Kenya's Policy Response to COVID-19

Policy Report • August 2020

Key Messages

- Number of cases. Kenya detected its first COVID-19 case on March 12, 2020. As of August 16, the latest date for which we have reliable national data, Kenya had 30,120 cases.
- Disparities by geography and sex. There is huge geographic variation between counties. Most cases have occurred in Nairobi (59%), Mombasa (7%), and Kiambu counties (7%). Two-thirds of cases (65%) have been in men.
- Measures to control transmission. Since March, the Government of Kenya has put in place a number of public health measures, including a travel ban, curfew, and closures of schools, workplaces, and places of worship. It also mandated increases in health service capacity and supplies and expanded mass testing. The number and strictness of government policies in response to COVID-19 can be measured by the Government Response Stringency Index, a composite measure based on 9 response indicators (e.g., school and workplace closures), scaled from 0-100 where 100 is the strictest response. Kenya's score peaked at 93.52 in May and June, falling to 81.48 in July.
- Socioeconomic welfare policies. The government has implemented several measures to mitigate the social and economic impacts of the pandemic. It has expanded civil servant health insurance to all county-level health workers, provided cash and food aid to those in need, and implemented the Tax Law (Amendment) Act, 2020 to reduce the tax burden on citizens.
- Policy Gaps. Gaps remain in Kenya's policy response to COVID-19. Increased attention should be given to reaching the most vulnerable, ensuring an adequate pipeline of testing kits and personal protective equipment (PPE), increasing financial accountability of COVID-19 resources, and adopting novel approaches from other settings to overcome barriers with existing quarantine facilities and capacity concerns.
- Financing the response. Nearly US\$4.9 billion has been mobilized for Kenya's COVID-19 response, with most funds coming from external sources.



In this brief, we focus on Kenya's response to the COVID-19 pandemic. We begin by examining the country's level of preparedness to deal with a pandemic prior to COVID-19. We then give a snapshot of the current COVID-19 situation, the health system response and policies that the government has enacted to curb its outbreak, and the policy gaps. Finally, we describe how the country is funding its COVID-19 response.

Background

On January 23 2020, the World Health Organization's International Health Regulations (IHR) Emergency Committee advised all nations worldwide to be prepared to deal with transmission of the new coronavirus (then called 2019-nCov, now called SARS-Cov-2) in their countries. The committee stated: "*all countries should be prepared for containment, including active surveillance, early detection, isolation and case management, contact tracing and prevention of onward spread of 2019-nCoV infection, and to share full data with WHO.*"¹ On January 30 2020, the WHO declared COVID-19 to be a public health emergency of international concern.²

Pandemic preparedness prior to COVID-19

There are two widely used metrics that assess a country's readiness to deal with a pandemic: (i) the WHO's Joint External Evaluation (JEE) of IHR core capacities, and (ii) the Global Health Security (GHS) Index.

2017 JEE of Kenya's IHR core capacities

The JEE is an independent, collaborative multi-sectoral effort, based on a country mission, to capture a country's capacity to prevent, detect, and respond to public health risks. The report measures a country's preparedness across 19 technical areas (with 48 separate indicators), grouped into three categories: risk prevention (7 technical areas, 15 indicators), detection (4 technical areas, 13 indicators), and response (8 technical areas, 20 indicators). Each indicator receives a score of 1 to 5, where 1 is no capacity and 5 is sustainable capacity.

Figure 1 summarizes the 2017 JEE of Kenya, based on a February 27 – March 3, 2017 mission.³ Figure 1 shows the average score across the indicators in the three broad categories.

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In 2017, Kenya's average score of 2.9 across the 15 indicators in the prevent category suggests that overall there was moderate capacity to prevent biological, chemical, or radiation health risk. The indicators with the highest scores were veterinary or animal health workforce and national vaccine access and delivery (4). The remaining indicators received scores of 2 (limited capacity) or 3 (developed capacity).

