 2020/2021.



Earlier in March and April 2020, the President appointed and commissioned the Kenya COVID-19 Emergency Response Fund Board on 2nd April, 2020. The fund was tasked with mobilising resources for emergency response towards containing the spread, disruptive effects and the knock on impact of the COVID-19 pandemic - by complementing the government's efforts in the supply of medical supplies, facilities and equipment and to provide support for the vulnerable communities with their immediate needs, including food. The Board incorporates members of the private sector; and has been obtaining professional services from PWC Kenya, Deloitte Kenya and Ernst and Young Kenya who are providing pro-bono assurance services to ensure that all contributions and expenditures are made public and accounted for. Presently, total contributions to this fund are KES 2,899,183,346 (~USD 26 million)³⁰.

Besides this, the Cabinet Secretary for the National Treasury and Planning, through the FY 2020/21 budget in June 2020 statement also established the COVID-19 Emergency Response Fund aimed at receiving voluntary contributions from well-wishers to meet expenses associated with the pandemic. The Government reached out to multilateral and bilateral development partners for additional financing - who have responded with support in the form of grants, highly concessional funding, personal protective equipment and assorted medical supplies.

³⁰ <https://www.kenyacovidfund.co.ke/contributors/>

Figure 2: Comparison of FY 2019/2020 and 2020/2021 Budgets (Source: FY 2019/2020 and FY 2020/2021 Budget Statements.

2.3.2 Where is the money going?

The FY 2020/21 budget statement highlights the proposed government spending on related programmatic areas³¹.

Government Expenditure

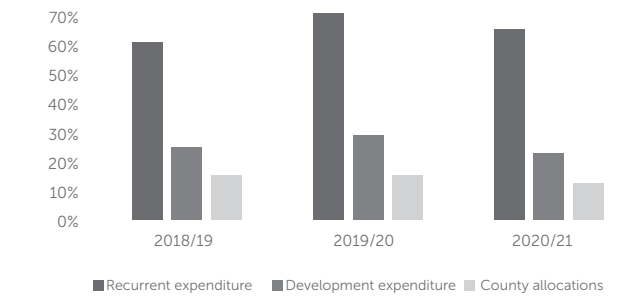


Figure 3: Government Expenditure (Source: FY 2020/2021 budget statement)

The government also moved to approve the use of over Kshs. 40 billion to cushion needy households in urban areas from economic shocks following reduced socio-economic activity in the wake of the COVID-19 pandemic. Some county governments further moved forward to set up their kitties that would be used as safety nets during this tough COVID-19 period³². The difficulties in moving produce within countries, across borders, coupled with frenzied buying, also impacted the food markets by affecting food security due to low labour availability and restrictions on the supply chains.

To mitigate the effects of COVID-19 to the Kenyan economy, the government proposed various tax reduction measures³³ (effective from May 2020) including:

1. Reduction of Personal Income Tax top rate (PAYE) from 30% to 25%;
2. 100 % Tax Relief on income, bonuses, overtime and retirement benefits for persons earning up to Kshs. 24,000 (the lowest tax band);
3. Reduction of Resident Corporate Income Tax rate from 30% to 25%;
4. Reduction of Turnover Tax rate for SMEs from 3% to 1%;
5. Immediate reduction of VAT rate from 16% to 14%.

³¹ As per the budget statement delivered to the National Assembly by Hon. (Amb.) Ukur Yatani, Cabinet Secretary for the National Treasury and Planning; FY 2020/21 Themed: "Stimulating the Economy to Safeguard Livelihoods, Jobs, Businesses and Industrial Recovery was crafted to implement the initiated measures to address the COVID-19 pandemic and stimulate the economy to achieve socio-economic recovery in the near term (2020 – 2022).

³² Lamu County Government set aside Kshs 10 million to assist families cope with adverse effects of COVID-19.

³³ Deloitte Kenya Tax Alert (COVID-19) Government Measures. [viewed 7 April, 2020] https://www2.deloitte.com/content/dam/Deloitte/ke/Documents/tax/Deloitte_Kenya_COVID-19_Government_Measures.pdf

Further to this, the government has implemented the following measures:

- 1. Suspension of all listing for all persons including companies at Credit Reference Bureau (CRB).
- 2. Lowering of Central Bank Rate (CBR) from 8.25% to 7.0% to signal commercial banks to lower the interest rates on credit and thereby facilitating to spur increased liquidity in the economy.
- 3. Lowering of Cash Reserve Ratio (CRR) by 100 basis points to 4.2% for commercial banks to release additional liquidity to the banks to directly support borrowers.
- 4. The Central Bank of Kenya to offered flexibility to banks on loans that were active as of March 2020 to maintain liquidity levels in the economy.
- 5. Facilitating expedited payment of VAT Refunds by allocating an additional Kshs. 10 Billion.
- 6. Setting up a fund to which players in the Public and Private Sector are contributing in support of the Government efforts.
- 7. The Government also announced a stimulus package of Kshs. 53.7 Billion to support other sectors of the economy including Tourism and the hospitality industry and the MSEM.

