

International Development Cooperation, Corruption, and COVID-19 in Kenya: Lessons for Infectious Disease Control

Kennedy Chesoli¹ and Peter Kimosop²

¹Independent Sustainable Development Consultant

²Youngstown State University, Department of Humanities and Social Sciences, Youngstown, OH 44512, USA

Corresponding Author: kenchesoli@gmail.com

Abstract

The novel coronavirus poses a grave danger to human populations, healthcare systems and world economies. These threats are more pronounced in developing countries with ill-prepared healthcare systems to manage such a pandemic. International development partners have responded by supporting them with financial, technical, and in-kind support. A review of local and international mainstream media reveals a very disturbing picture: Kenya's corrupt officials, particularly in the health ministry, were mismanaging and diverting foreign aid meant for COVID-19 mitigation and control efforts. In addition, the country missed valuable opportunities to improvise and innovate its health systems. It also failed to use cost-effective interventions that could have delivered stronger outcomes, such as using schools as isolation centers and deploying the *Nyumba Kumi* initiative. To successfully mitigate against future infectious disease outbreaks, partners would need to help developing countries: establish, equip and staff a fit-for-purpose healthcare infrastructure; grow domestic capacity for manufacturing drugs, vaccines and medical equipment; upgrade medical research capacity; and develop a surveillance system that is driven by Big Data and Artificial Intelligence. It is imperative that they combat corruption by seeking value for money and embracing the principles of aid effectiveness – both of which are missing in the ongoing flows to Kenya.

Keywords: COVID-19, development cooperation, South-South cooperation, development effectiveness, corruption, mitigation

INTRODUCTION

The mounting economic impact from the novel coronavirus is only comparable, in scale and magnitude, to major global disasters of the last century including World Wars, the Great Depression, and the Spanish flu pandemic. As of August 15, 2020, there had been 21.5 million confirmed cases, 14.2 million recoveries and 766,027 deaths around the world (Worldometer, 2020). Nearly half of all known cases and fatalities had been in Europe and North America, with Africa accounting for a modest 5 percent. The pandemic is decimating economies as global Gross Domestic Product (GDP) is projected to contract by about 5.2 percent, with per capita income falling 3.6 percent. The economies of the U.S. and Japan are forecast to contract by 6.1 percent while output from the Eurozone will contract by 9.1 percent (World Bank, 2020). While Sub-Saharan Africa's GDP is expected to decline to negative 2.1 percent in 2020, Kenya's economic growth is projected to decline from an average of 5.7 percent in 2019 to 1.5 percent in 2020 (World

Bank, 2020). This contraction would adversely affect critical sectors including health, education, agriculture, and housing, all of which are part of the country's Big Four Agenda.

The role of development cooperation in alleviating poverty, fighting hunger, inequality and social exclusion remains as critical today as it was in 1971 when the United Nations formalized it. That year, the General Assembly adopted a Resolution that required industrialized nations to provide foreign assistance of at least 0.7 percent of their Gross National Income (Reality of Aid, 2018). Traditional North-South cooperation, practiced by the West, is aid driven, emphasizes social development, good governance, and clear donor-recipient dichotomy. There is greater coordination and consultation among donors who ascribe to the principles of aid effectiveness, namely: advancing country ownership; a focus on results; fostering inclusive partnerships; transparency and mutual accountability (OECD/UNDP, 2019).

Emerging economies and other developing countries, among them, China, India, South Africa, Brazil, and Turkey champion South-South Cooperation as a unique, separate, and parallel development cooperation framework. They stress that their cooperation is a multi-faceted demonstration of solidarity, with social, economic, environmental, technical, and political interactions (Amorim, 2016). South-South cooperation is a business-oriented approach with development, humanitarian, commercial, financial, political, cultural, and strategic interests. Although there is a proliferation of South-South institutions, many of them remain informal, which indicates difficulty in establishing common definitions, rules, and principles of the framework (Stuenkel, 2013). Against the COVID-19 outbreak, the United Nations Committee for Development Policy called for international development cooperation actors to create a targeted package of support measures such as concessional financial flow, debt cancellation, food aid, market access of exports, and availability of drugs and vaccines (United Nations, 2020).

There is a strong push for partners to enhance their development cooperation in the health sector, especially by helping poor countries establish appropriate systems of surveillance and data gathering, developing teams and institutions to undertake data analysis, and in formulating effective responses to global health threats (McKee et al., 2005). The Lancet Commission on Investing in Health suggested that donor financing should increasingly support international collective action for health or global functions that aim to deal with transnational challenges (Watkins et al., 2018). It has been noted that in countries where external assistance is important, national health policies, strategies, and plans are crucial in improving development effectiveness (Collins et al., 2019).

Although Kenya is East Africa's largest economy, it faces serious debt sustainability challenges because it has borrowed heavily in recent years. The country is spending a considerable share of its revenue servicing these debts, hence threatening the sustainability of critical sectors such as healthcare. Kenya enjoys robust development cooperation from traditional development partners and more recently from emerging economies of the global south which has helped bridge its budgetary shortfalls. Whereas its current healthcare is largely financed through out-of-pocket and government expenditure, donors such as the United States Agency for International Development (USAID), World Bank, World Health Organization (WHO), UK's Department for International Development (DFID), Japan International Cooperation Agency (JICA), German Development Agency (GIZ), and Danish International Development Agency (DANIDA) have been instrumental in the provision of healthcare in Kenya (Muchemi, 2018; Munge & Briggs, 2014).

This study is based on an extensive review of local and international media sources which show that COVID-19 has triggered an inflow of financial and medical supplies from bilateral and multilateral partners as well as from Non-Governmental Organizations (NGOs). However, weak governance systems and corruption has led to the continued mismanagement and the pillage of these donated resources. Principally, the paper focuses on the role of development cooperation in mitigating the spread and impact of COVID-19 in Kenya, as a model for supporting future infectious disease outbreaks. It also explores the continuous expansion and evolution of South-South cooperation as well as the delicate balance of commercial interests and emergency assistance in the global South by the industrialized north.

Kenya's healthcare system

Healthcare is one of the major priorities of the Kenyan government. In 2018, Universal Health Coverage (UHC) was declared a national priority, and an integral part of the President's 'Big Four Agenda' for national sustainable development. The government also pledged to achieve universal access to essential health services by the year 2022 (Wangia & Kandie, 2019). To this end, several initiatives have been undertaken to boost access and demand for healthcare services which include piloting of the *Free Primary Health Coverage Services For All* in Kisumu, Nyeri, Isiolo, and Machakos counties (Ministry of Health of Kenya, 2018). The government has also prioritized free services at expanded maternity wings in most public health facilities; subsidized health insurance for the poor, vulnerable, and the elderly; health financing strategy that will ensure citizens are covered with some form of insurance; and staff and equipment through the Managed Equipment Service (MES) initiative at all levels (Ministry of Health of Kenya, 2018).

The government has strived to expand its healthcare capacity and increase personnel, especially following the 2013 devolution of healthcare services. The current ratio of practicing nurses to the total population is estimated at 122 nurses per 100,000 persons against the WHO recommended ratio of 250 (Kenya National Bureau of Statistics [KNBS], 2020). As indicated in Table 1, there are 12,090 Medical Officers (doctors), translating to approximately 25 doctors to 100,000 persons, against the WHO recommended minimum staffing level of 360 doctors (Ministry of Health of Kenya, 2015).

The COVID-19 pandemic, which the WHO declared on January 30, 2020, as "an international public health emergency that posed high risk to countries with vulnerable health systems" creates new impetus for Kenya to continue advancing quantity, quality, and access to its healthcare (Sohrabi et al., 2020, pp 71). It is an opportunity to innovate, expand and recruit more medical staff including doctors, pharmacists, lab technicians and nurses with the goal of attaining WHO staffing requirements. The country has a favorable outlook for it has 28,822 students in its nursing programs (KNBS, 2020).

In the interim, development partners are helping the country manage and contain the outbreak by providing financial and technical support that responds to the prevailing fiscal and emergency needs. The crisis offers traditional partners an opportunity to truly embrace and demonstrate their commitment to the principles of development effectiveness highlighted in the previous section. It is also an opportunity for southern partners to expand their development cooperation into human health emergencies. Before examining how partners have responded to Kenya's call for support, the next section discusses the growing COVID-19 crisis and how the government has responded thus far.

