

# Socioeconomic Impacts of COVID-19 in Kenya

November, 2020<sup>1</sup>

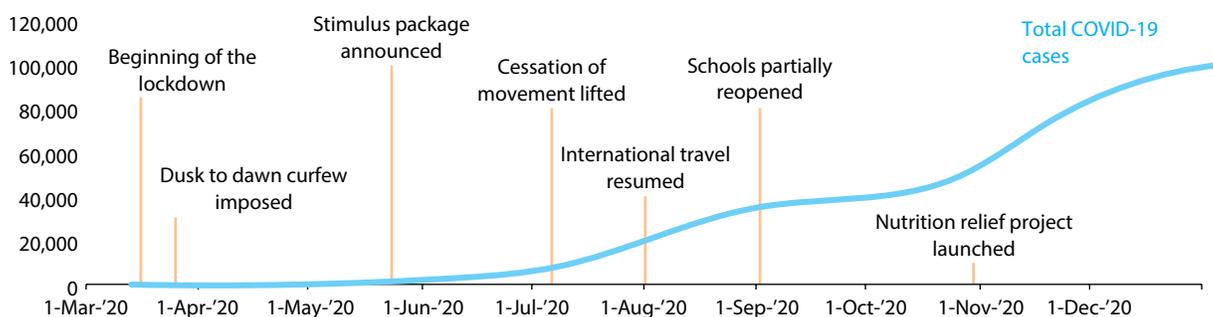
- The COVID-19 pandemic has had strong and lasting impacts on livelihoods of Kenyan households, with employment and income levels only slowly recovering.
- Most households had to implement multiple coping strategies, whereby fewer households relied on savings and more on reducing consumption as the pandemic continued.
- Although food security has started to improve, one in four adults still do not have enough food to eat.
- Access to services remained compromised nine months into the pandemic, as few children have had access to teachers and health care is still disrupted, with no visible improvements observable in the final months of 2020.
- The population has become less stringent in following preventive measures against COVID-19.



## THE COVID-19 PANDEMIC REACHED KENYA IN MARCH 2020 AND HAS HAD STRONG, LONG-LASTING SOCIOECONOMIC CONSEQUENCES FOR THE POPULATION.

The first case of COVID-19 in Kenya was confirmed on March 13, 2020. Soon after, a range of restrictions to reduce the spread of the pandemic were put in place, including school closures, restrictions on travel, bans on social gatherings, and limitations on economic activities. On March 25, the President declared a nationwide curfew from 7 P.M. to 5 A.M., and restricted both national and international travel (Figure 1). In April, containment measures were announced in and out of four major counties of Nairobi, Mombasa, Kilifi, and Kwale, and a stimulus package was introduced by the government to improve the health and economic conditions of the Kenyan people. In November, the President extended the nationwide curfew between 10 P.M. to 4 A.M. until January 3, 2021. As of December 31, 2020, Kenya had a total of 96,458 cases recorded across the country, with the number still rising. This brief summarizes the key results of the Kenya COVID-19 Rapid Response Phone Survey (RRPS), tracking the socioeconomic impacts of the crisis from May to November 2020.<sup>2</sup>

**FIGURE 1:** COVID-19 timeline in Kenya



Source: Our World in Data.<sup>3</sup>

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<sup>2</sup> The survey was implemented by the World Bank, the Kenya National Bureau of Statistics (KNBS), the United Nations High Commissioner for Refugees (UNHCR), and the University of California, Berkeley. This brief covers the first three rounds of the RRPS; additional rounds will be implemented in 2021. For more details on the survey visit: <https://www.kenyacovidtracker.org/rrps>

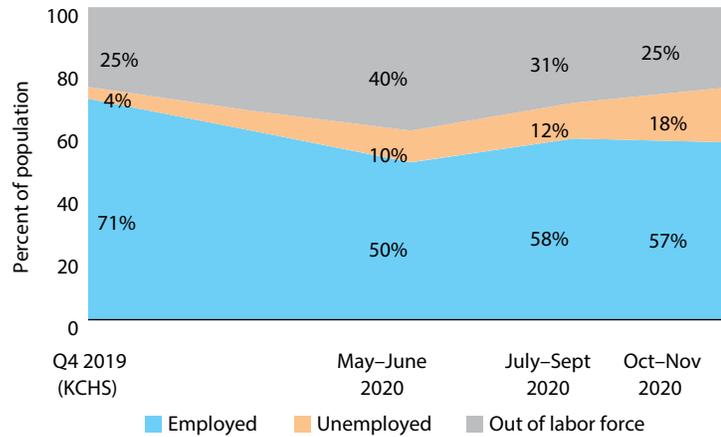
<sup>3</sup> Our World in Data. Data downloaded on January 12, 2021 at: <https://ourworldindata.org/coronavirus/country/kenya?country=~KEN>