2.3.3 Health budget and COVID-19 funds

In 2020/2021 FY, allocation to the Ministry of Health has increased by 10.3% to KES.114 billion (-USD 1.05 billion) compared with 2019/20. Additionally, the share of the Ministry of Health in the total budget for MDAs has increased from 5.5% in 2019/20 to 6.5%.

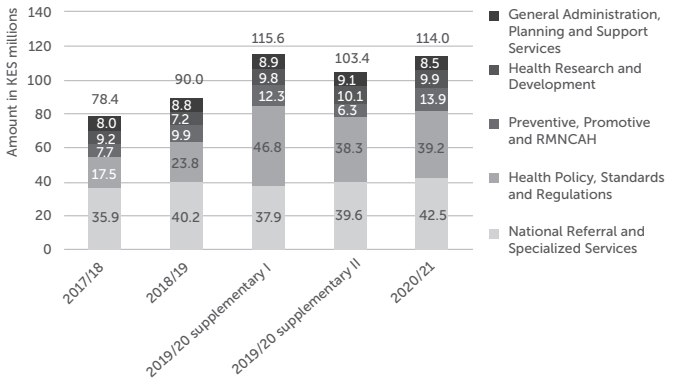


Figure 4: Budgetary allocations to the Ministry of Health, 2017/18 to 2020/21 (Source: Development Initiatives based on national government budget documents, 2017/18 to 2020/21)

We the People

The actual funding gap is likely to be much higher if the health needs stemming from the COVID-19 pandemic are taken into account. At the time of writing this report, the total commitments for fighting the COVID-19 pandemic stand at KES 253 billion (-USD 2.33 billion)³⁴ from international commitments. Not all of these monies have been disbursed, it is understood that the World Bank has released US\$ 50 million (-KES 5 billion) and the International Monetary Fund (IMF) also approved disbursement of US\$739 million (-KES78.3 billion) to Kenya under the Rapid Credit Facility to enable the country to cover its urgent balance of payments needs resulting from the knock on effects of the COVID-19 pandemic. This financial support is fully concessional at zero interest rate.

GOK has also received KES 22.5 billion (-USD 210 million) from the African Development Bank as a concessional loan³⁵; there are also additional commitments from the European Union in the form of grants and loans³⁶. While increased borrowing will enable the government to fund its response to the pandemic, it will increase the public debt burden that surpassed the KES 6 trillion (- USD 55.3 billion) in December, 2019³⁷.

Further, the Office of the Director of Public Prosecutions (ODPP) donated KES 2 billion (-USD 18 million) to the country's coronavirus emergency fund; the Director of Public Prosecution handed a cheque to the Cabinet Secretary for the National Treasury noting that the money came from seizures undertaken by the ODPP and surrenders from proceeds of corrupt dealings/crime by the Assents Recovery Authority in the past two years³⁸.

In the FY 2020/21 the Disease Surveillance and Response sub-programme previously added to the budget to finance the Kenya COVID-19 Emergency Response Project will receive KES2.7 billion (USD -25 million) in FY 2020/21³⁹. Key challenges to the response to COVID-19 pandemic expected to be prioritized include limited availability of testing kits, personal protective equipment for health personnel, lack of capacity (beds and ICUs) and equipment such as ventilators. There has also been an issue with motivating public health workers who are handling the pandemic; some of them have succumbed to COVID-19 and died.

³⁴ <https://www.aa.com.tr/en/africa/kenya-crackdown-on-demo-over-theft-of-covid-19-funds/1949336>
³⁵ <https://www.afdb.org/en/news-and-events/press-releases/kenya-eu188m-african-development-bank-loan-boost-covid-19-response-35735#:~:text=COVID-19%20response-,Kenya%3A%20188m%20African%20Development%20Bank,to%20boost%20COVID-19%20response&text=The%20Board%20of%20Directors%20of,economic%2C%20health%20and%20social%20impacts.>

³⁶ <https://www.google.com/url?q=https://www.africa-newsroom.com/press/source/au-delegation-to-kenya&ust=1601969663253000&usq=AFqjCNF8g2lZFEZhCkr2rzpalqBzSjJOCQ>

³⁷ Owino, B. (2020). Kenya's Covid-19 budget: Funding for health and welfare. Development Initiatives: <https://devinit.org/resources/kenyas-covid-19-budget-funding-for-health-and-welfare/>