Kenya had a similar level of preparedness in the detect category, with an average score of 2.9 across the 13 indicators in this category. Kenya scored the highest in laboratory testing for detection of priority diseases, indicator and event-based surveillance systems, analysis of surveillance data, syndromic surveillance systems, and field epidemiology training programs. Kenya had a mix of limited and developed capacity in other areas of its laboratory system, surveillance system, reporting structures, and workforce development.

The country performed poorest in the respond category, averaging just 2.0 across the 20 indicators in this category. Only 4 out of the 20 indicators had a score of 3, most of which were related to risk communication. The assessment showed that Kenya had no capacity (i.e., a score of 1) for a developed and implemented national multi-hazard public health emergency preparedness and response plan, medical countermeasures and personnel deployment, and mechanisms established for detecting and responding to radiation emergencies.



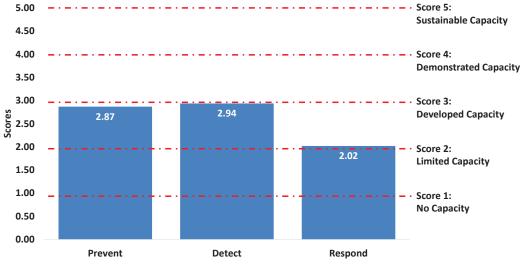


Figure 1: Kenya's average score on preparedness to tackle public health risks Source: Authors' creation using data from 2017 JEE of Kenya³

Global Health Security Index

The GHS Index is based on "a detailed and comprehensive framework of 140 questions, organized across 6 categories, 34 indicators, and 85 sub indicators to assess a country's capability to prevent and mitigate epidemics and pandemics."⁴ The six categories are prevention (e.g., immunization and tackling antimicrobial resistance); detection and reporting (e.g., real-time surveillance); rapid response (e.g., emergency response operation); health system (e.g., capacity in clinics, hospitals, and community care centers); compliance with international norms (e.g., compliance with IHR reporting); and risk environment (e.g., political and security risks). The index ranges from o-100, where 100 means perfect health security conditions. A score below 33.3 is considered low, 33.4-66.6 is moderate, and 66.7-100 is high.⁵

In 2019, Kenya's overall preparedness score was 47.1, above the global average of 40.2 across 195 assessed countries, putting Kenya in the "moderate" preparedness category.⁵ Across the six categories, Kenya performed below average in rapid response, health system preparedness, and risk environment. Kenya performed best on detection and reporting and compliance with international norms (68.6 and 67.1, respectively.)⁶

Current COVID-19 situation and impact

Kenya's first case of the new coronavirus was identified on March 12, 2020, believed to be brought into the country by a Kenyan citizen returning home from the United States.⁷ As of August 16, the latest date for which we have reliable national data, there were 30,120 confirmed cases and 474 confirmed deaths (Figure 2 and Figure 3).⁸ Cases in Kenya thus far have been primarily concentrated in three counties: Nairobi (59%), Mombasa (7%) and Kiambu (7%). Most confirmed cases (65%) have been among men (Figure 4).⁸

As of August 16, a total of 391,416 tests had been conducted, meaning the total positivity rate is currently at 7.7% (the WHO guidance is that countries should have a rate of below 5% for at least 14 days before reopening).⁸ According to the health cabinet secretary, Kenya was equipped enough to begin mass testing after receiving a shipment of medical supplies from China in mid-April.⁹ Mass testing currently occurs nationwide, including prison populations, with each county designating at least one hospital as a COVID-19 hospital.⁹ Testing initially prioritized high-density and/or high-risk areas (e.g., slums, hospitals).⁹



