COVID-19 High-Frequency Monitoring Dashboard Technical Note

What does the COVID-19 dashboard show?

The dashboard visualizes harmonized indicators from high-frequency phone surveys conducted in over 40 countries in response to the COVID-19 pandemic. Data are available from indicators in 12 topic areas:

Figure 1. Indicator Topics	
Category	**Description**
Demographic characteristics	Age, gender, education, household size, dependency ratio, disability
Geographic	Urban/rural and province
Knowledge	Awareness of government regulations and adoption of preventive behavior
Housing characteristics	Homeowner, Recent mover, number of rooms, ability to pay rent
Food security	Indicators of food security and access to staple foods and water
Education	Engaged in educational activities, previous enrolment in school
Health	Access to medical services
Labor	Stopped working, changed jobs, sector of work
Income	Self-reported income shock, decline in remittances
Safety nets	Receipt of assistance and type received
Coping mechanisms	Asset sale, reduced consumption (yes/no), use of savings
Financial	Access to financial institutions (ATM, Bank, Mobile Money)
Preventative Behaviors	Adopted handwashing and social distancing practices
Subjective Wellbeing	Life satisfaction now and in one year, concern about coronavirus.
Metadata	Total survey and indicator sample size

A full list of indicators can be found here.

Why create a harmonized survey dashboard?

With the onset of the COVID-19 pandemic face-to-face data collection has become increasingly difficult, due to both the health risks associated with traditional survey collection and quickly evolving government restrictions. To monitor the impact of the pandemic on the poor and vulnerable, the World Bank has supported the deployment of high frequency phone surveys through a flexible questionnaire template that can be adapted to country needs, implementation manuals, phone survey guidelines, as well as advisory support and financing.

Despite the creation of common survey questionnaire templates with core and optional modules, a fully standardized approach to COVID-19 survey monitoring was not possible. In many cases, partner

countries and national statistical offices had already launched surveys or needed to include additional topics of interest.

Given the divergence in survey construction, harmonization was necessary to create a comparable picture of how the pandemic affects the live of the poor around the world. Harmonized indicators help to track the impact of the pandemic and mitigating policies over time in a comparable manner.

Where does the dashboard survey data come from?

The figures presented in this dashboard are derived from the Rapid Monitoring Database (RMD). The RMD is a harmonized collection of high-frequency phone surveys in response to the COVID-19 crisis conducted by the World Bank Group and partners so that they share a common format. This involves renaming variables and recoding categories to be consistent with a common set of guidelines, which facilitates consistent comparison and aggregation across countries.

Creating the guidelines and the harmonization of the surveys equally require an element of judgment. The guidelines were based on a careful a review of the questionnaires that identified questions common to several surveys. Questions that were present in a large share of surveys, as well as topics of particular interest for monitoring welfare during the crisis, were included in the harmonization. Nonetheless, surveys do not generally contain all the questions listed in the guidelines. In cases where questions or indicators are not asked in a particular country survey or asked in a different way, that indicator is coded as missing in the RMD.

Since surveys are being executed in several waves, updates to the RMD will make it easy to monitor changing socio-economic conditions over time.

What are High-Frequency Monitoring Phone Surveys?

The World Bank has significant experience using phone surveys to monitor welfare in many circumstances, including in times of crisis and in response to emergencies. Experts from teams across the World Bank leveraged this experience to develop technical materials and implementation protocols to quickly produce reliable information on the impacts of COVID-19 using phone surveys.

A modular global template questionnaire was created to make it easier to adapt surveys to country contexts and information needs, while facilitating cross-country comparability and analysis.

Are the surveys representative of the population?

All high-frequency mobile surveys in the dashboard were designed to be representative of the underlying population. However, while a useful tool for data collection during the pandemic, phone surveys are not a panacea. They have important limitations, including under-coverage of groups with poor network connections or limited access to phones. They are known to be affected by high levels of non-response and attrition. The practical length of phone interviews is also an issue, limiting the breadth and depth of the information that can be collected.

In cases where countries had recently conducted representative household survey that contains re-contact information for some or all household members, this data was often used to create a representative sampling frame for telephone-based surveys. In other cases, list-based sampling frames used numbers from government registries, telecommunications companies, marketing firms, or other sources to survey representative samples.

It is important to keep in mind that cross-country comparisons and aggregations should be interpreted with caution. Because the surveys were collected by phone, they are only representative of phone owners who are willing to respond to the survey. Differences in the characteristics of phone owners are likely to bias comparisons across countries or areas. Nonetheless, the figures are presented with the belief that putting results in context will shed light on differences across countries in the economic impacts of the COVID-19 crisis, which will in turn put the survey results into context and inform policy responses.

How was the data harmonized?