Table 1. Registered health personnel by cadre, 2019 (provisional)

Category	No. of personnel	Personnel per 100,000 population
Medical Officers	12,090	25
Dentists	1,288	3
Pharmacists	3,825	8
Pharmacy Technologists	10,815	23
BSc (Nurses)	7,242	15
Registered Nurses	58,247	122
Enrolled Nurses	28,822	61
Clinical Officers	22,626	47
Public Health Officers	4,390	9
Public Health Technicians	1,328	3
Laboratory Technologists	13,144	28
Laboratory Technicians	3,886	8
Nutrition and Dieticians	3,573	8
Nutrition and Dietician technologists	5,284	11
Nutrition and Dietician technicians	927	2
TOTAL	177,487	373

Source: Economic Survey 2020 (KNBS, 2020)

Kenya's response to COVID-19

Kenya discovered its patient zero on March 13, 2020. As of August 15, 2020, known cases had increased to more than 29,000 (Worldometer, 2020). As shown in Table 2, the country ranked fifth on the African continent in terms of screening tests. It had conducted a total of 387,670 tests, behind South Africa (3.35 million), Morocco (1.58 million), Ethiopia (589,694) and Ghana (424,315). Approximately 0.7 percent of the country's population¹ had been screened, compared to South Africa (5.6%), Morocco (4.3%), Ghana (1.4%) and Senegal (0.8%).

The country had a slow start in mass screening, likely due to a steep learning curve, and difficulty in procuring testing kits (World Health Organization, 2020). It attained a thousand tests per day nearly three months after it first began the exercise. While it has shown a potential to successfully conduct 7,000 tests a day, there are notable daily fluctuations indicating, perhaps, lingering human and institutional challenges (Figure 1). So far, the country's recovery rate of 53.5

¹ Although the 2019 Housing and Population Census, conducted by the Kenyan government, indicated a population of 47,564,296, Johns Hopkins University uses a higher figure of 53,855,211 which is a Worldometer elaboration of the latest United Nations data. This paper uses the Johns Hopkins estimates.

percent, is remarkably lower than the global (66.3%) and continental (74.0%) estimates. Overall, there is a strong positive correlation between screening and confirmed cases; and screening and reported deaths (with R score of 0.9 in both cases).

Table 2: COVID-19 screening, cases, recoveries, and deaths

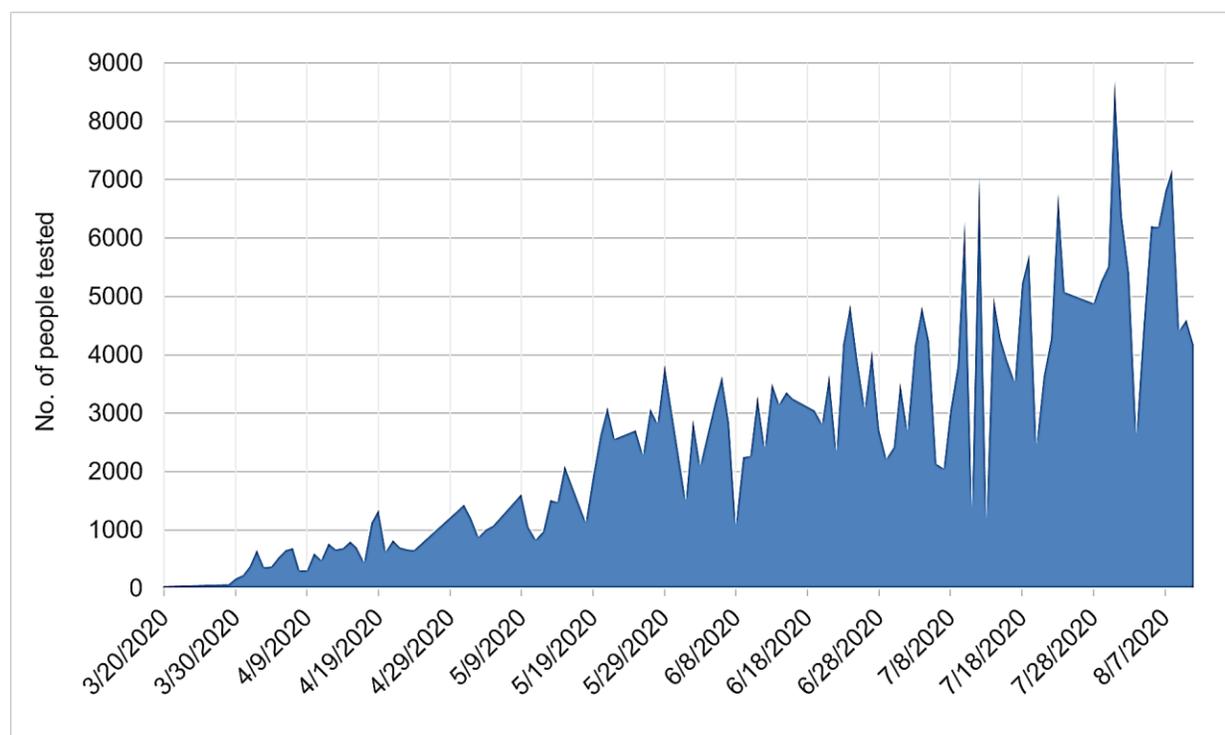
	Population (POP)	Tests (TST)	Cases (TC)	Recoveries (REC)	Deaths (DTH)	DTH/TC (%)	REC/TC (%)	TST/POP (%)
Ethiopia	115,161,304	589,694	28,894	12,037	509	1.8	41.7	0.5
Ghana	31,119,277	424,315	42,210	40,147	231	0.5	95.1	1.4
Kenya	53,855,211	387,670	29,849	15,970	472	1.6	53.5	0.7
Morocco	36,943,799	1,583,234	41,017	28,566	632	1.5	69.6	4.3
Senegal	16,774,199	129,392	12,032	7,637	251	2.1	63.5	0.8
S. Africa	59,365,223	3,351,111	579,140	461,734	11,556	2.0	79.7	5.6
Uganda	45,836,124	312,792	1,434	1,142	13	0.9	79.6	0.7
Africa			1,106,364	819,192	25,213	2.3	74.0	
Asia			5,570,746	4,263,498	118,606	2.1	76.5	
Europe			3,143,933	1,902,948	202,917	6.5	60.5	
N. America			6,478,573	3,526,470	245,423	3.8	54.4	
S. America			5,162,358	3,715,028	173,448	3.4	72.0	
World			21,487,827	14,243,136	766,027	3.6	66.3	

Source: Worldometer, 2020

In an attempt to mitigate the spread and impact of the novel coronavirus, the Kenyan government invoked standard measures, such as social distancing, lockdowns, hygiene, and enforcement of the wearing of face masks. Public gatherings and in-person learning, and religious functions were suspended. There were attempts to keep international travel open by subjecting arriving passengers to a mandatory 14-day quarantine. However, this was short-lived as the government opted for a complete shutdown of local and international air travel.

On February 28, 2020, the government established the National Emergency Response Committee through an executive order No. 2 of 2020 (Government of Kenya, 2020). A month later, the Committee made a raft of precautionary measures such as issuing directives for all entertainment venues, bars, restaurants and other social spaces to close by 7:30 p.m. every day; local food markets to be disinfected regularly and to maintain high standards of hygiene; businesses were encouraged to permit staff to telecommute; and public service vehicle operators to limit passenger carrying capacity to 60 percent. These measures were to take effect on March 23, 2020 and to remain in place until further notice.

Figure 1: Daily COVID-19 screening in Kenya (March 20 – August 10, 2020)



As the crisis worsened, the government instituted more stringent measures, including dusk-to-dawn curfews, cessation of movement by persons, and the closing of national borders except for truckers of transit goods. Several directives on how to conduct public burials by capping attendance to no more than 50 individuals were also issued. A clearance certificate was required for inter-county travel and a compliance certificate for public service vehicles. Additionally, consumption of alcohol in bars and restaurants was banned. Police and public administration officials who were tasked with enforcing these measures initially acted with extreme brutality. In the first 10 days of the curfew, at least six people were reportedly killed by the police (Human Rights Watch, 2020).

COVID-19 screening sites and isolation centers were established but largely in the main urban areas and at international border points for truckers, namely Holili, Isibania, Namanga, Busia, and Malaba. Senior Ministry of Health officials conducted daily briefings, some of which were led by the President. Furthermore, there were national and county government consultative meetings to discuss strategies, assess impact and review progress. As an example of the outcomes of these meetings, the president directed that each of the 47 counties, in preparation for an expected surge in positive cases, establish at least a 300-bed isolation center. The government took part in a series of intergovernmental deliberations intended to achieve greater public policy coherence and coordination, as well as sharing of expectations and experiences. Such meetings were organized by the African Union, the Intergovernmental Authority on Development (IGAD), East Africa Community (EAC), and the Common Market for Eastern and Southern Africa (COMESA).