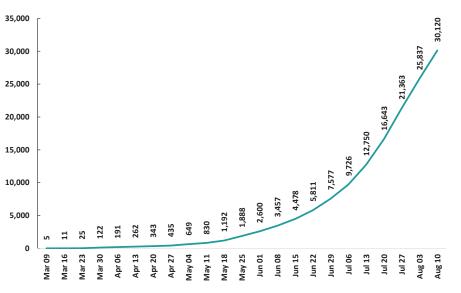


Figure 2: Total confirmed cases in Kenya⁸

However, despite being free of charge, mass testing initially had a low turnout. Low turnout was due to several factors, including the provision of incorrect contact information by those testing positive (limiting the effectiveness of contact tracing); the perceived stigma of infection; the costs of quarantine that must be borne by the individual (now lifted); perceived risks of contracting COVID-19 from a testing facility; concerns of potential unemployment if a test comes back positive; and the pain and discomfort associated with the testing procedure.^{10–13}

Kenya currently has limited intensive care unit (ICU) capacity: only 22 of the 47 counties have at least one ICU.¹⁴ Kenya has a total of 537 ICU beds and 256 ventilators, which, according to a recent study, is significantly below the capacity likely required to respond effectively.¹⁴

Policy steps taken

According to the Government Response Stringency Index, a composite measure of the number and strictness of a government's policies to control COVID-19, Kenya's score peaked between May 4 and June 22 at 93.52 out of 100, indicating a very strict response. Kenya's policy approach became progressively stricter as the virus entered Kenya: 2.78 on February 24; 13.89 on March 13; 56.48 on March 19; 87.04 on March 27.¹⁵ Kenya's response has relaxed since its peak, most recently on July 23 at 81.48. Figure 5 summarizes several examples of public health and socio-economic measures put into place by the government over the course of its outbreak.

Public health policies

Establishment of the National Emergency Response Committee on Coronavirus

On February 28 2020, President Kenyatta established a new committee to guide the response to COVID-19.¹⁶ This committee, chaired by the Cabinet Secretary for Health, was tasked with coordinating the country's COVID-19 preparedness, prevention, and response. In particular, this committee is responsible for coordinating capacity building of medical professionals, enhanced surveillance at points of entry, the preparation of isolation and treatment facilities, medical supplies and protective gear, and domestic and external financial and human resources support. Additionally, the committee is responsible for conducting economic impact assessments, developing mitigation strategies, and creating and maintaining entry requirements for travelers coming from affected areas.

Travel ban

On March 6 2020, Kenya cancelled all international meetings and events.¹⁷ Soon after, on March 25, Kenya suspended all international flights into and out of the country.^{18,19} Kenya also closed the border with neighboring countries



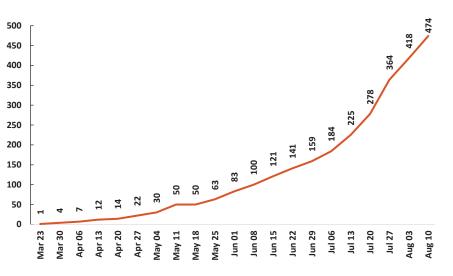


Figure 3: Total confirmed deaths in Kenya⁸

(Tanzania, Somalia, and Uganda), except for cargo transport.²⁰ All cargo drivers are required to undergo a coronavirus test prior to entry.^{20,21} Some of these restrictions were subsequently relaxed following an address to the nation by President Kenyatta on July 6. Since then, all local and international flights have resumed service, with measures put in place to curb the spread of COVID-19.²² The president announced that domestic flights would resume starting July 15, while international flights would resume the beginning of August.²³

Kenya also limited its domestic movement. Non-essential travel into and out of the major cities of Nairobi and Mombasa, both of which had high COVID-19 infection rates, was restricted, although such limitations were eased on July 7.²⁴

Dadaab and Kakuma refugee camps (which together have nearly half a million people) have also faced movement restrictions over the last several months in accordance with national government policies.^{25,26} As of August 6, there were 52 confirmed cases in Kenya's refugee camps.