## DUE TO THE PANDEMIC, MANY KENYANS LOST THEIR EMPLOYMENT WITHOUT A CLEAR RECOVERY IN SIGHT.

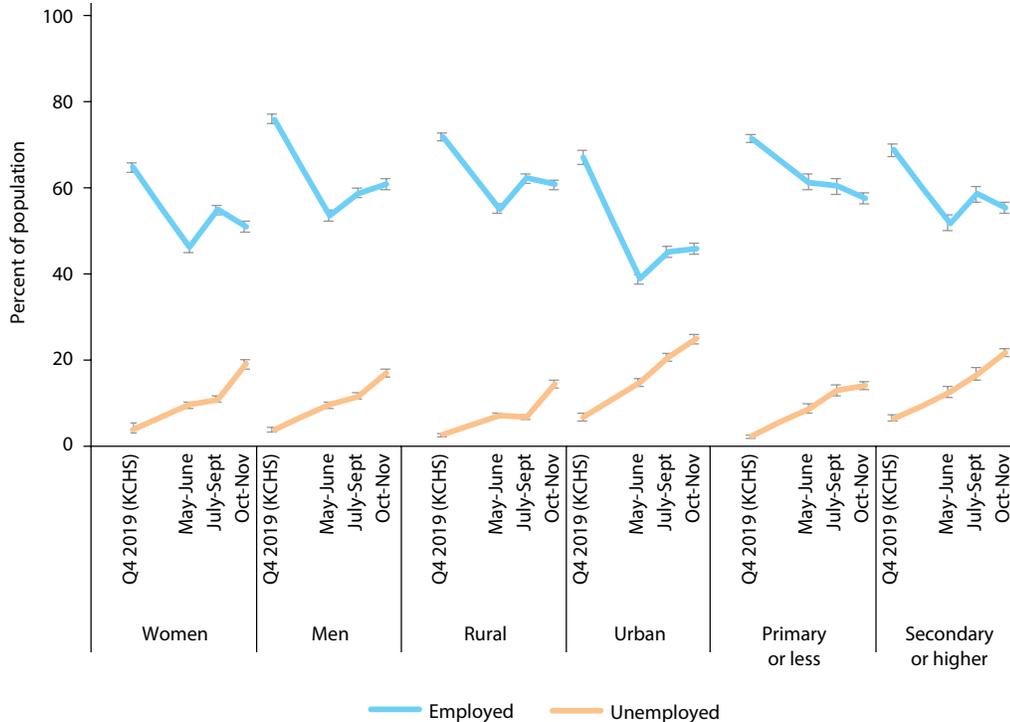
The pandemic resulted in large losses of employment from 71 percent in Q4 2019 to 57 percent in October–November 2020. Unemployment has increased about fivefold over the course of the pandemic (from 4 percent in Q4 2019 to 18 percent in October–November 2020; Figure 2). The urban sector has been impacted the most, as the unemployment increased from 7 percent to 25 percent of the population (Figure 3). Also, education has not proven to be a source of resilience during the pandemic, as persons with more education have experienced a major employment shock. Although labor force participation recovered in October–November 2020, employment remained clearly below Q4 2019 levels.<sup>4</sup> With the widespread loss of employment, the pandemic has widely affected people’s livelihoods.

**FIGURE 2:** Labor force statistics (18–64 years)



Source: Kenya COVID-19 RRPS and 2019 KCHS.

**FIGURE 3:** Employment (18–64 years)



Source: Kenya COVID-19 RRPS and 2019 KCHS.