Development cooperation and corruption

Development cooperation

Traditional development partners, including international financial institutions have provided a mix of loans, grants, and in-kind assistance to support the country's battered economy, expand the capacity of its healthcare system in the face of a deadly infectious disease, and mitigate against fiscal shortcomings (Table 3). Emergency funding was provided for the purchase of medical supplies, such as Personal Protective Equipment (PPE) and ventilators, and recruit and deploy medical and administrative personnel. Considerable resources have been secured ostensibly to cushion vulnerable households and businesses from the economic downturn. Additionally, the country has received technical cooperation for medical research, capacity building, knowledge sharing and public awareness campaigns.

Table 3: Foreign aid for combating COVID-19 in Kenya

Date (2020)	Partner	Type of support
Mar 11	AMREF	Partnership with Ministry of Health for health workers COVID-19 education (Amref, 2020)
Mar 22	China	In-kind: Jack Ma Foundation (Endeshaw & Paravicini, 2020)
Apr 2	World Bank	USD 50 million to fight and mitigate against COVID-19. (Muthembwa, 2020)
Apr 6	China	In-kind: Jack Ma Foundation (Matengo, 2020)
Apr 10	China	In-kind: The Kenya-China Economic and Trade Association (Hongjie, 2020)
Apr 23	UNDP	In-kind: COVID-19 waste management equipment at health centers (UNDP, 2020)
Apr 28	USA	USD 6.6 million: U.S. Centers for Disease Control and Prevention (CDC) (U.S. Embassy Kenya, 2020a)
May 5	UAE	In-kind: United Arab Emirates Ministry of Foreign Affairs & International Cooperation for Covid-19 (UAE MOFAIC, 2020)
May 6	IMF	USD 739 million: COVID-19 emergency financing (Fouda, 2020)
May 9	Turkey	In-kind: The Turkish Cooperation and Coordination Agency (Wasike, 2020)
May 14	China	In-kind: Association of Chinese Business Owners in Kenya (Xinhua News Agency, 2020).
May 14	World Vision	In-kind: Medical supplies for Covid-19 support (Ooko, 2020).
May 14	European Union	EUR 15 million: Aid package humanitarian support (Ujvari, 2020)
May 20	World Bank	USD 1 billion: Budget support (Rosauer, 2020)

May 20	United Kingdom	KES 2.6 billion: To fight and mitigate against COVID-19 (Capital News, 2020).
May 22	AfDB	EUR 188 million: To fight and mitigate against COVID-19 (Terry, 2020).
June 2	USA	In-kind: Embassy donation to journalists and media professionals (U.S. Embassy Kenya, 2020b)
June 11	European Union	EUR 64.4 million: To fight and mitigate against COVID-19 (Chadrak, 2020).
Jun 29	European Union	EUR 2.57 million: From EU/WHO for covid-19 support (Mwakisha, 2020)
Jul 1	USA	USD 50 million: To fight and mitigate against COVID-19 (U.S. Embassy Kenya, 2020c).
Jul 2	WFP	USD 10 million: For Nairobi's informal settlements COVID-19 nutrition support (Karimi, 2020).
Jul 15	Cuba	In-kind: 20 Specialized doctors (Kamau, 2020)
Jul 22	China	In-kind: From First Lady of China to help mothers and children tackle the effects of COVID-19 (Xinhua News Agency, 2020b)
Jul 23	United Kingdom	KES 150 million: Grants to support Covid-19 Kenyan scientists (Wanambisi, 2020)
Jul 28	European Union	In-kind: From Slovakia (EU Civil Protection, 2020)
Aug 7	World Bank	USD 150 million: To support fight COVID-19 pandemic in informal settlements (Muthembwa, 2020b)

At a global level, the Chinese development cooperation has been truly significant in magnitude and reach. China has sent humanitarian assistance consisting of ventilators, hazmat suits and face shields, thermometers, test kits, and gloves to countries in Europe whose healthcare systems were experiencing severe stress. Supported by its entrepreneur and philanthropist, Jack Ma, China dispatched similar support to all 54 African countries as well as to other developing countries in the global south. Other southern partners that have sent aid to Kenya include Cuba, United Arab Emirates, and Turkey. Cuba, which already had a number of its radiologists, surgeons, orthopedists, neurologists, and nephrologists in the country through a government agreement, reportedly sent 20 more internal medicine, oncology, cardiology, renal and pediatrics doctors.

In monetary terms, the World Bank has provided by far the largest support - some 1.2 billion USD to help close the fiscal financing gap, support ongoing reforms, and advance the government's inclusive growth agenda, including affordable housing and support to farmers. In April 2020, the Bank had extended 50 million USD as emergency funding for medical diagnostic services, surveillance and response, capacity building, quarantine, isolation and treatment centers, medical waste disposal, risk communications and community engagement. Similarly, the International Monetary Fund gave 739 million USD to cover the balance of payments gap, catalyze financing from other donors, help develop fiscal interventions in the healthcare sector, and support households and firms affected by the crisis. The African Development Bank provided 188 million EUR to mitigate the impacts of the pandemic.

With funding from its international partners such as the United States, Finland, Poland and Sweden, the World Food program launched a cash transfer and nutrition support program that targets more than a quarter of a million individuals in informal settlements around Nairobi. It aims at providing nutritional support to 16,000 children under 5 years, 700 pregnant and breastfeeding mothers, and 6,800 elderly individuals.

The European Union's development cooperation came in the form of grants and in-kind support. The United Kingdom is funding Kenyan scientists carrying out research that involve detecting coronavirus antibodies in blood donors as well as funding healthcare workers and visits to ante-natal clinics. It is also supporting the country indirectly, through its grant to the African Union's *Anti-COVID-19 Fund* that seeks to tackle the coronavirus pandemic on the continent. This Fund will help recruit and deploy health experts to areas where they are needed most, strengthen the tracking of the pandemic, combat misinformation, train health workers, and fund a public awareness campaign program.

On its part, the Canadian government has provided a grant of 27 million Canadian Dollars (CAD) to support 47 coronavirus research projects that span two areas: medical countermeasures research such as transmission and zoonotic source of the COVID-19, development and evaluation of diagnostic tools for early case detection and surveillance, and development and evaluation of candidate vaccines, among other areas; and social and policy countermeasures research, such as examining how individuals and communities understand and react to the disease, and developing strategies to combat misinformation, stigma, and fear, among other areas. Several of these projects will involve Kenyan scientists and communities.

Corruption

Despite the robust global support highlighted above, Kenya cuts a dubious image on the world stage as one of the highly corrupt countries in the world. The 2019 *Corruption Perception Index* ranked the country the 28th most corrupt nation globally, a position it has maintained for several years now (Transparency International, 2020). This ranking and reputation are not without merit. A recent World Bank study revealed that the country's elites had diverted large sums of aid disbursements to foreign havens such as Switzerland, Luxembourg, Cayman Islands and Singapore and non-haven countries like Germany, France, and Sweden (Johannesen et al., 2020). At least 3.2 billion USD were traced in foreign accounts with deposits suspiciously coinciding with aid disbursements. This was hardly surprising, for the National Bureau of Economic Research (NBER) had estimated, in 2018, that more than 50 billion USD of public funds were hidden in offshore tax havens across the world. At the time, that amount was nearly twice the national budget, or slightly more than half the country's Gross Domestic Product (Alstadsæter et al., 2018).

The recent entrance of China as Kenya's principal financier and implementer of public infrastructure projects, through the framework of South-South cooperation, is thought to be worsening corruption. Studies have shown that Chinese aid and projects fuel local corruption. Furthermore, some argue that China's non-interference policy, while unlikely to affect prescriptive norms in delegitimizing corruption, its engagement in corrupt practices in recipient countries risk affecting descriptive norms which ends up legitimizing corruption (Isaksson & Kotsadam, 2018). In Kenya, there are widespread perceptions that the economic viability of the Chinese-funded Standard Gauge Railway (SGR) project may have been seriously undermined by corruption, opaque contracting practices, skewed financing arrangements, and serious community and labor issues (Wissenbach & Wang, 2017).

Anti-corruption campaigns and reform initiatives geared towards fostering good governance have failed to yield tangible results. Efforts by development partners, through interventions, such as strengthening accountability and transparency mechanisms, withholding funds, disbursing funds through civil society and non-governmental organizations, shaming, naming, and imposing travel restrictions on suspects, supporting anti-corruption public agencies through capacity building, and enabling and promoting activism, organizations and movements for good governance, have failed to drive change. In recent years, diplomats have oscillated between openly criticizing the government and working quietly behind the scenes.

Kenya's Ministry of Health has the overall responsibility of developing, planning, coordinating, and executing COVID-19 strategies. Although development partners are keen on supporting the government, the Ministry of Health is, unfortunately, a known hotbed of corruption. Over the years, mismanagement, and diversion of public funds by Ministry officials acting with seemingly total impunity has irked the public and the development community alike. In 2017, the United States government suspended a 21 million USD aid package to the Ministry due to corruption-related allegations. An Audit had revealed that about 50 million USD meant for free maternity care was missing and likely pillaged by Ministry officials (US Embassy Kenya, 2017). A new scandal surfaced a year later regarding the Managed Equipment Services (MES) - an initiative that was heavily promoted by the World Bank.