Curfew

On March 27, Kenya began a strict curfew from dusk until dawn.²⁷ On July 7, the curfew times were relaxed to 9pm until 4am to reduce the impact on economic activities. The curfew has been extended many times. The heavy-handed

enforcement of this policy by the police resulted in injuries and deaths, and caused significant complaints from the Kenyan public.^{28,29}

Closures of schools and higher learning institutions

All schools and higher learning institutions closed on March 18.³⁰ The Education Ministry announced on July 7 that all primary and secondary schools will be closed until 2021, while a phased opening of higher learning institutions that observe all required protocols will begin starting January 2021.²⁴

Closure of work places, places of worship and ban on public, social gatherings

While there was no official directive to close work places, most voluntarily closed or switched to remote working; many have gradually re-opened.³¹ All places of worship were ordered closed beginning March 27 and have since reopened, albeit with precautions.³² All public gatherings, such as political rallies, were also banned. Strict guidelines for essential social gatherings, especially funerals, were put in place, with only close relatives allowed to attend funerals.

Prison populations released

On April 2, Kenya's judiciary announced that it had released about 4,800 prisoners "serving sentences for petty offences to help contain the spread of the novel corona-



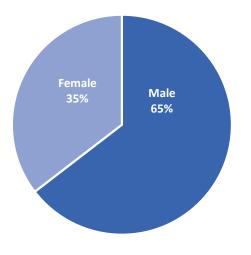


Figure 4: Sex distribution of confirmed cases⁸

virus in the country."³³ The government has put in place measures to restrict the spread of COVID-19 infection among prison inmates. Despite these measures, there have been documented infections in prisoners.³⁴

Mandated spread precautions

To slow the spread of the new coronavirus, on April 4 2020, the government implemented a mandatory mask wearing policy.³⁵ Other national policies implemented include provision of public hand washing stations and a ban on all social gatherings. All public service vehicles, including public transit, may only operate at 50% or below full passenger capacity, and drivers are required to meet certain safety requirements before being allowed to operate vehicles.^{20,36}

Additional healthcare worker training

11,000 healthcare workers have been trained to support the COVID-19 response.³⁷ The Ministry of Health led a training of trainers program that prepared county-level leaders to share knowledge of COVID-19 testing and management in their respective home counties.

Mandated increases in capacity, supplies, and human resources On April 10, the Ministry of Health directed all 47 counties to identify and designate at least one COVID-19 hospital.³⁸ As of June 17, 187 hospitals across the country were prepared for COVID-19 cases.³⁹ 453 ICU beds have been secured and 180 quarantine facilities are available. More than half of the required additional healthcare workers have been recruited (3,220 out of the required 5,550). As part of President Kenyatta's 10th address on COVID-19, he called on the Ministry of Health to develop a protocol to temporarily allow retired health care workers to return to the workforce to help bridge the remaining gap.^{40,41} Additionally, the government has expanded laboratory testing capacity and increased local manufacturing of personal protective equipment to help meet demand.^{42–44}

Socio-economic policies

Expanded health insurance for county-level government workers

The national government has now classified all county level government workers as civil servants, thereby automatically qualifying these individuals for the National Hospital Insurance Fund (NHIF).³⁹ This distinction ensures that government employees at the county level have the same classification as those at the national level. This move was made to avoid unnecessary out of pocket expenditures for government workers who are critical to controlling the pandemic.

Financial support

On March 25 2020, a presidential address outlined several proposals to cushion the financial hardships of the pandemic on Kenyans.⁴⁵ As a result, the government implemented the Tax Law (Amendment) Act, 2020, which went into effect on April 25 2020. This act put into action the following measures:

- a reduction of personal income tax rate from 30% to 25%;
- complete tax relief for individuals earning less than 24,000 shillings (approximately US\$224);
- a reduction in the resident corporate income tax rate from 30% to 25%;
- a reduction of the turnover tax rate for small and medium-sized enterprises from 3% to 1%; and
- an immediate reduction in the value added tax (VAT) rate from 16% to 14\%. 46

