Data for equitable COVID-19 action:
Kampala, Uganda

POPULATION: *3,298,000* [i]

Taking a data-based and equity-oriented approach to their response to the 2020 coronavirus disease (COVID-19) pandemic, city authorities **in Kampala, Uganda** have been assessing the susceptibility of local communities to the impact of COVID-19. They have been collecting data on equity and COVID-19 to guide decision-making and use of limited resources in the public health response.

Containment measures and disadvantaged groups

Comprehensive public health measures to control the spread of an infectious disease, like COVID-19, can have high social and economic costs, with a disproportionate impact on subpopulations living in vulnerable circumstances. During the 2020 COVID-19 pandemic, restrictions have created new challenges for food security, access to health services, household economic security and education. While cities and countries around the world can unite in these common difficulties, those with large populations living in slums and informal settlements, and reliance on the informal economy, face a different set of challenges.

The effects of national shutdown on disadvantaged groups

Like many African cities, the vast majority of residents in Kampala make their living through informal employment. In Greater Kampala, 87.2% of total employment is informal.[ii] Informality often means lack of social protection, rights at work and decent work conditions, and a reliance on daily trade to feed themselves and their families. During the pandemic, informal workers have experienced a high risk of loss of income and livelihood, as well as COVID-19 infection due to trading with close person-to-person contact.[iii] Moreover, 50% of residents in the Greater Kampala Metropolitan Area live in slums, comprising 16% of total land, presenting additional challenges to health protection measures such as physical distancing and stay-at-home orders. [iv]

On 30 March 2020, having reported a total of 33 cases of COVID-19, the Ugandan government ordered a nationwide shutdown to slow the spread of infection.[v] Private car use was prohibited, a 19:00-06:30 curfew was enforced, all non-food or pharmaceutical stores were closed and gatherings of more than five persons were banned. Politicians were

prohibited from providing food relief to populations living in vulnerable circumstances, punishable by arrest and charge of attempted murder; instead, donations were invited to a central government taskforce. Food sellers continuing to operate were banned from living at home and instead asked to find alternative shelter near to their place of business. These measures were in addition to previous orders that had been introduced earlier, such as the temporary termination of all public transport.[vi] The breadth of restrictions was apparent in the ensuing deserted 'rush hour' streets and quiet markets of the capital city.[vii,viii]
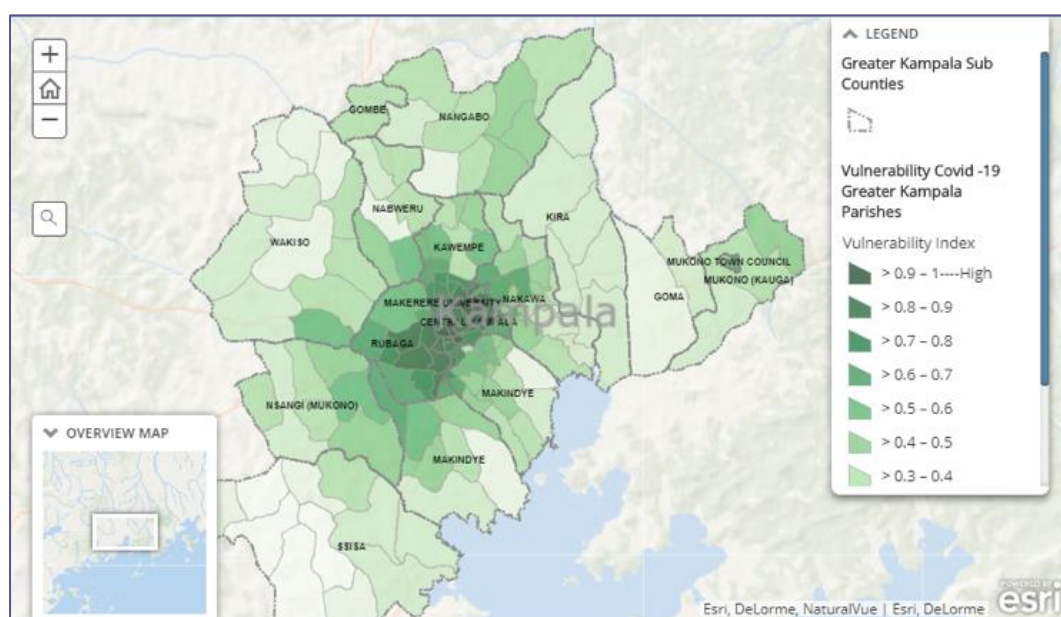
Recognising the need to focus resources on those at risk of the greatest impact of COVID-19, Kampala Capital City Authority (KCCA) sought to conduct a rapid assessment of community vulnerability.[ix] Here, vulnerability is defined as propensity for adverse outcomes from COVID-19, taking into account biological susceptibility and either risk or protective factors.

The COVID-19 Vulnerability Framework

Kampala's COVID-19 Vulnerability Framework is designed to define, identify and monitor the vulnerabilities of their communities during the pandemic, and gather the insight needed for equitable action. The Framework is made up of three components:

- **Exposure:** An aggregate of situations where individuals could be exposed to the virus. Indicators include transport hubs, shopping centres, population density, and transactional offices.
- **Adaptive capacity:** This takes into consideration the resources available to the community as a whole, and to the households in the community. Indicators include food security, level of income and access to healthcare.
- **Susceptibility:** Determined by population age and pre-existing medical conditions.