The MES initiative was advanced as a viable and practical way of fostering long term sustainable balance of health development through public and private partnerships. In a nutshell, MES is an arrangement where governments outsource all aspects of medical equipment to third-party companies, often manufacturers, like General Electric, Esteem Industries Inc and Phillips. These companies then provide the expertise to purchase, install, train users, manage, and maintain a portfolio of medical equipment on a long-term basis (Egan, 2018). Under this program, 98 public health facilities and hospitals in Kenya were to have access to modern health infrastructure, equipment and/or services over an agreed period. The government was to make regular, pre-arranged payments based on agreed performance parameters to participating private sector enterprises (Olotch, 2018).

In 2018, an assessment report of the country's financing system, funded and conducted by the USAID, was favorable. It stated that the MES arrangement would indeed allow the government to finally upgrade facilities, and expand its specialized services without requiring a large up-front capital investment or an increase in trained health workers and client utilization needed to justify acquisition (Dutta et al., 2018). The assessment found that although 94 of the 98 targeted hospitals had been equipped, utilization of equipment was still low due to shortage of trained staff. Despite this reality, each of the 47 counties were paying an annual fee of 2 million USD.

A subsequent audit report of the MES program was overly critical and negative. It concluded that the program lacked value for money, and that contracts between the government and manufacturers were opaque for they had been signed in secrecy. The audit also found that the cost of the project had increased from around 380 million to 680 million USD without a clear explanation or justification (Mutua & Wamalwa, 2020). The program was also found to be deeply flawed for its design was not informed by comprehensive disease burden. The health infrastructure needs assessment were not conducted yet counties are not homogeneous. Other scandals in this Ministry include: the loss of 8 million USD through a fraudulent mobile clinics program after it emerged that 100 shipping containers procured in 2015 were inflated and unsuitable and that they would have required a further 6 million USD to be remodeled into clinics (Ahmed & Wafula,

2019). More recently, the National Hospital Insurance Fund lost more than 100 million USD in false medical claims (Ombati & Obala, 2019).

Lessons learned and implications for future infectious outbreaks

The international community has responded speedily and favorably by providing financial and in-kind support to the Ministry of Health to deal with the pandemic- its corrupt reputation notwithstanding. Taxpayers and development partners have lost billions of dollars through corruption, fraud, and mismanagement, yet the government has hardly attempted to reprimand, transfer, dismiss or charge suspects. Here, audacious cartels and powerfully connected individuals operate with absolute impunity. It is a microcosm of growing state capture (Maina, 2019).

Corruption has been a major impediment in the delivery of public services. It is a risk and a cost to the Kenyan people. A disturbing picture is emerging of how these new disbursements - totally unexpected by government bureaucrats at the beginning of the year - have been pillaged. Anecdotal evidence of runaway corruption can be gathered from a desktop review of local and international mainstream media (Table 4). Some senior government officials have expressed frustration, giving credence to these claims. In the face of these malfeasance, bilateral and multilateral development partners have remained indifferent. Except for the British and American Ambassadors, development partners are yet to speak up, renewing doubts of their commitment to good governance and development effectiveness. The fact that the World Bank and the United States government praised the MES when it had been adjudged as a scam of colossal proportions only serves to reaffirm perceptions that anti-corruption message from traditional partners is empty rhetoric.

Table 4: Abuse of power and COVID-19 related corruption allegations

Date (2020)	Policy initiative	Abuse allegations	Media source	Reference
Mar 30	Covid-19 measures	Police brutality	Daily Nation	Olingo & Ahmed, 2020
Mar 31	Curfew enforcement	Innocent killing	The Star	Odenyo, 2020a
Apr 16	Curfew enforcement	Police brutality	Washington Post	Ombuor & Bearak, 2020
Apr 22	Curfew enforcement	Police brutality	H. Rights Watch	Human Rights Watch, 2020
Apr 30	Covid-19 funds	Corruption	CGTN Africa	Maema, 2020
May 13	KEMRI	Biased Staff changes	Daily Nation	Oketch, 2020a
May 13	Covid-19 funds	Misappropriation of funds	Daily Nation	Mwaura, 2020
May 14	KEMRI	Staff changes	Afronews	Afronews, 2020
May 19	Covid-19 funds	Misappropriation of funds	The Star	Otieno, 2020
May 27	Curfew enforcement	Innocent killing	New African	Collins, 2020
Jun 2	Curfew enforcement	Innocent killing	The Star	Odenyo, 2020b

Jun 2	Curfew enforcement	Innocent killing	ABC News	Odula, 2020a
Jun 5	Curfew enforcement	Police brutality	AFP News	AFP, 2020
Jun 20	covid-19 donation	Corruption	Daily Nation	Wasuna, 2020
Jun 26	Covid-19 measures	Innocent killing	The Hill	Deese, 2020
Jul 11	Kazi mtaani	Corruption	The Standard	Mungai, 2020
Jul 16	Covid-19 funds	Misappropriation of funds	Daily Nation	Okinda, 2020
Jul 16	Covid-19 tender	Corruption	Daily Nation	Wafula, 2020
Jul 17	Kazi mtaani	Bribery and nepotism	KTN News	KTN News, 2020
Jul 17	Kazi mtaani	Bribery and nepotism	People Daily	People Daily, 2020
Jul 22	Covid-19 Crisis	Police brutality	New York Review	Zhu (2020)
Jul 25	Covid-19 curfew	Health risks for pregnant women	AP News	Odula, 2020b
Jul 28	MES project	Corruption	Daily Nation	Owino, 2020a
Jul 29	KEMSA	Corruption	KBC	Munyao, 2020
Aug 2	Covid-19 tender	Corruption	Daily Nation	Oketch, 2020b
Aug 4	Covid-19 tender	Corruption	Daily Nation	Oketch & Wafula, 2020
Aug 5	MES project	Corruption	Daily Nation	Owino, 2020b
Aug 5	Kazi mtaani	Corruption	Citizen News	Citizen TV Kenya, 2020
Aug 5	Kazi mtaani	Bad programming	Kenyans.co.ke	Okubasu, 2020
Aug 6	Covid-19 tender	Bribery and nepotism	Daily Nation	Amadala, 2020
Aug 6	Kazi mtaani	Bribery & mismanagement	Daily Nation	Nanjala, 2020
Aug 7	Covid-19 measures	Bribery and poor pay	Daily Nation	Nation Team, 2020
Aug 10	Covid-19 tender	Corruption	Daily Nation	Lang'at, 2020
Aug 12	Covid-19 tender	Corruption	Daily Nation	Oketch & Mwere, 2020
Aug 12	Covid-19 tender	Corruption	Kenyans.co.ke	Mbati, 2020
Aug 12	Kazi mtaani	Payment issues	The Star	Vidija, 2020
Aug 14	Covid-19 supplies	Corruption	Daily Nation	Oketch & Wafula, 2020
Aug 16	Covid-19 tender	Corruption	Kenyans.co.ke	Mwanza, 2020

To illustrate engendered corruption, a shipment of donated PPEs and test kits from China was stolen and diverted to private hospitals (Wasuna & Oketch, 2020). It has been reported that these items were later sold back to the government at exorbitant prices. The Minister in charge has not made any attempts to dismantle cartels operating under his purview, yet he controversially removed the head of COVID-19 testing team at the Kenya Medical Research Institute, a government run medical research center (Oketch, 2020a). Critics accuse the Minister of practicing nefarious tribalism and cronyism by placing allies in strategic positions to manage and control COVID-19 funds.

Corrupt officials are blamed for letting in COVID-19 into the country through a Southern China Airline with 239 passengers from Guangzhou that landed in Nairobi in late February (Citizen, 2020). A whistleblower who reported the arrival of that flight was dismissed from his position and threatened with arrest and prosecution for making and sharing a digital recording of a restricted area. These threats were later dropped following public outcry. Since then, Kenyans have remained critical of the government. A senior Foreign Affairs official who tested positive for COVID-19 criticized the government for its handling of the pandemic. He questioned how billions of shillings could have been spent when the contact tracing system had essentially collapsed. He was concerned that the inflow of financial support had not meaningfully improved quality, quantity, and access to healthcare. Furthermore, there was no medical insurance cover for the virus (Wamochie, 2020).

Corruption undermines well-meaning efforts. It is endangering the lives of front-line workers, many of whom do not yet have protective gear. It is the cause of incompetent leadership, constrained capacity, and the inadequate public health infrastructure. Corruption is the cause for the relatively fewer tests conducted so far. Individuals seeking these tests were charged, in government facilities, an inflated fee of between 100 and 200 USD. Mandatory screening at some workplaces has been received favorably for it does not impose a financial burden on the participants. When free screening was announced, it was offered on a random basis, even when some measure of targeting could have been more effective. Furthermore, the lag time of more than 48 hours, between screening and the release of results, put unsuspecting patients at greater risk of infecting others since they continued to interact freely with the general population.