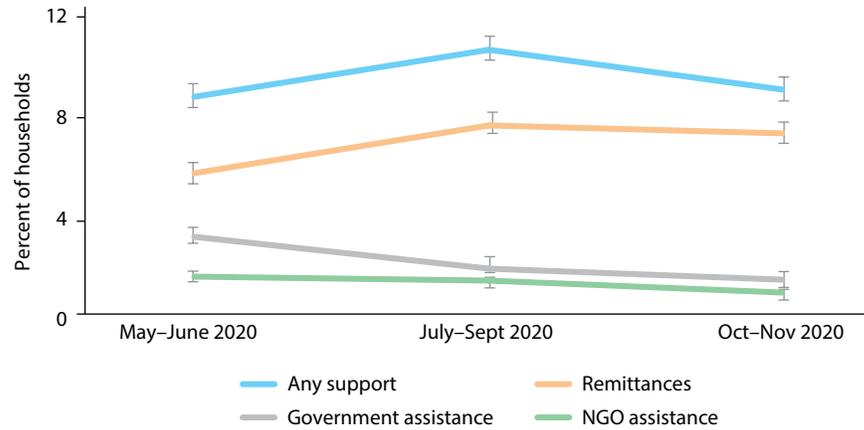
<sup>4</sup> While the labor force statistics in the phone survey were designed to be comparable with the quarterly labor indicators released by the KNBS, the mode of data collection (phones instead of face-to-face interviews), as well as the selection of the respondents, can limit comparability. Furthermore, the KNBS does not include refugees in their labor force statistics. The presented statistics based on the KCHS data also differ from the official labor force statistics published by the KNBS as the latter uses a different age group (15–64).



## FOR THE FEW HOUSEHOLDS THAT RECEIVE REMITTANCES, THE AMOUNTS HAVE MOSTLY INCREASED.

Remittances have helped to buffer the impact of the pandemic on household finances; however, only a small share of households receive any (7 percent in October–November). Among the households that received remittances, most continued to receive higher amounts than in February 2020 (Figure 4). Similar to before the pandemic, rural households received half the amount compared to urban households.

**FIGURE 4:** Support from external sources



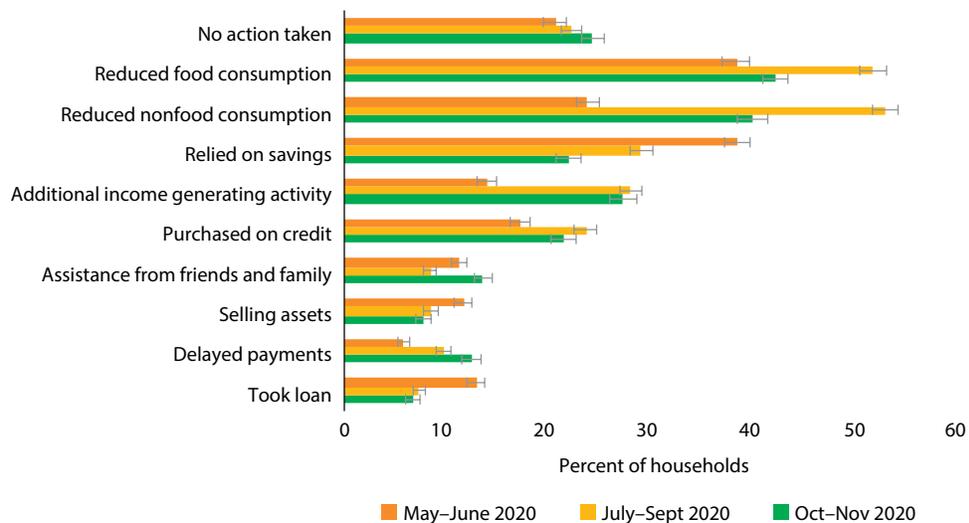
Source: Kenya COVID-19 RRPS.



## TO COPE WITH THE IMPACT OF THE PANDEMIC, HOUSEHOLDS ARE REDUCING FOOD AND NONFOOD CONSUMPTION.

At the beginning of the pandemic, households' most common coping strategy was to rely on savings. However, this strategy became less frequent as the crisis continued and some households depleted their savings (dropping from 38 percent in May–June to 29 percent in July–September). Instead, more and more households started to reduce food and nonfood consumption to cope with the economic effect of the pandemic (38 percent in May–June to 51 percent in July–September for food consumption), with more than 50 percent having reduced consumption in July–September. As households used up savings and reduced consumption, other strategies became more common in the final months of 2020, including engaging in additional income-generating activities, taking assistance from friends and family, and delaying payment obligations (27 percent, 13 percent, and 12 percent, respectively, in October–November, Figure 5).

