Pandemic erodes living standards in developing countries, study shows

By Mike Cummings  |  FEBRUARY 5, 2021

A township near the coast of Freetown, Sierra Leone, West Africa. (© Shutterstock)

The onset of the COVID-19 pandemic caused a sharp decline in living standards and rising food insecurity in developing countries across the globe, according to a new study by an international team of economists.
The study, published Feb. 5 in the journal Science Advances, provides the first in-depth view of the health crisis’s initial socioeconomic effects in low- and middle-income countries, using detailed micro data collected from tens of thousands of households across nine countries.

The researchers conducted 16 nationally and sub-nationally representative phone surveys from April through July 2020 in Bangladesh, Burkina Faso, Colombia, Ghana, Kenya, Nepal, Philippines, Rwanda, and Sierra Leone. In all of these countries, respondents reported drops in employment, income, and access to markets and services, translating into high levels of food insecurity. Many households reported being unable to meet basic nutritional needs.

“COVID-19 and its economic shock present a stark threat to residents of low- and middle-income countries — where most of the world's population resides — which lack the social safety nets that exist in rich countries,” said Mushfiq Mobarak, professor of economics and faculty director of the Yale Research Initiative on Innovation and Scale (Y-RISE), and the study’s corresponding author. “The evidence we’ve collected shows dire economic consequences, including rising food insecurity and falling income, which, if left unchecked, could thrust millions of vulnerable households into poverty.”

Across the surveys, the percentage of respondents reporting losses in income ranged from 8% in Kenya to 86% in Colombia. The median, or midpoint of the range, was a staggering 70%. The percentage reporting loss of employment ranged from 6% in Sierra Leone to 51% in Colombia, with a median of 29%.

“Painting a comprehensive picture of the economic impact of this global crisis requires the collection of harmonized data from all over the
world,” said Edward Miguel, a professor of economics at the University of California-Berkeley and a co-author of the study. “Our work is an exciting example of fruitful collaboration among research teams from a variety of institutions working in multiple countries simultaneously to improve our understanding of how COVID-19 has affected the living standards in low- and middle-income countries.”

Significant percentages of respondents across the surveys reported being forced to miss meals or reduce portion sizes, including 48% of rural Kenyan households, 69% of landless, agricultural households in Bangladesh, and 87% of rural households in Sierra Leone — the highest level of food insecurity. Poorer households generally reported higher rates of food insecurity, although rates were substantial even among the top half of each sample.

The steep rise in food insecurity reported among children was particularly alarming given the potentially large negative long-term effects of under-nutrition, according to the study.

Survey results from Bangladesh and Nepal suggest that levels of food insecurity were far higher during the pandemic than during the same season in previous years.

In most countries, a large share of respondents reported reduced access to markets, likely due to lockdowns and other restrictions implemented to contain the spread of the virus. The availability of social support from governments or non-governmental organizations varied widely across the surveys, but the high rates of food insecurity reported suggest that support was insufficient even when present, the researchers found.
In addition to increasing food insecurity, the study shows that the pandemic and accompanying containment measures have undermined several other aspects of household wellbeing. In all the countries, schools were closed during most or all of the survey period. Respondents also reported reduced access to health services, including prenatal care and vaccinations. Combined, these factors could have damaging long-term effects on children in particular, the researchers note.

“The pandemic’s economic shock in these countries, where most people depend on casual labor to feed their families, causes deprivations that have adverse consequences in the long term, including excess mortality,” said study co-author Ashish Shenoy, a professor of agriculture and resource economics at the University of California, Davis. “Our findings underscore the importance of gathering survey data to understand the effects of the crisis and inform effective policy responses. We demonstrate the efficacy of large-scale phone surveys to provide this crucial data.”

Current circumstances may call for social protection programs that prioritize addressing immediate poverty and under-nutrition before tackling deeper underlying causes of inequity and economic deprivation, the researchers state. They suggest that policymakers consider identifying poor households using mobile phones and satellite data and then provide them mobile cash transfers.

The researchers also recommend providing support for basic utilities, such as water and electricity, through subsidies and by removing penalties for unpaid bills. They note a fundamental link between containing COVID-19 and providing economic relief since households...
facing acute shortages may be less willing than others to follow social distancing rules as they pursue opportunities to meet basic needs.

In addition to researchers from Yale and Y-RISE, the study included partners from the following institutions: University of California-Berkeley; The World Bank; Innovations for Poverty Action; University of California-Davis; Northwestern University; University of Basel, Switzerland; Princeton University; Busara Center for Behavioral Economics, Nairobi, Kenya; Stanford University; WBZ Berlin Social Science Center; Columbia University; International Growth Center, London; Vyner Remit Kenya, Busia, Kenya; American University; University of Goettingen, Germany; Harvard University; and Wageningen University, Netherlands.