Governments are also combating the coronavirus through treatment-related interventions which include the expansion of hospital capacity and the use of ventilators (Hick et al., 2014). Before the pandemic, there was pressure to expand capacity and modernize service delivery to meet the demand of the rapidly growing Kenyan population. Although the 2013 devolution of health services to the counties has helped improve service delivery, access among rural dwellers remains a major challenge for health facilities are few, poorly staffed and stocked, and located at relatively greater distances for most users. The problem is compounded by the poor road network and collapsed community-based public healthcare programs.

Persistent urban bias in the health sector can still be seen in the government's response to COVID-19 pandemic. The government is yet to articulate a strategy on how to respond to say, a breakout of mass infections, in remote villages that do not have health facilities or isolation centers. As it turns out, a low cost-solution to a seemingly difficult challenge like this one is readily available. Since learning activities have been suspended, classrooms and dormitories in schools across the country, including in remote villages, could be identified, stocked, and designated as potential isolation centers. Such facilities could have been used by frontline staff for screening and surveillance purposes.

The crisis is an opportunity to institutionalize long term solutions that will include building up spare capacity for critical medical supplies such as ventilators, PPEs, testing kits and hospital beds. It has also demonstrated the necessity of a comprehensive and inclusive Universal Healthcare for individual and collective health security (Armocida et al., 2020). The pandemic brought to the fore the difficulty faced by poor households, marginalized communities including those in the rural settings, migrants, and undocumented workers in accessing relevant information, in this case regarding COVID-19 interventions such as screening and social distancing.

Having a functional free primary health coverage could have seen more people seek screening services yet its low uptake may suggest the government's talk of promoting UHC could simply be empty rhetoric. Besides UHC, there is little evidence that the government utilized data it collected through the 2019 Population and Housing census and the *Huduma Namba*², which was promoted as the central master population database and the 'single source of truth' on a person's identity. This data could have been utilized to map out, identify and target economically vulnerable populations and at-risk individuals as well as in carrying out contact tracing.

Instead of applying force to implement mitigation and control measures which, tragically resulted in loss of life, the government could have advanced participatory approaches that embrace community buy-in and deliver better outcomes. The *Nyumba Kumi* initiative, modelled along the *Ujamaa system* of Tanzania, was instituted following the Westgate terror attacks in 2013 (Ndono et al., 2019). It was meant to empower households to generate solutions to mutual problems, foster inclusivity, and community ownership, and reduce barriers to policy and program implementation. Despite these noble objectives, the initiative stalled at the pilot phase and has not been implemented countrywide. In hindsight, the *Nyumba Kumi* initiative could have socialized interventions and played a transformative role, for example, in contact tracing, enforcement of curfews, travel restrictions and surveillance of outbreaks.

The COVID-19 pandemic has spotlighted the need for a fit-for-purpose public health infrastructure (Chesoli & Maje, 2020). There is a need to channel development cooperation towards a healthcare system that is adequately funded, staffed, and with a grassroots footprint as well as capacity to collaborate with other regional and international public health organizations. It is imperative to prioritize preventive care such as in the community-based nurses, especially in remote and rural areas. Development cooperation should also equip a public health infrastructure that detects disease patterns in real time, bearing in mind that some diseases and some infectious agents may actually be novel such as the current case (Burkom, 2017). Rather than providing emergency funding, resources could be used to prevent sporadic cases from turning into outbreaks, and here, Big Data and Artificial Intelligence may play a transformative role (Thiébaud & Cossin, 2019).

Technical cooperation should be channeled towards building the capacity of recipient nations to perform medical research and general evidence that can help formulate decisions related to infection control measures, treatments, and vaccines. The explosive nature of the COVID-19 epidemic has necessitated "make-shift" science to guide choices related to control and mitigation efforts (Alexander et al., 2020). Effective partnership between the public, private and academic sectors can help nip potential future outbreak of infectious diseases in the bud (Mercer et al., 2018).

² Huduma Namba or the National Integrated Identity Management System (NIIMS) program was initiated through Executive Order No. 1 (2018). <https://www.hudumanamba.go.ke/>

The current crisis has shown that the private sector is significantly affected by disease outbreaks, yet it has played an important role in prevention and mitigation. Kenya augmented imported PPEs with locally produced facemasks and alcohol-based sanitizers. Additionally, crude prototypes of ventilators, hand sanitizer dispensing machines and hospital beds emerged - concepts that could have been improved upon with investments made to produce functional and commercially viable items. These products, and the level of observed ingenuity, offers the country the possibility of fostering domestic industrial growth. Properly tailored development cooperation, that brings together all stakeholders, can galvanize this process (Chesoli, 2020).

A primary mission of any public health infrastructure is to ensure that currently recommended public health measures that stem from centuries of knowledge and experience pertaining to food and water safety and sanitary living conditions are enforced (Corburn et al., 2020). Africa's crowded slums, informal settlements, markets and eating establishments have extremely poor physical infrastructure - a no small miracle that the continent has not suffered frequent outbreaks of food and water-borne diseases. Development cooperation should continue playing a central role in reducing poverty and inequality by focusing on the most vulnerable and funding among others, improved housing, water supply, and health infrastructure.

Kenya's runaway corruption in the Ministry of Health, undermines the effectiveness of development cooperation. As shown, aid receipts are often diverted by corrupt officials acting with complete impunity. Traditional development partners must demand value for their money by embracing and practicing the principles of development effectiveness which include focusing on results, accountability, and transparency. The crisis demonstrated the value for greater coordination among partners to avoid duplication of support and overwhelming the system with massive inflows. Besides accountability challenges, the Kenyan government lacks the capacity to prudently utilize such large inflows.

CONCLUSION

The novel coronavirus is a danger to national populations, healthcare systems and global economies. Open corruption and pillage of donated COVID-19 emergency funds and material in Kenya, and the steadfast silence by their providers reveals the limitations of good governance rhetoric. There have been no attempts by the Kenyan government to uphold transparency, accountability, and value for money considerations. Whereas the government has shown an unwillingness to address corruption – perpetuated by and for the benefit of political elites, their families, and allies – partners such as the World Bank and the United States released several aid packages in quick succession. It was only in a TV interview, that top American and British diplomats expressed their concerns over the alleged misuse of COVID-19 funds, but even then, there was a feeling that this response was weak. Whereas the United States generally channels its development cooperation through USAID, there was a slight departure from this model, with the U.S. Embassy providing PPEs to the media houses.

Despite facing COVID-19 challenges themselves, several Southern partners, namely Cuba, China, Turkey and United Arab Emirates, extended in-kind medical emergency assistance to Kenya. Chinese assistance came largely from the Jack Ma Foundation and was received, coordinated, and disbursed to member countries through the African Union in Addis Ababa. Chinese cooperation remained shrouded in mystery, especially regarding the quantities and monetary value of what was sent to Kenya. China's Ministry of Commerce (MOFCOM) that had

been central in managing the country's development cooperation in recent years was completely missing. Instead, aid came from multiple official and unofficial sources, including private foundations (Jack Ma), Business Associations, and the Office of the First Lady of China. This assistance perpetuated China's soft power and further entrenched its interests on the continent by deepening existing Sino-Africa mechanisms including commercial associations.

The longstanding South-South cooperation principle of non-interference in the internal affairs of partner countries remains a major impediment in the fight against corruption. While whistleblowers notified the Chinese, through various channels including social media, that their donations had been stolen, they remained indifferent. The lack of disclosure of what had been sent prevented the public from grasping the magnitude of the theft. Furthermore, this secrecy could have led to wasteful duplication of donor efforts and material. The Chinese have not signaled a willingness to embrace the formal norms, standards and practices of traditional partners such as the principles of development effectiveness. In courting the Kenyan media houses with PPEs, the United States appears to have abandoned good governance ideals and was, instead pursuing Chinese-like soft power. This new approach could be explained by Washington's push for lucrative trade and commercial deals with Nairobi.

Besides reviewing local and international media accounts on COVID-19 support, corruption and mismanagement allegations, this paper has identified several cost-effective interventions that could have delivered stronger outcomes. These include the use of schools as isolation centers, leveraging data generated from the national census and the *Huduma Namba*, and deploying the *Nyumba Kumi* initiative. In order to mitigate against future infectious disease outbreaks, it is imperative for development partners to channel development cooperation towards helping developing countries to a) establish, equip and staff a fit-for-purpose healthcare infrastructure, b) grow domestic capacity for manufacturing drugs, vaccines and medical equipment, c) upgrade medical research capacity, and d) develop a surveillance system that is driven by Big Data and Artificial Intelligence. To be effective, development partners should work towards combating corruption by seeking value for their money, and through greater transparency and accountability.