**FIGURE 5:** Coping mechanisms (multiple answers possible)



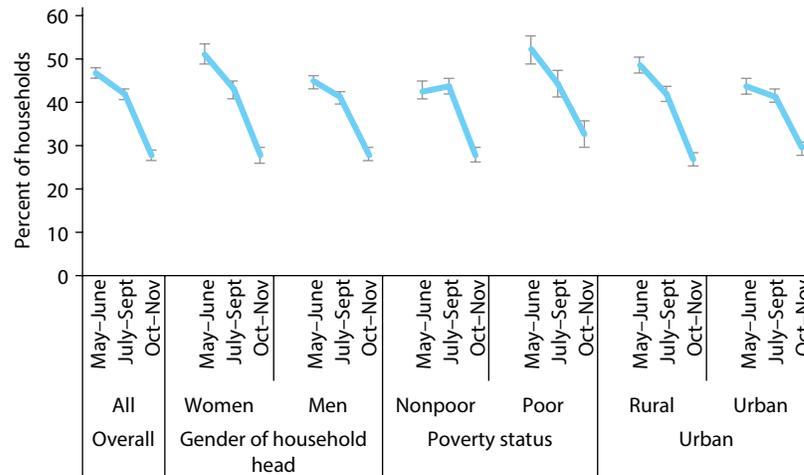
Source: Kenya COVID-19 RRPS.



## ALTHOUGH FOOD SECURITY HAS STARTED TO IMPROVE, 25 PERCENT OF HOUSEHOLDS STILL DO NOT HAVE ENOUGH FOOD TO EAT.

47 percent of households had an adult going hungry due to the unavailability of food in May-June, which decreased to 28 percent in October-November (Figure 6). Although the situation has improved, lack of food is still an issue for more than one in four households. Food insecurity is worse for female-headed and poor households. Lack of food can directly impact the ability of adults and children to undertake a normal, healthy, and productive life, thus leading to malnutrition, stunting, and human capital losses.<sup>5</sup>

**FIGURE 6:** Adults going hungry because of shortage of food in the last 30 days



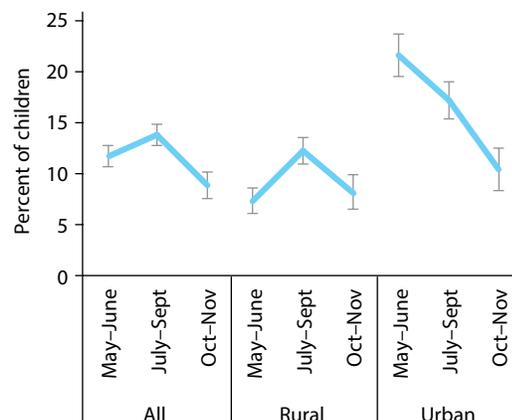
Source: Kenya COVID-19 RRPS.



## ACCESS TO TEACHERS REMAINS LOW AND CHILDREN ARE MOSTLY ENGAGED IN SELF-DIRECTED LEARNING ACTIVITIES.

Access to teachers has been low since schools closed at the start of the pandemic, especially in rural areas. Only 12 percent of children had access to teachers in May-June, which further decreased to 9 percent in October-November (Figure 7). Many children still engage in learning activities, but these are mostly self-directed or taught by the parents (70 and 27 percent of the children learning in October-November, respectively, Figure 8). However, these activities are usually not effective ways of learning for children, compared to educational activities with teachers. Even though the situation of households improved in some respects, such as in food security, the impact on services, such as education, has worsened over the course of the COVID-19 crisis.

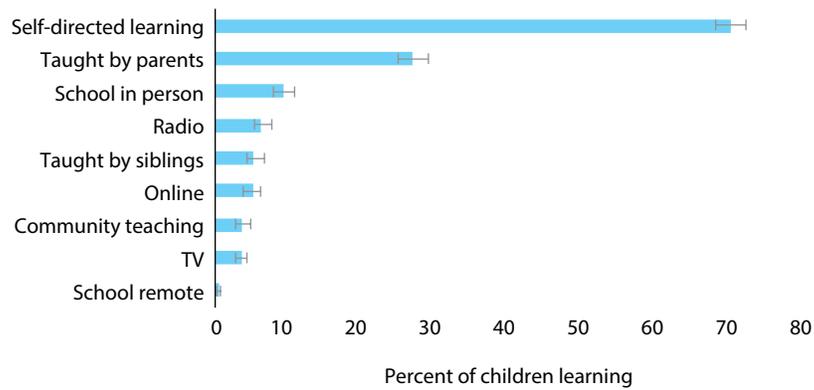
**FIGURE 7:** Access to teacher



Source: Kenya COVID-19 RRPS.