³⁸ <https://www.aa.com.tr/en/africa/kenya-s-covid-19-fight-gets-boost-from-seized-funds/1796520>

³⁹ Ibid



SOCIO-ECONOMIC FACTORS

Largely, owing to the lockdown measures implemented by the government to lower the risk of exposure to the virus. The socio-economic impact of COVID-19 has adversely affected the country leading to the:

- 1. Loss of livelihoods and jobs:** According to the Kenya National Bureau of Statistics (KNBS) survey report on the socio-economic impact of COVID-19 published on May 2020, the labour force participation rate in the country is at 56.8% which is huge drop from 75% as recorded by the World Bank data⁴⁰.
- 2. High cost of living (ability to afford food, rent, ability to perform cash transfer remittances):** Based on the KNBS surveys the loss of businesses and jobs has resulted in; reduced earnings. According to the TIFA Research Survey, people living in Nairobi low income areas are currently earning less money due to COVID-19, which has negatively impacted their expenditures on basic necessities including food, shelter, rent, among others.
- 3. Rent:** Based on the KNBS surveys the loss of businesses and jobs has resulted in; reduced earnings. According to the TIFA Research Survey, people living in Nairobi's low income areas are currently earning less money due to COVID-19, which has negatively impacted their expenditures on basic necessities including food, shelter and many others. The survey highlights that 18% of the respondents were spending less on their rent.
- 4. Food security:** Surprisingly, based on the KNBS survey report June 2020, respondents (78.1%) did not have difficulties in their food supplies because they had adequately stocked up due to the unpredictability of the pandemic. Still, the TIFA Research survey highlights that 58% of people living in Nairobi low income areas, especially women, are extremely worried about having enough food during this period due to their reduced incomes.
- 5. Increased domestic violence:** For Kenya, the stay at home directives by the government to help slow the spread of COVID-19 has resulted in many families spending most of their time at home. In a country where 45% of women and girls experience domestic violence⁴¹, this number is likely to rise. Especially, with the large number of domestic violence cases that go unreported⁴².
- 6. Declined cash remittances:** According to the KNBS survey report June 2020, only 18.4% of households reported to have received cash transfers and or remittances from relatives or friends, mostly the female-headed households.
- 7. Financial distress:** The pandemic has caused 41.9% of Kenyan households to cut their financial spending on non-essential commodities. A majority of these households have resorted to taking loans from friends and relatives, mobile lending applications and credit institutions in order to cope with the straining financial crisis.

⁴⁰ Development Initiatives: Socioeconomic impacts of COVID-19 in Kenya, Background Paper, June 2020: <https://devinitorgresources/socioeconomic-impacts-covid-19-kenya/>

⁴¹ Kenya Demographic and Health Survey 2014, <https://dhsprogram.com/pubs/pdf/fr308/fr308.pdf>

⁴² <https://www.hrw.org/news/2020/04/08/tackling-kenyas-domestic-violence-amid-covid-19-crisis>

2.5 SUMMARY OF POLICIES AND INTERVENTION AREAS

The government has been in crisis mode and largely implementing emergency responses, to cope with short term impacts of COVID-19 pandemic. The main areas of policy intervention have focused on:

1. Building Resilient Health Systems;
2. Inclusive and Integrated Crisis Management and Multi-Sectoral Response; and,
3. Socio-Economic Impact and Recovery.

The table below outlines the key policies, laws and executive orders that have been issued from March 2020 during the COVID-19 pandemic.

Table 1: Summary list of executive orders, laws and procedures set during the COVID-19 Pandemic from March, 2020 (Source: Kenya Law Reports)

| Executive Orders |
|---|
| <ol style="list-style-type: none"> 1. The Twelfth [12th] Presidential Address On The COVID-19 Pandemic On Monday, 28th September, 2020 At Kenyatta International Convention Centre (KICC), Nairobi. 2. The Eleventh [11th] Presidential Address On The COVID-19 Pandemic. Wednesday, 26th August, 2020 State House, Nairobi. 3. The Tenth [10th] Presidential Address On The COVID-19 Pandemic On Monday, 27th July, 2020 At State House, Nairobi. 4. The Ninth [9th] Presidential Address On The Coronavirus Pandemic, Harambee House, Nairobi Monday, July 6th, 2020. 5. The Eighth [8th] Presidential Address On The Coronavirus Pandemic State House Saturday, June 6th, 2020. 6. The Seventh Presidential Address On The Coronavirus Pandemic: The 8-point Economic Stimulus Programme Saturday 23rd May, 2020. 7. The sixth Presidential address on the Coronavirus Pandemic at State House, Nairobi, Kenya on Saturday, May 16th, 2020 8. President Uhuru Kenyatta assents to the Tax Laws (Amendment) Bill, 2020 on April 25th, 2020 9. President Kenyatta Urges Kenyans To Observe Government Directives On Coronavirus – April 7th, 2020. 10. Presidential Address on Enhanced Measures in Response to the COVID-19 Pandemic, April, 6th 2020 11. Press Statement: by H.E Uhuru Kenyatta, C.G.H, President of the Republic of Kenya and Commander-in-chief of the Defence forces – March 16, 2020. 12. President Kenyatta Convenes First Meeting Of Task force To Marshal Funds For Coronavirus Response - April 1st, 2020. 13. Presidential address on the State interventions to cushion Kenya's against economic effects of COVID – 19 pandemic – March 25th, 2020. 14. Kenya Approves Roll Out of Google Loon 4G To Mitigate Coronavirus Work Disruptions - March 23, 2020. 15. Press Statement: by H.E Uhuru Kenyatta, C.G.H, President of the Republic of Kenya and Commander-in-chief of the Defence forces – March 16, 2020. 16. Executive Order No. 2 of 2020: National Emergency Response Committee on Coronavirus issued at State House, Nairobi on February 28th, 2020. |