References

- AFP. (2020, June 5). Kenyan police have killed 15 since start of virus curfew. <https://www.msn.com/en-us/news/world/kenyan-police-have-killed-15-since-start-of-virus-curfew/ar-BB15681K>
- Afronews. (2020, April 28). COVID-19: Kenya's top scientist fired after delaying results. <https://afronews.eu/african-news/covid-19-kenyas-top-scientist-fired-after-delaying-results/>
- Ahmed, M., & Wafula, P. (2019, April 11) Mobile clinics: The face of graft and impunity in Kenya. *Daily Nation*. <https://nation.africa/kenya/news/mobile-clinics-the-face-of-graft-and-impunity-in-kenya-157222>
- Alexander, P. E., Debono, V. B., Mammen, M. J., Iorio, A., Aryal, K., Deng, D., ... & Alhazzani, W. (2020). COVID-19 coronavirus research has overall low methodological quality thus far: case in point for chloroquine/hydroxychloroquine. *Journal of clinical epidemiology*, 123, 120–126. <https://doi.org/10.1016/j.jclinepi.2020.04.016>
- Alstadsæter, A., Johannesen, N., & Zucman, G. (2018). Who owns the wealth in tax havens? Macro evidence and implications for global inequality. *Journal of Public Economics*, 162, 89-100.

- Amadala, B. (2020, August 6). Western region where Covid-19 tenders went to officials' friends. *Daily Nation*. <https://nation.africa/kenya/counties/western-region-where-covid-19-tenders-went-to-officials-friends-1914200>
- Amorim, A., Baptista, F., Ippolito, A., & Djacta, S. (2016). *South-South and triangular cooperation academy: A decent work overview*. Geneva, Switzerland: International Labour Organization. http://wcmstraining2.ilo.org/wcmstp5/groups/public/---dgreports/---exrel/documents/publication/wcms_496952.pdf
- Amref. (2020, March 11). Amref partners with Kenya's Ministry of Health on Covid-19 Response. <https://amrefusa.org/news/amref-partners-with-kenyas-ministry-of-health-on-covid-19-response/>
- Andersen, J. J., Johannesen, N., & Rijkers, B. (2020). *Elite capture of foreign aid: Evidence from offshore bank accounts*. The World Bank.
- Endeshaw, D., & Paravicini, G. (2020, March 22). Coronavirus supplies donated by Alibaba's Ma arrive in Africa. *Reuters*. <https://www.reuters.com/article/us-health-coronavirus-africa/coronavirus-medical-supplies-donated-by-alibabas-ma-arrive-in-ethiopia-idUSKBN2190JU>
- Armocida, B., Formenti, B., Palestra, F., Ussai, S., & Missoni, E. (2020). COVID-19: Universal health coverage now more than ever. *Journal of global health*, 10(1), 010350. <https://doi.org/10.7189/jogh.10.010350>
- EU Civil Protection. (2020, July 28). Coronavirus global response: EU sends assistance to Kenya, Bangladesh, Ecuador and El Salvador. https://ec.europa.eu/echo/news/coronavirus-global-response-eu-sends-assistance-kenya-bangladesh-ecuador-and-el-salvador_en
- Burkom, H.S. (2017). Evolution of public health surveillance: Status and recommendations. *American Journal of Public Health*, 107(6), 848–850. <https://doi.org/10.2105/AJPH.2017.303801>
- Capital News (2020, May 20). UK to work with African Union in tackling COVID-19. <https://www.capitalfm.co.ke/news/2020/05/uk-to-work-with-african-union-in-tackling-covid-19/>
- Chadrak, A. (2020, June 11). Kenya: EU approves KSh7.8bln in aid for covid-19 response plan. *Ecofin Agency*. <https://www.ecofinagency.com/public-management/1106-41466-kenya-eu-approves-ksh7-8bln-in-aid-for-covid-19-response-plan>
- Chesoli, K. (2020, July 27). Making ICU beds locally would kickstart industrialization drive. *Daily Nation*. <https://nation.africa/kenya/blogs-opinion/letters/making-icu-beds-locally-would-kickstart-industrialisation-drive-1907070>
- Chesoli, K. & Maje, H. (2020, June 1). Why post-Covid-19 mitigation must have disaster prevention at its core. *Daily Nation*. <https://nation.africa/kenya/blogs-opinion/opinion/post-covid-19-mitigation-disaster-prevention-378730>
- Citizen. (2020, February 28). Coronavirus: Why Kenya is dancing with death <https://www.thecitizen.co.tz/news/africa/Coronavirus--Why-Kenya-is-dancing-with-death-/3302426-5472188-1ehn3vz/index.html>
- Citizen TV Kenya. (2020, August 5). Kazi mtaani missing cash [Tweet]. <https://twitter.com/citizentvkenya/status/1290893258751713280>
- Collins, T. E., Nugent, R., Webb, D., Placella, E., Evans, T., & Akinnawo, A. (2019). Time to align: development cooperation for the prevention and control of non-communicable diseases. *bmj*, 366, 14499. <https://doi.org/10.1136/bmj.14499>
- Collins, T. (2020, May 27). Kenya's proactive Covid-19 response overshadowed by police brutality. *NewAfrican*. <https://newafricanmagazine.com/23320/>
- Corburn, J., Vlahov, D., Mberu, B., Riley, L., Caiaffa, W. T., Rashid, S. F., ... & Jayasinghe, S. (2020). Slum health: arresting COVID-19 and improving well-being in urban informal settlements. *Journal of Urban Health*, 97, 348–357.

- Deese, K. (2020, June 26). 3 dead in Kenya after clash with police over masks. *The Hill*. <https://thehill.com/policy/international/africa/504701-3-dead-in-kenya-after-clash-with-police-over-masks>
- Dutta, A., Maina, T., Ginivan, M. & Koseki S. (2018) *Kenya Health Financing System Assessment: Time to pick the best path*. Washington, DC: Palladium, Health PolicyPlus
- Egan, P. (2018). Managed equipment service—Is it all it's cracked up to be? *European Journal of Medical Physics*, 52, 165.
- Fouda, L. M. (2020, May 6). IMF Executive Board approves a US\$739 Million disbursement to Kenya to address the impact of the COVID-19 pandemic. International Monetary Fund. <https://www.imf.org/en/News/Articles/2020/05/06/pr20208-kenya-imf-executive-board-approves-us-million-disbursement-address-impact-covid-19-pandemic>
- Government of Kenya. (2020). *Executive Order Number 2 of 2020*. Executive Office of the President: State House, Nairobi.
- Hick, J. L., Einav, S., Hanfling, D., Kissoon, N., Dichter, J. R., Devereaux, A. V., ... & Task Force for Mass Critical Care. (2014). Surge capacity principles: care of the critically ill and injured during pandemics and disasters: CHEST consensus statement. *Chest*, 146(4), e1S–e16S.
- Hongjie, L. (2010, April 10). Chinese companies donate food to Kenyan students to fight COVID-19. *China Daily*. <http://www.chinadaily.com.cn/a/202004/10/WS5e9064bba3105d50a3d15669.html>
- Human Rights Watch. (2020, April 22). Kenya: Police brutality during curfew. <https://www.hrw.org/news/2020/04/22/kenya-police-brutality-during-curfew>
- Isaksson, A. S., & Kotsadam, A. (2018). Chinese aid and local corruption. *Journal of Public Economics*, 159, 146–159.
- Kamau, J. (2020, July 17). More Cuban doctors sent to Kenya. *Daily Nation*. <https://nation.africa/kenya/news/more-cuban-doctors-sent-to-kenya-1874748>
- Karimi, M. (2020, July 2). WFP supplements Government support to poor families in Kenya hit by COVID-19. *World Food program*. <https://www.wfp.org/news/wfp-supplements-government-support-poor-families-kenya-hit-covid-19>
- Kenya National Bureau of Statistics. (2020). *Economic Survey 2020*. KNBS: Nairobi, Kenya
- KTN News. (2020, July 17). *Kazi mtaani queries: Section of youth raise concerns and protest over selection process and payment*. YouTube. https://www.youtube.com/watch?time_continue=11&v=k4DjZewjVfo&feature=emb_logo
- Lang'at, P. (2020, August 10). Martha Karua puts Kagwe on the spot over Covid-19 funds. *Daily Nation*. <https://nation.africa/kenya/news/martha-karua-puts-kagwe-on-the-spot-over-covid-19-funds-1915628>
- Maema, C. (2020, April 30). Kenyans react after govt spends Sh48m on airtime, tea and ambulance hire. *CGTN Africa*. <https://africa.cgtn.com/2020/04/30/kenyans-react-as-sh48m-spent-on-airtime-tea-and-ambulance-hire/>
- Maina, W. (2019). *State Capture: Inside Kenya's Inability to Fight Corruption*. Africa Centre for Open Governance (AfriCOG). Nairobi, Kenya. <https://africog.org/wp-content/uploads/2019/05/STATE-CAPTURE.pdf>
- Matengo, D. (2020, April 6). China's Jack Madonates second batch of medical supplies to Africa to combat COVID-19. *CGTN Africa*. <https://africa.cgtn.com/2020/04/06/chinese-billionaire-jack-ma-to-donate-second-batch-of-medical-covid-19-supplies-to-africa/>
- Mbati, J. (2020, August 12). US, UK Ambassadors demand answers from CS Kagwe on Covid-19 funds. *Kenya's.co.ke*. <https://www.kenya's.co.ke/news/56277-usuk-ambassadors-demand-answers-cs-kagwe-video>