<sup>5</sup> Government of Kenya, "IPC Acute Food Insecurity and Acute Malnutrition Analysis, February 2020-July 2020." [https://reliefweb.int/sites/reliefweb.int/files/resources/IPC\\_Kenya\\_AcuteFoodInsec\\_Malnutrition\\_2020FebJuly.pdf](https://reliefweb.int/sites/reliefweb.int/files/resources/IPC_Kenya_AcuteFoodInsec_Malnutrition_2020FebJuly.pdf)

**FIGURE 8:** Learning activities for October–November 2020 (multiple answers possible)



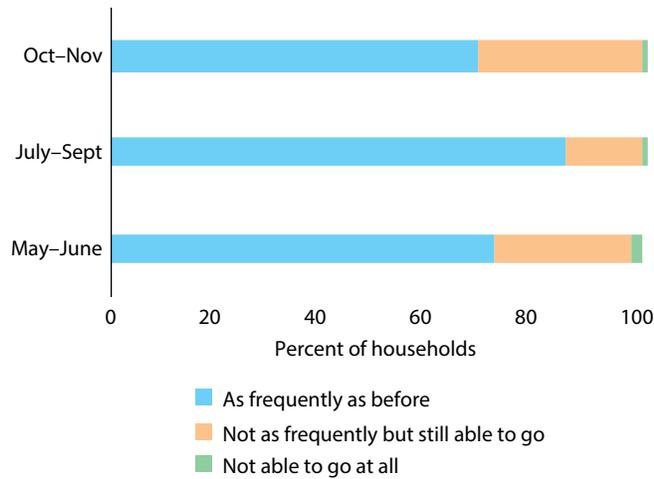
Source: Kenya COVID-19 RRPS.



**ACCESS TO HEALTH SERVICES HAS BEEN CONTINUOUSLY IMPACTED SINCE THE START OF THE PANDEMIC.**

Access to routine health check-ups has been impacted continuously since the start of the pandemic and still shows no trend toward recovery. In October–November, 30 percent of households were only able to access health services less frequently than before the pandemic or not at all (Figure 9). Limited access to health services, such as immunizations and prenatal check-ups, can severely impact the population’s health in the long run.

**FIGURE 9:** Ability to go for routine health check-ups compared to March 2020



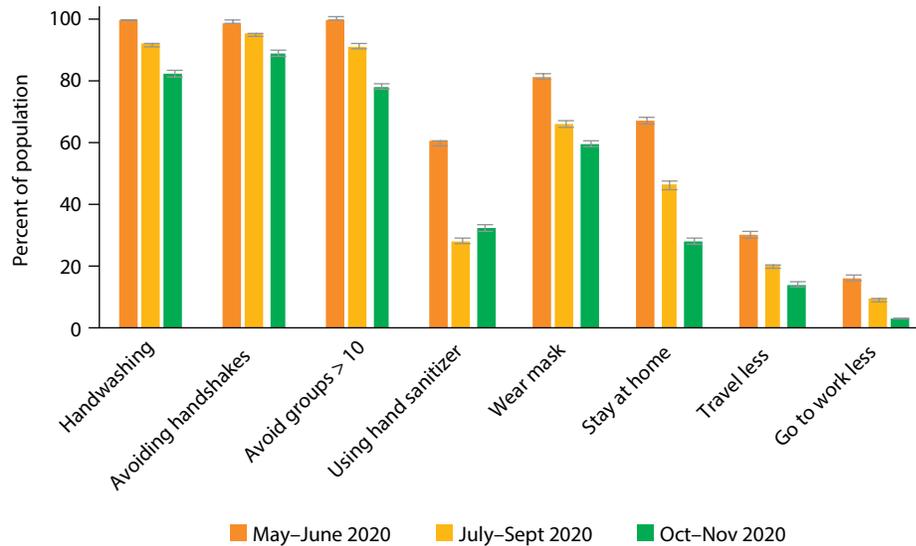
Source: Kenya COVID-19 RRPS.