Via its cash transfer program, Kenya allocated an additional 10 billion shillings (about US\$100 million) to one million vulnerable people (e.g., elderly, orphans).^{47,48} These populations are part of an existing cash transfer program that provides 2,000 shillings (about US\$19) to each individual monthly.⁴⁷



	•	July 6 Phased reopening began
	•	April 25 Tax Law (Amendment) act in effect
	•	March 27 Curfew implemented, ban on public and social gatherings
	•	March 25 International travel ban implemented
	•	March 18 Schools, higher education institutions close
	•	March 12 First confirmed case of COVID-19
	•	February 28 National Emergency Response Committee established

Figure 5. Timeline of policy and coordination measures by the Kenyan government Key: **green**—public health measures, **blue**— social and economic policies

Food aid

Kenya has implemented food aid programs at both national and county levels to support citizens struggling to obtain essential food items, not only due to economic strains related to COVID-19 (e.g., from stay-at-home orders) but also from the recent significant flood damage.⁴⁹ However, early attempts at direct food aid provision faced major problems including fatal stampedes at distribution sites, accusations of misappropriation of rations, and a lack of social distancing while waiting in line to receive food rations.^{47,50–52} Recent efforts have been made to minimize these problems, for example, by using digital platforms for citizens to obtain food rations from local vendors.⁵³

To mitigate the impact of these crises on food security, the County Government Coordination and Food Supply Working Group has allowed agriculture markets to remain open when proper hygiene and social distancing is observed. The group has also suspended taxes on food stuffs in all counties, allowed for the importation of maize, and exempted transport of food items from the curfew.^{54,55} Additionally, this working group is monitoring availability and affordability of, and access to, food and water for the duration of the pandemic.

Policy gaps

Kenya has taken significant steps to address weaknesses in its coronavirus response. However, the response has faced ongoing limitations that must still be addressed.

Enhance protection of healthcare workers

Gap: There has been a recent rise in infections among healthcare workers.^{56,57} This rise may be due to hospitals' inability to sufficiently isolate confirmed cases due to operating over capacity. Moreover, the main cost driver in caring for patients hospitalized with COVID-19 in Kenya is the cost of PPE to healthcare workers. PPE supply has thus far been unable to meet demand. At the time of writing, there was no policy on procurement and distribution of adequate and high quality PPE to frontline healthcare workers.

What needs to be done: Health systems need to be strengthened, especially two systems building blocks— human resources for health and medical supplies—to ensure healthcare workers are outfitted with adequate medicines, equipment, and PPE to perform their duties safely and effectively.

Increase social protection for vulnerable populations

Gap: Although the entire population is at risk of COVID-19, some populations are at higher risk of experiencing more severe health, social, and/or economic impacts from the



crisis.⁵⁸ Higher-risk populations include residents of informal settlements, prisoners and prison workers, the elderly, and those with co-morbidities such as cancer, diabetes, high blood pressure, and HIV/AIDS.^{59,60} Only 64% of Kenyans have financial protection against catastrophic health expenditures.¹⁴ Although the Kenyan government has launched emergency funds aimed at cushioning the burden on vulnerable populations, there have been instances of corruption where the allocated funds have not reached the targeted population.^{61,62}

What needs to be done: More investment is needed to help support Kenyans with co-morbidities. This population must be able to continue to seek treatment without fear of catastrophic expenditure. Kenya must identify ways to remedy harsh treatment of those in informal settlements to ensure this population does not face any further hardship. Furthermore, to ensure that resources reach vulnerable populations efficiently and effectively, Kenya could take advantage of its existing community structures (e.g., local administration, religious leaders) to help in identification and distribution of resources to target populations while promoting transparency.

Improve quarantine center model

Gap: Kenya chose to use quarantine centers to contain those suspected of having COVID-19. These centers were intended to monitor travelers for 14 days after reentry. However, the centers have been criticized for inadequate sanitation, forcing stays beyond 14 days, insufficient food and water, withholding coronavirus test results, and requiring tenants of these centers to pay the bill for their stay.⁶³ The Ministry of Health has since suspended the requirement for tenants to foot the bill for their stay themselves.