Legislations

1. Legal Notice No. 59: Public Finance Management Act(No. 18 of 2012); Waiver of court fees in respect of commercial disputes Fund(Amendment) Regulations, 2020.
2. Legal Notice No. 60: Public Finance Management Act (State Officers and Public Officers Motor Car Loan Scheme Fund(Amendment) Regulations, 2020.
3. Legal Notice No. 57: Public Order(State Curfew) Variation Order, 2020
4. Legal Notice No. 58: Public Health (Covid- 19 Restriction of Movement of Persons and Related measures) Variation Rules, No. 2 of 2020
5. Legal Notice No. 50: Public Health (Covid-19 Restriction of movement of persons and Related Measures) Rules, 2020
6. Legal Notice No. 51: Public Health (Covid-19 Restriction of movement of persons and related measures) (Nairobi Metropolitan Area) Order, 2020
7. Legal Notice No. 52: Public Health (Covid-19 Restriction of movement of persons and related measures) (Mombasa County) Order, 2020
8. Legal Notice No. 53: Public Health (Covid-19 Restriction of movement of persons and related measures) (Kilifi County) Order, 2020
9. Legal Notice No. 54: Public Health (Covid-19 Restriction of movement of persons and related measures) (Kwale County) Order, 2020
10. Legal Notice No. 49: Public Health (Prevention, Control and Suppression of Covid- 19) Rules, 2020.
11. Value Added Tax Act 2013, No. 35 of 2013 Legal Notice No. 35: The Value Added Tax (Amendment of the Rate of Tax) Order, 2020.
12. The Public Order Act, Cap. 56 Legal Notice No. 36: The Public Order (State Curfew) Order, 2020.
13. Constitution 2010, Article 159 (2) and Article 161 (2) (a).
14. Judicature Act, Section 10.
15. Civil Procedure Act, Section 81 (3)

Directives and Circulars on the Administration of Justice

1. Judiciary to upscale justice delivery through increased use of technology; to delay resumption of open court activities by the Hon. Justice David K. Maraga, EGH, Chief Justice and Chairman of the National Council on the Administration of Justice issued 21st April, 2020
2. Chief Justice Press Statement: Continuing Review of Justice Sector Operations in the wake of Covid- 19 pandemic -April 15th, 2020
3. National Council on the Administration of Justice statement on justice sector operations in the wake of COVID – 19 operations -April 1st, 2020
4. National Council on the Administration of Justice measures implemented by the justice sector to prevent the spread of the coronavirus -March 19th, 2020.
5. Chief Justice Press Statement: Administrative and contingency management plan to mitigate COVID – 19 in Kenya's Justice Sector -March 15th, 2020
6. Practice Directions on the upscaling operations of the Employment and Labour Relations Court in Nyeri and Meru by the Hon. Mr. Justice Nzoki wa Makau, Presiding Judge Nyeri ELRC
7. Practice directions for the protection of Judges, Judicial Officers, Judiciary Staff, other Court users and the General Public from the risks associated with the global Corona virus pandemic. Gazette Number 3137 of 2020
8. Practice directions on Electronic Case Management, Gazette Number 2357 of 2020 made pursuant to Articles 159 (2) and 161 (2) (a) of the Constitution, section 10 of the Judicature Act and section 81 (3) of the Civil Procedure Act, accessed at: Practice Directions on Electronic Case
9. Supreme court judges to take pay cut to mitigate the effects of the COVID – 19 -March 27th, 2020.
10. Practice Notes for the conduct of Court business during the global Coronavirus pandemic issued pursuant to Section 13 (2) (a) & (b) of the Court of Appeal (Organization & Administration) Act, No. 28 of 2015 on 21st April, 2020 by The Hon. Mr. Justice William Ouko, President, Court of Appeal.
11. Court of Appeal practice note administrative measures to mitigate COVID – 19.
12. Public Notice to all Litigants and Advocates, Milimani Law Courts and Milimani Commercial courts, Court Standard Operating Procedures during Covid- 19 Pandemic
13. Interim administrative directives on up-scaling operations of the courts in Eldoret Law Court, Kapsabet Law Courts and Iten Law Courts by Lady Justice Hellen A. Omondi issued on 17th April, 2020
14. COVID – 19 Regulatory operations at Milimani Law Courts -March 26th, 2020
15. Practice note on E-filing of commercial cases to mitigate COVID – 19 in the Commercial Justice Sector -March 24th, 2020.
16. Administrative directives on Court operations during the period of temporary scaled-down operations of courts in Nakuru and Molo -April 1st, 2020.
17. COVID – 19 Electronic delivery of judgments & Rulings by Family Division, Milimani – NOTICE- April 1st, 2020.
18. Public Notice – Eldoret Law Courts – COVID –19 -March 28th, 2020.