- McKee, M., Gilmore, A. B., & Schwalbe, N. (2005). International cooperation and health. Part I: issues and concepts. *Journal of Epidemiology & Community Health*, 59(8), 628–631. <https://doi.org/10.1136/jech.2003.013532>
- Mercer, T., Gardner, A., Andama, B., Chesoli, C., Christoffersen-Deb, A., Dick, J., ... & Maritim, B. (2018). Leveraging the power of partnerships: spreading the vision for a population health care delivery model in western Kenya. *Globalization and health*, 14(1), 1–11. <https://doi.org/10.1186/s12992-018-0366-5>
- Ministry of Health of Kenya. (2015). *Kenya health workforce report: The status of healthcare professionals in Kenya*. Ministry of Health: Nairobi, Kenya.
- Ministry of Health of Kenya. (2018, December 13). President Uhuru launches Universal Health Coverage pilot program Nairobi, (KENYA). <https://www.health.go.ke/president-uhuru-launches-universal-health-coverage-pilot-program-nairobi-kenya-december-13-2018/>
- Muchemi, J. (2018). *Transforming health systems for universal care*. Ministry of Health: Nairobi, Kenya
- Mungai, A. (2020, July 11). Claims of graft and cronyism dog welfare initiative. *The Standard*. <https://www.standardmedia.co.ke/nairobi/article/2001378343/claims-of-graft-and-cronyism-dog-welfare-initiative>
- Munge, K., & Briggs, A. H. (2014). The progressivity of health-care financing in Kenya. *Health policy and planning*, 29(7), 912–920. <https://doi.org/10.1093/heapol/czt073>
- Munyao, B. (2020, July 29). Kembi Gitura downplays reports of alleged fraud in KEMSA. *KBC*. <https://www.kbc.co.ke/kembi-gitura-downplays-reports-of-alleged-fraud-in-kemsa/>
- Muthembwa, K. (2020, April 2). Kenya receives \$50 million World Bank Group support to address COVID-19 pandemic. *The World Bank*. <https://www.worldbank.org/en/news/press-release/2020/04/02/kenya-receives-50-million-world-bank-group-support-to-address-covid-19-pandemic>
- Muthembwa, K. (2020b, August 7). Kenya receives \$150 million to improve living conditions for 1.7 million residents in urban informal settlements. *The World Bank*. <https://www.worldbank.org/en/news/press-release/2020/08/07/kenya-receives-150-million-to-improve-living-conditions-for-17-million-residents-in-urban-informal-settlements>
- Mutua, J., & Wamalwa, N. (2020). *Eight facts on the medical equipment leasing project in Kenya*. Institute of Economic Affairs: Nairobi, Kenya. <https://www.ieakenya.or.ke/publications/bulletins/eight-facts-on-the-medical-equipment-leasing-project-in-kenya>
- Mwakisha, J. W. (2020, June 29). The EU and WHO working together to defeat COVID-19 in Kenya. *World Health Organization*. <https://www.afro.who.int/news/eu-and-who-working-together-defeat-covid-19-kenya>
- Mwanza, E. (2020, August 16). Jack Ma donations were sold to KEMSA - Civil Society. *Kenya.co.ke*. <https://www.kenyans.co.ke/news/56443-jack-ma-donations-were-sold-kemsa-civil-society>
- Mwaura, M. (2020, May 13). Kagwe, Yatani summoned by MPs to explain Covid-19 funds. *Daily Nation*. <https://nation.africa/kenya/news/kagwe-yatani-summoned-by-mps-to-explain-covid-19-funds-288782>
- Nanjala, S. (2020, August 6). This is not what we hoped for, youth in Kazi Mtaani say about pay. *Daily Nation*. <https://nation.africa/kenya/news/youth-say-kazi-mtaani-pay-low-1914070>
- Nation Team. (2020, August 8). Nyanza faces crisis amid Covid-19 fight as county medics strike. *Daily Nation*. <https://nation.africa/kenya/counties/nyanza-faces-crisis-amid-covid-19-fight-as-county-medics-strike-1914694>

- Ndono, P. W., Muthama, N. J., & Muigua, K. (2019). Effectiveness of the Nyumba Kumi community policing initiative in Kenya. *Journal of Sustainability, Environment and Peace*, 1(2), 63–67.
- Odenyo, A. (2020a, March 31). Boy, 13, shot dead in third curfew tragedy, police blamed. *The Star*. <https://www.the-star.co.ke/news/2020-03-31-boy-13-shot-dead-in-third-curfew-tragedy-police-blamed/>
- Odenyo, A. (2020b, June 2). Homeless, harmless and shot dead in Mathare slums. *The Star*. <https://www.the-star.co.ke/news/2020-06-02-homeless-harmless-and-shot-dead-in-mathare-slums/>
- Odula, T. (2020, June 2). Kenyans protest as police accused of killing homeless man. *ABC News*. <https://abcnews.go.com/International/wireStory/kenyans-protest-police-accused-killing-homeless-man-71017534>
- Odula, T. (2020b, July 25). Pregnant women at risk of death in Kenya’s COVID-19 curfew. *Associated Press*. <https://apnews.com/2e1a7d8b8401e4c06df52085994cf4ba>
- OECD/UNDP (2019), Making Development Co-operation More Effective: 2019 Progress Report, OECD Publishing, Paris. <https://doi.org/10.1787/26f2638f-en>
- Oketch, A. (2020a, May 13). Researchers demand answers over dismissal of Kemri scientist. *Daily Nation*. <https://nation.africa/kenya/news/researchers-demand-answers-over-dismissal-of-kemri-scientist-287566>
- Oketch, A. (2020b, August 2). Covid-19: Kenya paid double for protective kits. *Daily Nation*. <https://nation.africa/kenya/news/-covid-19-kenya-paid-double-protective-kits-1911292>
- Oketch, A., & Mwere, D. (2020, August 12). Ministry told to clarify role of Unicef in procurement of Covid-19 PPE. *Daily Nation*. <https://nation.africa/kenya/news/moh-told-to-clarify-role-of-unicef-1917390>
- Oketch, A. & Wafula, P. (2020, August 14). Kemsas suspends CEO, 2 directors over Covid-19 procurements probe. *Daily Nation*. <https://nation.africa/kenya/news/kemsa-suspends-ceo-2-directors-over-covid-19-procurements-probe-1918402>
- Okinda, B. (2020, July 16). Kemsas scandal: anti-graft lobby group calls for speedy probe. *Daily Nation*. <https://nation.africa/kenya/news/kemsa-scandal-anti-graft-lobby-group-calls-for-speedy-probe-1845548>
- Okubasu, D. (2020, August 5). Alfred Mutua criticises Uhuru's ksh10B Kazi Mtaani project. *Kenya.co.ke*. <https://www.kenya.co.ke/news/56060-alfred-mutua-rubbishes-uhurus-ksh10b-kazi-mtaani-project>
- Olingo, A., & Ahmed, M. (2020, March 30). Dozens injured as police brutality marks start of curfew. *Daily Nation*. <https://nation.africa/kenya/news/dozens-injured-as-police-brutality-marks-start-of-curfew-282622>
- Olotch, C. (2018, January 4). How Managed Equipment Services in Kenya help the private sector contribute to healthcare. *World Bank Blogs*. <https://blogs.worldbank.org/ppps/how-managed-equipment-services-kenya-help-private-sector-contribute-healthcare>
- Ombati, C., & Obala, R. (2019, February 25). Over Sh 10 billion feared lost in new NHIF pay scandal. *The Standard*. <https://www.standardmedia.co.ke/business-news/article/2001314296/over-sh10b-feared-lost-in-new-nhif-pay-scandal>
- Ombuor, R., & Bearak, M. (2020, April 16). ‘Killing in the name of corona’: Death toll soars from Kenya’s curfew crackdown. *The Washington Post*. https://www.washingtonpost.com/world/africa/kenya-coronavirus-curfew-crackdown-death-toll/2020/04/15/740a8c4e-79be-11ea-a311-adb1344719a9_story.html
- Ooko, S. (2020, May 14). World Vision donates medical items to boost Kenya's COVID-19 fight. *World Vision*. <https://www.wvi.org/stories/coronavirus-health-crisis/world-vision-donates-medical-items-boost-kenyas-covid-19-fight>