## KENYANS HAVE BECOME LESS STRINGENT IN FOLLOWING MEASURES TO CURB THE SPREAD OF COVID-19 IN THE FINAL MONTHS OF 2020.

During May–June, 99 percent of the population washed their hands with soap more often than they used to and avoided handshakes, but these rates reduced to 81 percent and 88 percent, respectively, in October–November 2020. The use of masks also declined from 81 percent in May–June to 59 percent in October–November (Figure 10). This increasingly lenient adherence to basic protective measures can result in increasing numbers of COVID-19 infections. Weeks of lockdown and sitting at home have resulted in various emotional and psychological challenges resulting in “pandemic fatigue” and therefore, a change in behavior.<sup>6</sup>

**FIGURE 10:** Behavioral changes in response to COVID-19



Source: Kenya COVID-19 RRPS.



## ANNEX: METHODOLOGY

**The Kenya COVID-19 RRPS for households is structured as a five-wave, bimonthly panel survey that monitors the socioeconomic impacts of the pandemic and targets Kenyan nationals, refugees, and stateless people.** Households are interviewed every two months. Three rounds of the survey are already completed, with the first round having been implemented in May through June 2020, the second in July through September 2020, and the third round in September through November 2020 (Table 1). Since the first week of data collection, an online dashboard displays weekly results on the impacts of COVID-19 on households in Kenya.<sup>7</sup>

**The survey questionnaire for households was designed to allow for international comparability.** To ensure that findings are comparable across countries, the Kenya COVID-19 RRPS was designed to both allow comparison across countries that have implemented surveys on the impact of COVID-19 and measure the impacts of the pandemic in Kenya specifically. Therefore, the questionnaire maintained most core questions from the global template of the World Bank and added country specific questions for a better understanding of the effects of COVID-19 on Kenyan households.<sup>8</sup> The Kenya COVID-19 RRPS for households questionnaire covers a range of topics including employment, income, coping strategies, food security, access to education and health services, subjective well-being, knowledge of COVID-19, changes in behavior in response to the

<sup>6</sup> WHO (2019), “Mental Health and Psychosocial Considerations during the COVID-19 Outbreak.”

<sup>7</sup> For access to further details on the survey, weekly results, and micro-data library, visit: <https://www.kenyacovidtracker.org/rpps>

<sup>8</sup> For access to the global questionnaire template, visit: <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/567571588697439581/questionnaire-template>

**TABLE 1:** Sample size

|                        | Wave 1                 | Wave 2                        | Wave 3                            |
|------------------------|------------------------|-------------------------------|-----------------------------------|
| <b>Data collection</b> | May 14 to July 7, 2020 | July 16 to September 18, 2020 | September 18 to November 28, 2020 |
| KNBS sample            | 3,294                  | 3,664                         | 3,982                             |
| RDD sample             | 769                    | 840                           | 1,011                             |
| UNHCR sample           | 1,326                  | 1,687                         | 1,469                             |
| <b>Total sample</b>    | <b>5,389</b>           | <b>6,191</b>                  | <b>6,462</b>                      |

Source: Kenya COVID-19 RRPS.

pandemic, and perceptions of the government’s response. The definition of a household in this survey was “a person, or group of people, that eat from the same pot and spend four nights or more in an average week sleeping in the same home,” which is aligned with the one used by the KNBS.

**The survey sample was drawn from three different sampling frames.** The first is a randomly drawn subset of the 2015/16 Kenya Integrated Household Budget Survey (KIHBS). The 2015/16 KIHBS is representative at the national level, stratified by county and place of residence (urban and rural areas). To select the sample, the Kenya COVID-19 RRPS firstly identified all households that were part of the KIHBS CAPI and provided a phone number and used the resulting list of 9,009 households as a sampling frame. The second sample comprises households selected using the Random Digit Dialing (RDD) method, whereby phone numbers potentially existing in Kenya are randomly generated. A list of random mobile phone numbers was created using a random number generator from the 2020 Numbering Frame produced by the Kenya Communications Authority. The initial sampling frame consisted of 92,999,970 randomly ordered phone numbers assigned to three networks: Safaricom, Airtel, and Telkom. An introductory text message was sent to 5,000 randomly selected numbers to determine if the numbers were in operation. Out of these, 4,075 were found to be active and formed the final sampling frame. There was no stratification and individuals that were reached through the selected phone numbers were asked about the households they live in. These first two groups cover urban and rural areas and are designed to be representative of the population of Kenya using cell phones. The third RRPS sample consisted of urban and camp-based refugees as well as stateless people registered by the UNHCR. The sample aims to be representative of the refugee and stateless population in Kenya. It comprises five strata: Kakuma refugee camp, Kalobeyei settlement, Dadaab refugee camp, urban refugees, and Shona stateless, where sampling approaches differ across strata.