Relevant Ministries, Departments and Agencies guidelines, policies and directives:

1. Public Notice: Submission of Self- Declaration Forms during Covid-19 pandemic issued on 9th April, 2020
2. Public Notice issued on 16th March, 2020
3. Highlights of Coronavirus in the country and response measures - March 29th, 2020.
4. Press Statement: National Response Emergency Committee -March 22nd, 2020.
5. Press Statement: National Response Emergency Committee -March 21st, 2020.
6. Proclamation of the National Day of Prayer by H.E Uhuru Kenyatta, C.G.H, President of the Republic of Kenya and Commander-in-chief of the Defence forces, March 17th, 2020
7. Press Statement: by H.E Uhuru Kenyatta, C.G.H, President of the Republic of Kenya and Commander-in-chief of the Defence forces – March 16th, 2020.
8. The Public Finance Management (COVID – 19 Emergency Response Fund) Regulations, 2020 – April 1st, 2020

3 FINDINGS OF THE STUDY

3.1 DATA INFORMING GOK'S MANAGEMENT OF THE COVID-19 EMERGENCY

A lot of the data and reports highlighted in both the health, budget and socio-economic data discussion are published online (on websites and through webinars) and the links have been provided in section 2 of this study.

3.1.1 Health data

Kenya faces challenges due to its burgeoning disease burden. Diseases and conditions fall within three main domains: communicable diseases, non-communicable diseases/conditions and violence/injuries. With the Constitution of Kenya 2010 devolving health functions to the counties, health service delivery is driven by the county governments as well as departments and agencies in the health sector – with MOH leading in shaping health policies and guiding the relevant agencies⁴³. MOH recognizes that there is a need for more specialized human resources for health to respond to the disease burden as well as mortality. These are therefore the broad administrative data points (disease burden, mortality and human resource for health) being collected by MOH periodically. Disease burden (Malaria, Tuberculosis, among others) and mortality rates (stillbirth rates, maternal mortality) are uploaded on a monthly basis from public, faith based/ NGO, private for profit .

Facilities distributions are updated in KHIS on need basis and the national cadres for human resources in health are updated annually. MOH is also publishing administrative data on key indicators its data analytics platform: <http://dsl.health.go.ke/#>.

3.1.2 Socio-economic data

As outlined in the literature review, KNBS⁴⁵ is generating statistics from primary sources through administering surveys. Important statistics that have been generated and that have been vital in informing the COVID-19 response by multiple stakeholders include:

1. There have been two surveys on Socio-Economic Impact of COVID-19 on Households Report (Wave 1⁴⁶ published on 15th May, 2020 and Wave 2⁴⁷ published on 30th June, 2020) which speak to the socio-economic constructs outlined in the literature review.
2. The 2020 Comprehensive Poverty Report⁴⁸ by the Kenya National Bureau of Statistics (KNBS) launched on 10th August, 2020 which shows that 23.4 million Kenyans are multidimensionally poor, compared to 15.9 million if one were looking at income only. This is an important index drawn from the 2019 census data, and which has taken deprivation as the multidimensional index (drawing from basic needs of physical development, nutrition, health, education, child protection, information, water, sanitation and housing). A person is considered multidimensionally poor if she/he is deprived in three or more dimensions out of the seven that were examined. During the COVID-19 pandemic, this report is an important analysis that identifies the most vulnerable population groups that are both multidimensional and monetary poor, and sheds light into geographical inequalities with realisation of rights and fulfillment of basic needs in line with Kenya's development objectives and the Sustainable Development Goals.

