

**Researchers** Rachel Glennerster UK Department for International Development (DFID)

Kristen Himelein World Bank

Tavneet Suri Massachusetts Institute of Technology

**Staff** Andrew Tedesco Country Director

Fatoma Momoh Senior Field Manager

Osman Siddiqi Country Director, Liberia & Sierra Leone

Anthony Mansaray Senior Research Associate

**Timeline** 2014-2015

Sample Size 2,500 households (approximately)

Research Implemented by IPA Yes

# The Socio-Economic Impacts of Ebola on Households in Sierra Leone

## Abstract

The economic impacts of the Ebola virus required monitoring in real time for policymakers to estimate the short- and long-term costs of the epidemic and respond appropriately, yet information on the magnitude of the effects was scarce. The aim of this monthly survey in Sierra Leone was to measure the economic and social impacts of the outbreak on households and provide timely updates on the survey's findings to policymakers.

#### **Policy Issue**

The Ebola outbreak in West Africa may be disrupting local economies, and if so, the long-term impact could be considerable. Reports have circulated that the virus has increased prices, reduced the availability of essential goods, and impacted agricultural production, yet there is little to no quantitative data to back these claims and inform appropriate policy responses. There is a great need, therefore, to monitor economic impacts in real time and provide accurate date to governments and their development partners. This research in Sierra Leone aims to help fill the information gap and supply policymakers with timely updates to address the crisis in both the short- and long-term.



Note: This is not a randomized controlled trial.

## **Context of the Evaluation**

Since its initial appearance in March 2014 in rural Guinea, the Ebola virus has spread to three other West African countries. As of November 12, 2014, Sierra Leone has had more than 4,900 confirmed cases and nearly 1,200 deaths.<sup>1</sup> The situation has become even more challenging as the virus has now taken hold in the capital, Freetown. Two of the country's fourteen districts have been quarantined for over two months, an additional three districts were quarantined in mid-September, and certain areas of the capital are also under isolation.

In partnership with the World Bank, IPA is supporting Statistics Sierra Leone (SSL) with onthe-ground technical assistance and supervision for a monthly household survey that measures the economic impacts of the Ebola virus over time.

#### **Details of the Intervention**

This multi-round survey is a tool for monitoring the socio-economic and service delivery impacts of the Ebola virus. IPA and Statistics Sierra Leone will jointly administer the cell phone survey to a subsample of households taken from a national survey. The focus of the data collection is on economic indicators – such as the functioning of labor markets, the availability of foodstuffs, agricultural production, other health outcomes.

We aim to conduct a 20-minute survey at monthly intervals, with some questions administered every month and other questions rotated into the questionnaire based on the situation at the time.

The questionnaire will incorporate baseline information from the nationally-representative Labor Force Survey (SLLFS), administered in 2014, to capture changes and, due to the brief nature of this survey, to target and streamline data collection.

## **Results and Policy Lessons**

Round 1: released January 12, 2015

- In the first round of data collection, wage and non-farm self-employed workers saw the largest declines in employment in urban areas of Sierra Leone, with Ebola cited as one of the main reasons for not working. An estimated 9,000 wage workers and 170,000 self-employed workers outside of agriculture are no longer working since the July/August 2014 baseline. The percent of households engaged in a non-farm household enterprise that was no longer operating tripled from 4 to 12 percent and among those still operating these businesses, average revenue decreased by 40 percent.
- These job losses have been caused mainly by the indirect effects of necessary preventive measures to restrict disease spread and by the general disruption



**to the economy caused by the outbreak**. No differences were found in labor impacts between quarantined and non-quarantined districts, further highlighting the importance of economy-wide indirect effects.

- Food insecurity is high as the harvest continues. There is no evidence thus far on negative impacts on agriculture due specifically to Ebola, but harvest activities are still ongoing and future rounds of data collection will track Ebola-related effects if and when they arise.
- There is some evidence of a decrease in utilization of health services for non-Ebola conditions in Freetown. In particular, a much lower proportion of women in the capital reported post-natal clinic visits than in 2013. In the rest of the country, however, there is little evidence of such a decline.

#### Round 2: released April 15, 2015

- There are signs of improvement in Sierra Leone, but the economic situation remains uneven. While there have been overall improvements in employment since November driven by urban areas, youth employment in Freetown has continuously declined and the percentage non-farm enterprises that are no longer operating has increased fourfold.
- Stability of earnings has depended on the employment sector. Wage workers are earning around the same as they did pre-crisis, while those operating non-farm household enterprises are seeing revenues around 54 percent lower than in July-August 2014. Women in particular are affected, mostly due to the fact that they are generally working in non-farm household enterprises, the sector most heavily impacted by Ebola.
- Food insecurity, which was high in Sierra Leone even before the crisis, continues to be a concern. Nearly 70 percent of households taking at least one action to cope with food shortages in the week leading up to the survey. Coverage of social assistance thus far reflects the disease-specific targeting of the emergency response, suggesting efforts to reach the poorest will be key as the country moves toward recovery.
- Delivery of social services has generally improved. The utilization of maternal care services has increased significantly since November: the percentage of women who gave birth in a clinic up from 28 percent to 64 percent and the percentage who received at least one prenatal visit up from 56 percent to 71 percent. National educational radio programs, working to bridge gaps created by long-term school closings, have reached nearly 72 percent of households with school-aged children, who reported that at least some children listened to these programs.

A third round of mobile phone data collection in Sierra Leone is planned for April 2015, to continue to track and highlight the most pressing areas of attention for policy makers as they move toward the economic recovery phase.

#### Sources

 CDC Ebola Outbreak Monitoring, http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/index.html



June 04, 2015