**The COVID-19 RRPS household survey was only able to include households with a valid phone number.** As phone surveys can only reach respondents who use a phone with an active subscription in an area with network coverage, statistics are only representative for this part of the population. Nationally, 80 percent of Kenyan households report owning a mobile phone. Although cell phone penetration and coverage are high, the sample excludes those households without a registered number, potentially excluding to some extent the poorest households who do not own phones or who live in areas with no network coverage. The areas in the northeast of Kenya have the lowest mobile phone penetration and are among the most vulnerable counties in Kenya, whereas, central and southern regions display a much higher mobile phone penetration. Households providing a phone number in household surveys such as the KIHBS CAPI have better living conditions. The Kenya RRPS uses reweighting techniques to enhance representation of the overall sample. More information is provided in the more extensive report related to this survey: “Socioeconomic impacts of COVID-19 in Kenya, on households, round 1.”<sup>9</sup>

**To address potential bias, some interviews were dropped from the labor analysis.** Despite the random allocation of households to enumerators, high variability is observed in reported employment across enumerators. To reduce inconsistencies and obtain unbiased labor statistics, interviews collected by some enumerators were omitted from the labor analysis. For

9 World Bank (2020): “Socioeconomic impact of COVID-19 in Kenya, on households, round 1.”

each enumerator the mean proportion of households without any employment is calculated. Then, across all enumerators the 95 percent confidence interval of this mean proportion is established. Enumerators who display a proportion of households with no employment above the upper bound of the confidence interval are dropped. This results in 596 of the 6,192 households in wave 2 and 1,109 of the 6,462 households in wave 3 being dropped from the labor analysis. The weights for the remaining households have been adjusted to account for the dropped observations.

**Sampling weights were constructed for each stratum to consider different probabilities of selection at baseline.** A two-step approach was used to create the weights for the national sample provided by the KIHBS CAPI and RDD method. As a first step, raw weights were constructed for three groups of households: (i) households that existed in 2015/16, and did not change phone numbers, (ii) households that existed in 2015/16, but changed phone numbers, and (iii) households that did not exist in 2015/16. The baseline weights from the 2015/16 KIHBS CAPI pilot make the KIHBS sample representative of type (i) households. For RDD households, we ask whether they existed in 2015/16, when they had acquired their phone number, and where they lived in 2015/16, allowing us to classify them into type (i), (ii), and (iii) households and assign them to a KIHBS CAPI stratum. We adjust weights of each RDD household to be inversely proportional to the number of mobile phone numbers used by adult members of the household, and scale them relative to the average number of mobile phone numbers used in the KIHBS within each stratum. RDD therefore gives us a representative sample of type (ii) and (iii) households. We then combine RDD and KIHBS type (i) households by ex-post adding RDD households into the 2015/16 sampling frame and adjusting weights accordingly. Last, we combine our representative samples of type (i), type (ii), and type (iii), using the share of each type within each stratum from RDD. As a second step, we use post-stratification to adjust for differential attrition and response rates across counties and rural/urban strata, ensuring that all geographic areas in Kenya were appropriately accounted for. We scale the raw weights from step 1 above to reflect the population size in each county and rural/urban stratum as recorded in the 2019 Kenya Population and Housing Census conducted by the KNBS. For the five refugee and stateless samples, sampling weights were tailored to the respective sampling strategies. Weights were then scaled to match population totals as provided by the up-to-date UNHCR registration data.

**For each household, a target respondent is followed throughout all survey waves.** All households in the sample were targeted in each wave, independent of whether they were reached in a previous wave. The only exception was households that explicitly stated that they don't want to be called again in future waves. This means some households were interviewed for the first time in wave 2 or 3. In each household we follow one target respondent. In the 2015/16 KIHBS sample, the target respondent was the primary male or female from the 2015/16 KIHBS, who was randomly chosen where both existed. In the RDD and UNHCR samples, the target respondent was the owner of the phone number drawn for the sample. If the target respondent was not available for a call, the field team spoke to any adult currently living in the household of the target respondent. If the target respondent was deceased, the field team spoke to any adults that lived with the target respondent in 2015/16. Finally, if the household from 2015/16 split up, we targeted anyone in the household of the target respondent, but did not survey a household member that no longer lives with the target respondent.