⁴³ MOH is also in charge of Kenya Medical Supplies Agency (KEMSA), National Hospital Insurance Fund (NHIF), National Quality Control Laboratory (NQCL) and National blood Transfusion Services, Kenya Medical Research Institute (KEMRI)

⁴⁴ See a visualization: <http://dsl.health.go.ke/>

⁴⁵ KNBS is also mandated through the Statistics Act of 2006 to establish standards and promote the use of good practices and methods in the production and dissemination of statistical information.

⁴⁶ <https://www.knbs.or.ke/?p=5896>

⁴⁷ <https://www.knbs.or.ke/?p=5983>

⁴⁸ <https://www.knbs.or.ke/?p=6022>



3. KNBS has continued to produce macro-economic statistics for the entire economy since these are key in analysing and monitoring financial stability, informing economic policy decision making, and in the compilation of national accounts statistics. The statistical release for the Quarterly Gross Domestic Product Report⁴⁹ for the first quarter of 2020 was published on 30th June, 2020.

Additionally, non-state actors have also conducted surveys that have further informed government response. To cite a few examples, the countrywide mapping of ICU beds and ventilators that has been instrumental in shaping investments and the needed resource allocation to ramp up the capacity of facilities to absorb COVID-19 patients. Also, while measures instituted to curb the spread of coronavirus

are crucial in slowing down the spread of COVID-19, they simultaneously hamper business continuity especially in the supply chains. A survey was conducted by the Kenya Association of Manufacturers (KAM) among its membership to uncover the challenges faced by businesses including labour issues, financial constraints, and challenges in production and firm operations arising from the imposed curfew and restrictions of movements⁵⁰.

Also, UON has taken it a bit further to develop a research and innovation blog that is calling on academic staff (at UON only) to provide insightful articles with a focus on the COVID-19 Pandemic – and presenting them at the level of a general reader⁵¹.

⁴⁹ <https://www.knbs.or.ke/?wpdmpromo=quarterly-gross-domestic-product-report-first-quarter>

⁵⁰ https://kam.co.ke/kam/wp-content/uploads/2020/05/KPMG-KAM-Survey-The-impact-of-Covid-19-on-the-manufacturing-sector-in-Kenya_FINAL_19May2020.pdf

⁵¹ <https://uonresearch.org/blog/>

Further, CSOs and the media⁵² have been vocal about diversion of funds meant for the COVID-19 pandemic response after it emerged from the Ethics and Anti-Corruption Commission (EACC) that it was investigating KEMSA officials over irregularities in a KES 7.7 billion (-USD 71 million) tender; among others. The demand for accountability in the use of COVID-19 funds has subsequently been called for by the Commission on Administrative Justice (CAJ) – requesting full disclosure by the National Treasury⁵³. The Council of Governors has also called for counties to be allowed to procure drugs and other medical equipment directly from suppliers after increased corruption allegations continue to be leveled against KEMSA.

3.1.3 Budget Data

The National Treasury and Planning is the apex body that ensures effective accountability for the use of financial resources and provides guidance on public procurement – for national, devolved government and all public entities and is therefore the source of all budget data. The National Treasury is mandated by the Constitution of Kenya 2010, the Public Finance Management Act 2012 and the Executive order No. 2/2013⁵⁴. It formulates all financial and economic policies and coordinates government financial operations – which involve both expenditure and revenue. This study however notes that data on budget implementation, that is, from MCDAs post-tender notice stage is scarce, can only be accessed by auditors (under the office of the Auditor General).

3.2 DATA USE - GOK'S RESPONSE PLAN

3.2.1 Health response measures

At the early stages as the COVID-19 pandemic unraveled in developed countries with advanced healthcare systems, Kenya knew there would be challenges in containing the pandemic through detection, diagnosing and caring for patients if the caseload spiked suddenly. As such, the messaging in the public by MOH was targeted at ensuring that the public was worried enough to take the pandemic seriously⁵⁵. Also, at the onset, the government had adopted the stance of not paying for any quarantine measures but this subsequently changed.

A number of things have changed since then. Earlier models which had predicted a quick spike in caseload have not been experienced. This may be due to the presence of a younger population, and a high asymptomatic rate (previously not factored in) that has led to a lower mortality rate and less hospitalisations compared to elsewhere globally. Barasa, Ouma and Okiro (2020) define surge capacity as the capacity to accommodate healthcare demand arising from COVID-19 - bearing in mind the existing capacity for non-epidemic healthcare demands⁵⁶. They focused on four measures nationally and by county: namely; 1) general hospital bed surge capacity 2) ICU bed surge capacity, 3) health system general hospital bed tipping point, and 4) health system ICU bed tipping point.