The harmonization process was a global effort whereby teams from multiple Global Practices and Regions gathered to create a data dictionary of frequent, comparable and relevant survey questions in order to understand the impact of COVID-19. Once a data dictionary was created, several Bank teams and poverty economists embedded in client countries monitored the execution of the surveys and reviewed the acquired data before sharing with a team in charge of the harmonization process.

This team reviewed the received raw data and recoded categories to create high-level indicators. In cases where questions or indicators are not asked in the survey or asked in a different way, that indicator is coded as missing in the RMD.

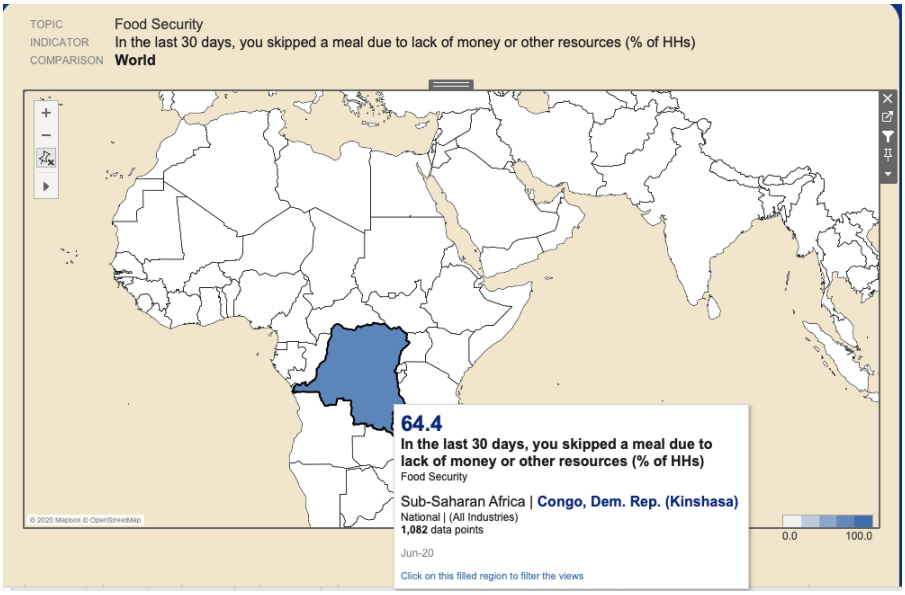
Because all survey respondents are phone owners, which are likely to bias comparisons across countries or areas, it is difficult to obtain nationally representative results using individual weights. To prepare national representative statistics at the individual level in other countries, household weights were applied for all the indicators in the dashboard. Care was taken to include accurate indicator descriptions to reflect whether the indicator data pertains to individuals or households.

You can learn more about the indicator harmonization process using our Data Dictionary.

How do I know how survey rounds have been completed in each country?

Nearly all countries in the dashboard will include harmonized indicator data from multiple survey rounds. To know if a country contains multiple rounds of data, and when the data was collected, simply over data points until a tooltip with additional information appears. (See Figure 2.)

Figure 2. Dashboard Tooltip Example



The tooltip contains data on the indicator name, topic, region, country and whether the data is disaggregated by National/Urban/Rural and Industry Sector categories. It also includes the data when the data was collected and the total number of data points of that indicator.

How do we present disaggregated data?

Current data can be disaggregated at the respondent level by Urban/Rural and Industry Sector, however these figures should be taken with caution. Limitations inherent to phone surveys, including under-coverage of groups with poor network connections or limited access to phones may lead to selection biases and issues with representation. For example, despite the near ubiquity of mobile devices, there are significant gaps in phone ownership by gender and profession. These gaps vary hugely across countries. Although in most cases the sampled phone numbers are for households and individuals that had been interviewed face-to-face by a recent survey. We will continue conducting exercises to understand and account for selection biases associated with lack of cell phone ownership, non-response, and attrition.

Why do some countries not appear in the dashboard? Will you add more countries?

The countries displayed in the dashboard are those that have completed at least one survey round and have had survey data harmonized to match the dashboard data structure. In some cases, data agreements between the survey collection agencies - partner governments, national statistical offices, and multilateral agencies – and data privacy concerns restrict the data that can be made publicly available. In other cases, surveys are still in progress or are completed but have not yet been harmonized.

At the time of the dashboard launch on November 11, 2020, it contained survey data from 43 countries. In most countries, survey rounds are conducted every 4-6 weeks over a period of 12 months. As the COVID-19 pandemic continues, new rounds of HFPS will continue in many countries.

By early 2021, we expect to have harmonized survey data from around 100 countries in the dashboard. Around the same time, we intend to make - whenever feasible - anonymized microdata available in the World Bank Microdata Library, recognizing that there are country specificities with respect to data access and remaining mindful of data privacy considerations.