What needs to be done: Adequately resourced quarantine centers need to be established in each of Kenya's counties. We propose that Kenya considers incorporating quarantine centers into a new model of care facility to maximize use of available resources. One such model (described below) is the *Fangcang* shelter hospital; a concept developed in China, which proved effective in the management of people infected with COVID-19. Such a change could improve technical efficiency in service delivery.

The government needs to:

- Enhance protection of healthcare workers by securing adequate PPE and preventing hospitals from operating overcapacity
- 2. Invest more resources to cushion high risk populations from catastrophic health costs, and ensure people in informal settlements do not face any further harsh treatment.
- 3. Improve the current quarantine center model through a new model of care facility, such as the *Fangcang* shelter hospital
- 4. Improve coordination, transparency, and procurement processes of testing kits and PPE between the central government and the counties
- 5. Enhance financial accountably of COVID-19 resources by establishing an independent commission to review COVID-19 financial management practices
- 6. Adopt novel strategies from other countries, such as the *Fangcang* shelter hospital, to cope with the expected surge in COVID-19 cases

Box 1. What needs to be done to control Kenya's COVID-19 epidemic

Ensure adequate pipeline of affordable testing kits and PPE Gap: Kenya's testing kit capacity is insufficient for testing the expected number of infected persons over the coming months.⁶⁴ To adapt to the inadequate numbers of testing kits, Kenya had to revise its discharge protocols based on symptoms (e.g., no fever for three days after all other symptoms have ceased), rather than a negative test result.⁶⁴ Additionally, Kenya's PPE supply has been unable to meet demand and much of what has been acquired has been purchased at rates significantly over the market rate.⁶⁵

However, even if more testing kits become available many citizens may be hesitant to proactively seek testing. Citizen mistrust may be linked to recent high-profile events such as slum destruction, evictions, and the violent enforcement of the country's curfew.⁶⁶ Contact tracing is still a challenge, with people unwilling to provide information on contacts or personal details, such as telephone numbers and physical addresses.^{67,68} Although there have been efforts to use technology to improve contact tracing, it cannot be successful if people provide incorrect information.^{69,70}

What needs to be done: The procurement and distribution of testing kits needs to be streamlined and better coordinated between the central government and the counties.



In particular, the role of the Kenya Medical Supply Authority (KEMSA) in the procurement of testing kits needs to be reviewed and made more transparent. Improved procurement practices need to be linked to a strategy on increasing public support for voluntary testing. A better public engagement strategy is needed to encourage the public to voluntarily seek testing. Once the existing barriers to voluntary testing are addressed, contact tracing as a result will improve.

Increase financial accountability of COVID-19 funding

Gap: Kenya has both mobilized and received external funding for its coronavirus response. However, there have been allegations that the finances have not been allocated efficiently or in some cases, ethically. For example, the Ministry of Health was criticized for using World Bank funds for providing snacks and tea for its teams.^{20,71,72} The Kenya Conference on Catholic Bishops released a statement calling for transparency of pandemic spending.⁷³

What needs to be done: An independent commission on COVID-19 resource management comprising of representatives of government, private sector, religious bodies, and the donor community would streamline financial management and technical efficiency in the use of available resources.

Apply novel strategies to domestic response

Gap: Strategies that are being proposed to slow the spread of infections include increased testing, home-based care for patients with mild symptoms, increased numbers of trained healthcare workers, and improved contact tracing. However, there is a danger that Kenya's health system might be overwhelmed as the number of cases continue to increase. To prepare for a potential surge, ICUs in county referral hospitals must be better equipped.