⁵² At the time of writing, Nation Media Group ran an expose depicting procurement irregularities at KEMSA, MOH and Personal Protective Equipment (PPEs) that have been donated to curb the spread of COVID-19 titled “#COVID19Millionaires: Corruption and Covid-19 moving at the same pace” <https://www.youtube.com/watch?v=pXasgK6Pif8&feature=youtu.be>

⁵³ <https://www.nation.co.ke/kenya/news/explain-covid-19-funds-use-state-told-1918158>

⁵⁴ Executive Order 2 of 2013 – Organization of the Government of the Republic of Kenya: <http://www.shitemi.com/wp-content/uploads/2013/10/executive-order-no-2-of-2013-on-the-organization-of-gok.pdf>

⁵⁵ Ibid

⁵⁶ Ibid

The literature reveals that when the number of general hospitals beds nationally are considered, projected COVID-19 cases needing hospitalization will take up 39%, 19%, and 13% of available hospital beds if the pandemic lasts 6, 12, and 18 months respectively. Also, Kenya faces substantial gaps in ICU beds and ventilator capacity. As of April 2020, only 22 out of the 47 counties had at least 1 ICU unit⁵⁷.

Consequently, there is a need in the longer term to rethink investments in the healthcare system especially at the county level. Kenya will need an additional 1,511 ICU beds and 1,609 ventilators (6 months transmission curve) to 374 ICU beds and 472 ventilators (18 months transmission curve) to absorb caseloads due to COVID-19 spread.

3.2.2 Socio-economic response measures

It is clear that the socio-economic aspect has been the most devastating to households. This may then inform the 'lives versus livelihoods' debate that led to lifting of the ban on movement of people to enable economic recovery. This time the messaging by the government has shifted to admonishing citizens to be responsible individually and adhere to laid down health and safety protocols of wearing masks, social distancing and regular handwashing.

However, the silver lining is that a fall in imports of consumer goods has possibly set the tone for a revitalization of national and regional industry, as local producers step up to fill the void by decreased imports⁵⁸. This is positive for the preservation of local jobs – other macroeconomic indicators remaining constant – implied because not all supply chains have been affected.

⁵⁷ Ibid

⁵⁸ Ibid



4 CONCLUSIONS AND RECOMMENDATIONS

Forecasting models are used across domains in order to guide decisions, identifying and characterizing real world problems in order to mitigate risks. Models also serve as scientific tools that describe phenomena in a rigorous and accessible manner⁵⁹. This section focuses on a descriptive modeling that outlines the functional dynamics of the knowns and unknowns in understanding data demand and supply issues that will be highly valuable to model and forecast - any forthcoming crises in the short or long term.

Table 2: Can we avert the next crises using data?

| | Known Data | Unknown Data |
|----------------|--|--|
| Known Issues | 1. We are collecting data and we understand issues at hand | 2. We are not collecting any data but we understand the issues at hand |
| Unknown Issues | 3. We are collecting data but we do not understand the issues. | 4. We are neither collecting data nor do we understand the issues at hand. |

4.1 KNOWN KNOWN

Scenario: We are both collecting data and we understand the issues at hand.

Short term action: Step to take in this case is to make better decisions such as investments in data collection; a pragmatic and prioritized approach is needed and so more granular data needs to be collected to inform what to invest in and when to optimize what is existing.

Long term action: Funds need to be mobilized for long term investments in the fight against COVID-19, - given the known existing system gaps and financial constraints that majorly need more testing and more ICUs, hospital beds and isolation centres need to be built.

⁵⁹ Bailer-Jones, D. M. 1999. Tracing the Development of Models in the Philosophy of Science. Model Based Reasoning in Scientific Discovery pp 23-40. https://link.springer.com/chapter/10.1007/978-1-4615-4813-3_2

4.1.1 Health

From the analysis of the health sector, the responses from the government need to focus on increasing investments in healthcare systems and infrastructure. The government is already doing some of these – such as earmarking educational institutions as potential isolation centres. But the government will also need to collaborate with the private sector to leverage the private healthcare resources. Government may further need to reign in on pricing in order to make COVID-19 therapies more affordable and accessible to Kenyans who become infected or affected by COVID-19 pandemic.

4.1.2 Socio-economic

For example, it was known from the outset that government lock-down measures would have adverse effects on society and the economy. But the main issue has been that the government has neither done a good job of explaining the rationale for putting in place the COVID-19 rules nor helping citizens to mitigate the adverse effects of the COVID-19 lock-down measures. This is because many people are still in the dark as to the intended purposes of these rules and protocols. They have therefore opted to flout them; also feeling they are draconian because they deny them of livelihood options. Their lack of participation or involvement in decision-making has made them skeptical about the government's motives – however

well-intentioned they are. This is especially true of the poor who have borne the socio-economic brunt and disruptions occasioned by the pandemic. Citizens have the right to hold the government(s) accountable. When procurement processes for public goods during the COVID-19 pandemic are bungled, an environment of mistrust is bred and it is this trust that is vital in saving lives.