The three measures are aggregated to generate the COVID-19 Vulnerability Index. An interactive map displaying COVID-19 vulnerability by parish is available to view on the KCCA COVID-19 Response Hub.

Source: Kampala Capital City Authority COVID-19 Response Hub

To collect baseline data, KCCA disseminated an online survey covering issues such as household demographic; housing situation; WASH (water, sanitation and hygiene); food security; health care; and financial situation. [x] The survey was promoted through the Response Hub webpage and social media platforms.

Source: Kampala Capital City Authority

In parallel, KCCA has been working on additional ways to expand and strengthen data collection. For example, as a member of the Partnership for Healthy Cities—a global initiative funded by Bloomberg Philanthropies, in collaboration with the World Health Organization and Vital Strategies— Kampala received support to implement a surveillance system to track COVID-19 incidence across its population. Data from contact tracing and laboratory testing are fed into a database, and predictive modelling is used to forecast the likelihood of new cases and cluster similar data trends for further analysis. This real-time data can facilitate comparative analysis between affected and non-affected households. This further supports KCCA's work to understand which population groups and communities are most affected by COVID-19, enabling targeted allocation of resources and a systematic public health response.

From data to action

In the face of rapidly changing conditions, data is the backbone of the public health response to the COVID-19 pandemic. There is an urgent need for both local and national authorities to collect data on the acceptability, impact and effectiveness of public health and social measures for COVID-19, and particularly how key measures are affecting subpopulations living in vulnerable circumstances.[xi]

With the COVID-19 Vulnerability Assessment and incidence data to hand, KCCA plans to take a targeted approach to its COVID-19 response. Food relief and healthcare aid can be directed to the communities at risk of experiencing the most adverse outcomes, to mitigate the social and economic impact of COVID-19 measures. In this case, data gathered will support an equitable COVID-19 response, but these data will also help to inform preparedness for reducing the impacts of future health emergencies.

Source: Kampala Capital City Authority

For further information see the Kampala Capital City Authority [KCCA COVID-19 Response Hub](#).

Key resources

- Responding to COVID-19 in Africa: Using data to find a balance; Partnership for Evidence-Based Response to COVID-19 (PERC)
- COVID-19 crisis and the informal economy: Immediate responses and policy challenges; International Labour Organization
- WHO National health inequality monitoring: a step-by-step manual
- WHO guidance on COVID-19: How to include marginalized and vulnerable people in risk communication and community engagement
- WHO Surveillance strategies for COVID-19 human infection

[i] United Nations, Department of Economic and Social Affairs, Population Division (2018). World Urbanization Prospects: The 2018 Revision, custom data acquired via website. (https://population.un.org/wup/; accessed 12 June 2020)

[ii] Urban Labour Force Survey 2015 Fact Sheet. Uganda: Uganda Bureau of Statistics. (https://www.ubos.org/wp-content/uploads/publications/03_2018ULFS_2015_Fact_Sheet_(1).pdf; accessed 26 May 2020)

[iii] COVID-19 crisis and the informal economy: Immediate responses and policy challenges. International Labour Organization. (https://www.ilo.org/global/topics/employment-promotion/informal-economy/publications/WCMS_743623/lang--en/index.htm; accessed 26 May 2020)

[iv] From regulators to enablers: role of city governments in economic development of greater Kampala. Washington DC, United States: The World Bank. (https://datacatalog.worldbank.org/dataset/kampala-informal-sector-survey; accessed 26 May 2020)

[v] WHO Coronavirus disease (COVID-2019) situation reports. World Health Organization. (https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports; accessed 26 May 2020)

[vi] Address by H.E. Yoweri Kaguta Museveni President of the Republic of Uganda to the nation on the corona virus (COVID 19), 30th March 2020. (https://mediacentre.go.ug/media/more-guidelines-preventive-measures-and-need-shut-down; accessed 25 May 2020)

[vii] Kampala unrecognisable as COVID-19 lockdown starts. Uganda: NTVUganda. (https://www.youtube.com/watch?v=SpSrn2vcHNI; accessed 26 May 2020)

[viii] Effective Implementation of Public Health and Social Measures in Uganda: Situational Analysis. Partnership for Evidence-Based Response to COVID-19 (PERC). (https://preventepidemics.org/wp-content/uploads/2020/05/perc_situation-analysis_uganda.pdf; accessed 26 May 2020)

[ix] KCCA COVID-19 Response Hub. Kampala, Uganda: Kampala Capital City Authority. (https://coronavirus-response-19-ctf-kcca-gisservices.hub.arcgis.com/; accessed 26 May 2020)

[x] Coronavirus disease (COVID-19) Vulnerability Assessment. Kampala, Uganda: Kampala Capital City Authority. (https://coronavirus-response-19-ctf-kcca-gisservices.hub.arcgis.com/app/a5e531ea28054cfd853824ce1082763f; accessed 26 May 2020)

[xi] Responding to COVID-19 in Africa: Using data to find a balance. Partnership for Evidence-Based Response to COVID-19 (PERC). (https://preventepidemics.org/covid19/perc/; accessed 26 May 2020)