- Otieno, B. (2020, May 19). Covid-19 funds shrouded in mystery, says MP Ali. *The Star*. <https://www.the-star.co.ke/counties/coast/2020-05-19-covid-19-funds-shrouded-in-mystery-says-mp-ali/>
- Owino, S. (2020a, July 28). Senators question Health ministry's tender for legal services. *Daily Nation*. <https://nation.africa/kenya/news/ministry-in-trouble-over-irregular-tender-1907632>
- Owino, S. (2020b, August 5). Much-awaited probe report on Sh68bn health kits scandal to delay. *Daily Nation*. <https://nation.africa/kenya/news/probe-report-health-kits-scandal-delayed-1912860>
- People Daily. (2020, July 17). Bribery, nepotism claims stalk Kazi Mtaani project. *People Daily*. <https://www.pd.co.ke/news/bribery-nepotism-claims-stalk-kazi-mtaani-project-44302/>
- Reality of Aid. (2018). *The changing faces of development aid an cooperation: Encouraging global justice or buttressing inequalities?* IBON International: Quezon City, Philippines
- Rosauer, V. (2020, May 20). World Bank approves \$1 billion financing for Kenya, to address COVID-19 financing gap and support Kenya's economy. *The World Bank*. <https://www.worldbank.org/en/news/press-release/2020/05/20/world-bank-approves-1-billion-financing-for-kenya-to-address-covid-19-financing-gap-and-support-kenyas-economy>
- Sohrabi, C., Alsafi, Z., O'Neill, N., Khan, M., Kerwan, A., Al-Jabir, A., ... & Agha, R. (2020). World Health Organization declares global emergency: A review of the 2019 novel coronavirus (COVID-19). *International Journal of Surgery*, 76, 71–76
- Stuenkel, O. (2013). *Institutionalizing South-South Cooperation: Towards a New Paradigm? Background Research Paper*. Submitted to the High-Level Panel on the Post-2015 Development Agenda.
- Terry, O. (2020, May 22). Kenya: €188m African Development Bank loan to boost COVID-19 response. *African Development Bank Group*. <https://www.afdb.org/en/news-and-events/press-releases/kenya-eu-188m-african-development-bank-loan-boost-covid-19-response-35735>
- Thiébaud, R., & Cossin, S. (2019). Artificial intelligence for surveillance in public health. *Yearbook of medical informatics*, 28(1), 232–234. <https://doi.org/10.1055/s-0039-1677939>
- Transparency International. (2020). *Kenya*. Transparency International Kenya. <https://www.transparency.org/en/countries/kenya>
- U.S. Embassy Kenya (2017, May 9) Statement regarding the suspension of assistance to the Ministry of Health. <https://ke.usembassy.gov/statement-regarding-suspension-assistance-ministry-health/>
- U.S. Embassy Kenya. (2020a, April 28). U.S. Government to provide additional 705 million KES to Kenya's COVID-19 response. <https://ke.usembassy.gov/u-s-government-to-provide-additional-705-million-kes-to-kenyas-covid-19-response/>
- U.S. Embassy Kenya. (2020b, June 20). United States donates facemasks to protect Kenyan journalists on frontlines of COVID-19 reporting. <https://ke.usembassy.gov/united-states-donates-facemasks-to-protect-kenyan-journalists-on-frontlines-of-covid-19-reporting/>
- U.S. Embassy Kenya. (2020c, July 1). United States providing KSH 5 billion to support health and economy recovery in Kenya's COVID-19 response. <https://ke.usembassy.gov/united-states-providing-ksh-5-billion-to-support-health-and-economy-recovery-in-kenyas-covid-19-response/>
- UAE MOFAIC (United Arab Emirates Ministry of Foreign Affairs & International Cooperation). (2020, May 5). UAE sends medical aid to Kenya in fight against COVID-19. <https://www.mofaic.gov.ae/en/mediahub/news/2020/5/5/05-05-2020-uae-kenya>
- Ujvari, B. (2020, May 14). Coronavirus: EU provides support in Horn of Africa region. *European Commission*. https://ec.europa.eu/commission/presscorner/detail/en/IP_20_880
- UNDP. (2020, April 23). UNDP hands over equipment to bolster COVID-19 Medical Waste Management in Kenya.

- <https://www.ke.undp.org/content/kenya/en/home/presscenter/articles/2020/undp-hands-over-equipment-to-bolster-covid-19-medical-waste-mana.html>
- United Nations. (2020). *Development Policy and Multilateralism after COVID-19*. United Nations Publications, New York
- Vidija, P. (2020, August 12). How fake IDs, M-Pesa lock youths out of Kazi Mtaani payments. *The Star*. <https://www.the-star.co.ke/news/2020-08-12-how-fake-ids-m-pesa-lock-youths-out-of-kazi-mtaani-payments/>
- Wafula, P. (2020, July 16). Senior executives at Kemsco on EACC radar in graft probe. *Daily Nation*. <https://nation.africa/kenya/news/senior-executives-at-kemsco-on-eacc-radar-in-graft-probe-1807596>
- Wafula, P., & Oketch, A. (2020, August 4). Cartels block locally made Covid-19 kits in tender wars. *Daily Nation*. <https://nation.africa/kenya/news/cartels-block-locally-made-covid-19-kits-in-tender-wars-1912370>
- Wamochie, R. (2020, July 30). What have we done with Covid-19 billions? - Virus positive PS. *The Star*. <https://www.the-star.co.ke/news/2020-07-30-what-have-we-done-with-covid-19-billions-virus-positive-ps/>
- Wanambisi, L. (2020, July 23). UK announces sh150 million grant to support Covid-19 research in Kenya. *Capital News*. <https://www.capitalfm.co.ke/news/2020/07/uk-announces-sh150mn-grant-to-support-covid-19-research-in-kenya/>
- Wangia, E. & Kandie, C. (2019). Refocusing on quality of care and increasing demand for services; Essential elements in attaining universal health coverage in Kenya. *Ministry of Health of Kenya*. <https://www.health.go.ke/wp-content/uploads/2019/01/UHC-QI-Policy-Brief.pdf>
- Wasike, A. (2020, May 9). Turkey distributes aid in Kenya's capital. *Anadolu Agency*. <https://www.aa.com.tr/en/africa/turkey-distributes-aid-in-kenya-s-capital/1834967#>
- Wasuna, B. & Oketch, A. (2020, June 20). Scanty information on theft of donated Covid-19 equipment. *Daily Nation*. <https://nation.africa/kenya/news/scanty-information-on-theft-of-donated-covid-19-equipment-733440>
- Watkins, D. A., Yamey, G., Schäferhoff, M., Adeyi, O., Alleyne, G., Alwan, A., ... & Goldie, S. J. (2018). Alma-Ata at 40 years: reflections from the Lancet Commission on Investing in Health. *The Lancet*, 392(10156), 1434–1460.
- Wissenbach, U., & Wang, Y. (2017). African politics meets Chinese engineers: The Chinese-built Standard Gauge Railway Project in Kenya and East Africa. *SAIS-Cari*. <https://static1.squarespace.com/static/5652847de4b033f56d2bdc29/t/594d739f3e00bed37482d4fe/1498248096443/SGR+v4.pdf>
- World Bank. (2020). *Global Economic Prospects*, June 2020. Washington, DC: World Bank. <http://dx.doi.org/10.1596/978-1-4648-1553-9>
- World Health Organization. (2020). Coronavirus disease (COVID-19), Situation Report – 171. https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200709-covid-19-sitrep-171.pdf?sfvrsn=9aba7ec7_2
- Worldometer. (2020). Covid-19 Coronavirus Pandemic. <https://www.worldometers.info/coronavirus/>
- Xinhua News Agency (2020, May 15). Chinese businessmen donate 70,000 face masks to Kenya to curb COVID-19. http://www.xinhuanet.com/english/africa/2020-05/15/c_139057619.htm
- Xinhua News Agency. (2020b, July 23). Chinese embassy hands over medical supplies to Kenya to combat COVID-19. http://www.xinhuanet.com/english/2020-07/23/c_139232938.htm
- Zhu, A. (2020, July 22). Kenya turns its Covid-19 crisis into a human rights emergency. *The New York Review of Books*. <https://www.nybooks.com/daily/2020/07/22/kenya-turns-its-covid-19-crisis-into-a-human-rights-emergency/>