4.1.3 Budget

In the short term the COVID-19 pandemic requires sufficient public funding to ensure a comprehensive response. Reprioritizing and adjusting revenues and public spending must be geared towards bolstering the economy and the healthcare systems through specific responses that can react adequately.

PFM systems also do provide some level of flexibility for the executive to use existing budgeted allocations through reprioritizing line items or within budgetary programme resource envelopes. This can take the form of advance payments, priority disbursement procedures, and risk-based controls (if high thresholds of funds will be disbursed) or required. Most legal frameworks also provide for activation of contingency funds by the executive in emergency situations. This has already happened in Kenya. Since it is known that COVID-19 is here for a long time, in the longer term, there is a need for revision of finance laws through supplementary budgets. The sheer scale of the resources needed for the COVID-19

pandemic response requires supplementary budgets. Further, budget control procedures must be adjusted to accelerate disbursement to the frontline to ensure that help can be delivered when and where it is needed.

4.2 KNOWN UNKNOWN

Scenario: We are collecting data but we do not understand the issues at hand. The Two (2) scenarios are possible: 1) qualitative studies are needed to dig deeper into phenomenon or 2) politics and not data takes centre stage in decision making.

Short term action 1: Step to take - there might be need to trigger additional qualitative studies to reveal underlying behaviours because whereas we understand that things have changed, we cannot tacitly quantify what the problem is.

MOH has put guidelines for burial ceremonies for those who have died as a result of COVID-19. Even with fear and enforcement measures by the government, many people have resisted these changes and or protocols. It is unheard of during African funerals that one cannot shake hands, visit family and mourn the dead. But how this has to be done has drastically changed since the advent of the COVID-19 pandemic. Though additional adjustments have been made burial

rights, more in-depth qualitative studies need to be undertaken in order to help the government formulate policies that are more in tandem with cultural norms - given that the COVID-19 pandemic is still with us.

Short term action 2: It will take strong advocacy and holding all stakeholders to account in order to ensure that politics do not take centre stage in implementing policies. Also, rigor and methodology has an important role to ensure that validity and reliability of data are beyond question.

It would be naive to think that politics do not play a role that undermines the use of data in implementation of interventions. Politics plays a key role in the data ecosystem given that when elected officials - namely the president or the governors - constitute their governments, they have a manifesto to implement (which may not necessarily have been developed based on data-based priorities). Even with data, sometimes due to power dynamics, when there is a clash between real priorities (such as the COVID-19 pandemic) and what is expedient (for example settling pending bills), it is the realities on the ground that will be suspended or put on hold (for instance the purchase of PPEs). The same applies to lobbying for projects to be implemented (without using data to inform these decisions). In the end projects fail because they are not viable, feasible, or they end up not being functional.

4.3 UNKNOWN KNOWN

Scenario: Even though we understand the issues, we do not have enough data to advocate for needed changes.

Short term action: The step to take here is to begin to collect data, update data sources or get higher resolution data.

Long term actions: An evidence-based alignment of programmes to the data at hand will be important. The learnings can be used to inform public policy and guidelines.

The COVID-19 measures have hurt people in the informal economy, particularly women. For example, the closure of open-air markets where most get food is expected to be felt more by women, who are the majority in these spaces. The push for mobile money transactions does not favour micro-enterprises. Women in micro-enterprises are cash dependent; it forms part of their daily survival and is needed to purchase stock or settle debts and engage in savings.

Notably, women have been more affected by the stay at home orders because for women with abusive partners, a total lockdown means captivity. Normally, victims of domestic abuse from partners can seek help outside the home or at work or even with friends and relatives. With curfew restrictions, many have been stuck with their abusers with no way to escape.

It is also important to note here that women shoulder the vast burden of unpaid care work and responsibilities which increased dramatically due to COVID-19,

whether caring for sick relatives or looking after children at home because schools are closed.

4.4 UNKNOWN UNKNOWN

Scenario: We neither have the data nor understand the issues at hand.

Short term action: The step is to take is to operationalize constructs using similar or known concepts and to create models of the problem that allow to understand problems better

Long term actions: Rather than just remain at modeling, actual pilots should be undertaken to test hypothesis before substantial investments in the data supply chain is made

In this scenario, similar to what many surgeons and physicians face, we must admit that we are unable to weigh options – including the option of no intervention because we do not know enough about the situation at hand. This presents an open-ended opportunity to ask questions and to express fears and concerns. Such modeling will make it increasingly possible to carry out contextualized analysis that reflects the complexity in order to allow better predictions and refine the problem – to actually understand what the issue is and what decisions can be made to address the problem.