What needs to be done: Kenya needs to think of adopting novel strategies that have worked elsewhere to cope with the expected surge in COVID-19 cases in the coming months. One such strategy is the establishment of *Fangcang* shelter hospitals that allowed China to successfully contain the pandemic in Wuhan.⁷⁴ Kenya could consider establishing such shelters in all counties and in refugee camps, and incorporate quarantine centers within the shelters. The shelters could manage all the mild cases of COVID-19 infection, relieving the pressure on the county and national referral hospitals to deal with cases requiring ICU care.

Funding the COVID-19 response

According to Devex's analysis of COVID-19 funding, as of August 9, nearly US\$4.9 billion dollars had been committed to Kenya's response (Table 1).⁷⁵ Over half of the committed funds (US\$2.6 billion) target the country's public health response efforts, US\$1.7 billion is for its economic response, while most of the remaining funds focus on development of vaccines and treatments (US\$547 million) (Figure 6). The African Development Bank and the World Bank are the two largest external funders, providing US\$1.6 billion and US\$1.2 billion, respectively. The Kenyan government has provided US\$508 million. Kenya has also received support from the private sector, philanthropies (e.g., the Bill & Melinda Gates Foundation), and bilateral and multilateral donors: the International Monetary Fund (IMF), the

Funder	Amount (US\$)
African Development Bank	1.6 billion
World Bank	1.2 billion
IMF	739 million
Gavi	549 million
Bill & Melinda Gates Foundation	547 million
Government of Kenya	508 million
Other	345 million
TOTAL	4 e billion

Table 1. Overview of funding for COVID-19 by source

Source: Data from Devex analysis of funding opportunities⁷⁵, reflected as of August 9, 2020, values rounded



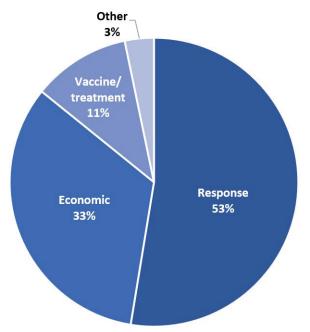


Figure 6: COVID-19 funding by focus Source: Devex analysis of funding opportunities⁷⁵, reflected as of August 3, 2020, values rounded

Danish International Development Agency, the European Union, the US Agency for International Development, the Swedish International Development Agency, and Gavi, the Vaccine Alliance.

The World Bank projects that growth in Kenya's gross domestic product per capita will significantly slow or even potentially contract in 2020.⁷⁶ Despite Kenya's relatively limited number of cases to date, COVID-19 has caused significant economic domestic shocks through disruption in trade, tourism, and foreign direct investment.⁷⁶ Kenya is also facing a loss of tax revenue due to its economic stimulus measures. However, it has taken action to generate additional revenues to close the gap.⁷⁷ For example, the government has reduced tax incentives and increased the tax scope.⁷⁷ However, Kenya's domestic finances are likely to be strained given it's significant borrowing burden. In mid-May, the IMF raised Kenya's risk of debt distress from moderate to high, although the IMF noted that as exports revert back to normal levels, the economic outlook is likely to improve.⁷⁸

Conclusion

Since the COVID-19 pandemic began, the government of Kenya has implemented a range of public health and socio-economic measures, such as a travel ban, curfew, closures of schools and workplaces, expansion of health insurance, cash and food aid, and tax relief. However, Kenya's cases and fatalities continue to grow and the economy is expected to remain strained.

After easing lockdown restrictions on July 6, there is a risk of further viral transmission. To ensure the outbreak does not worsen, the government needs to implement strategies for identifying and protecting the most vulnerable, facilitate the establishment of *Fangcang* shelter hospitals, improve procurement and distribution of testing kits and PPE, and increase financial accountability over the response.

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Methods

Our research included a desk-based review of websites, strategy documents, grey literature reports, and academic literature. This project was screened for exemption by the Duke University Institutional Review Board as part of the study 'Driving health progress during disease, demographic, domestic finance and donor transitions (the"4Ds"): policy analysis and engagement with transitioning countries.'

