Guinea, Liberia and Sierra Leone
Food insecurity remains high in spite of the harvest

Tracking food security during the Ebola Virus Disease (EVD) outbreak

Highlights

- Despite the start of the main harvest, little-to-no effect on indicators in high EVD-affected zones of all countries has been observed, including Forest Guinea (Guinea), Lofa County (Liberia) and Kailahun District (Sierra Leone), where people are continuing to implement severe coping strategies.

- The geography of food insecurity is shifting as the epidemic spreads. For instance, decreased wages and terms of trade are observed in the newly cordoned-off Northern Province in Sierra Leone, where many new EVD cases have been registered since September.

- In Liberia and Sierra Leone, food security impacts appear less severe in urban areas than in rural ones.

- While imported rice prices are generally stable, the price of local rice has dropped noticeably in production areas of Guinea, Sierra Leone and Liberia as new supplies are brought to market.

- The EVD outbreak may be disrupting wage labour markets in newly-affected areas of Sierra Leone. Wage rates remain low in Lofa.
The reduced coping strategies index (rCSI) is the index that expresses the frequency and severity of the mechanisms that households use to access food. The more strategies households implement, the higher the rCSI. November data suggests that the rCSI has increased in Nzerekore (Guinea). The rCSI remains stable at high levels in Conakry (Guinea) and in Lofa (Liberia). By contrast, the rCSI has fallen in Sierra Leone in November, in line with seasonal trends.

**Methodology: Remote Mobile Phone Surveys**

mVAM round two data was collected by text message (SMS) in Liberia and Sierra Leone and by Interactive Voice Response (IVR) in Guinea. In all, 800 households were sampled in Liberia; 800 in Sierra Leone; and 532 in Guinea. Respondents contacted in round one were contacted again in round two to allow for trend analysis. Learn more about our survey methodology [here](#).

Overall, the data suggests that the impact on food security of the Ebola Virus Disease (EVD) in Liberia and Sierra Leone has been more severe in rural areas than in urban areas, where there appears to be better market access. People in Monrovia and Freetown are generally better off than people residing in rural areas, including areas that are not affected by EVD.

**Ebola outbreak shifts in October–November**

In **Sierra Leone**, a decline in the number of EVD cases has been reported weekly in Kenema and Kailahun, while transmission remains intense in western and northern areas of the country.

In **Guinea**, transmission rates remain high in Macenta, Nzerekore, and Beyla.

While high EVD transmission continues, weekly case numbers in **Liberia** have been declining since mid-September, including in Lofa and Margibi Counties.

For a visualization of the growing number of new cases, please see the interactive map [here](#).

Source: WHO

---

**Figure 1: rCSI trends for October and November 2014**

![Figure 1](source: mvAM data)
Sierra Leone: Improvement in rCSI with risk in newly-cordoned EVD areas

In Sierra Leone, rCSI levels dropped in October, as the main rice harvest was underway. Coping remains the highest in the EVD-affected district of Kailahun (rCSI=19.0) in Eastern Province, but even here, the situation has improved from an rCSI of 22.1 last month (p=0.10). Interestingly, the rCSI in Northern Province (rCSI=17.4) has not dropped as much as in the rest of the country and now stands higher than in the district of Kenema, where the rCSI was very high in October. These variances across Sierra Leone may be explained by a delay in the start of the rice harvest, which typically begins in August–September in the east and in October in the north. This year, however, farmers have reported delayed harvests because of heavy rains in September. Northern Province has also witnessed a sharp increase in Ebola cases since mid-September, resulting in newly cordoned areas in northern towns including Port Loko and Bombali.

In contrast to other countries, it seems that the harvest is reducing food-related coping in Sierra Leone, including in EVD-affected zones. In November, the lowest coping levels are observed in Western Area (rCSI=14.6), which includes the capital Freetown. Households in Kailahun and Kenema reported using significantly fewer coping strategies in November compared to October. This is likely a result of the harvest. Consuming less expensive and less preferred food remains the most frequently used strategy, employed by 87 percent of households in Kailahun and 79 percent in Kenema.

Liberia: rCSI remains stable at high levels in Lofa County

In Liberia, WFP switched from collecting data via IVR in October to using SMS in November. As such, a strict comparison cannot be made between round one and round two results, except for Lofa County, which was surveyed by SMS in both months.

In October, the central belt of counties had been found to have the highest rCSI levels. In November, the areas of Liberia with the highest rCSI are Lofa and the south-eastern counties. In Lofa, the rCSI remains stable at high levels: the county registered an rCSI of 21.7 in October and of 20.9 in November (p=0.61). In spite of the harvest, Lofa’s rCSI is the highest in Liberia in November. Lofa produces a food surplus, but the area has been severely affected by the EVD outbreak and is subject to quarantines. The high rCSI in November indicates that the positive effects of the harvest, perhaps offset by low wages, have not been sufficient to improve household food security in the area.

High levels of coping continue to be observed in the south east, western and central zones. The lowest levels of coping in Liberia were seen in Montserrado County (rCSI=15.9), which includes the capital Monrovia, where a decline in EVD cases has been reported. High rCSI levels in the south east – less affected by EVD – may reveal chronic food insecurity.

The percentages of households in Lofa County employing various coping strategies differed little between round one and round two data collection. Consuming less expensive and less preferred food remains the most frequently used strategy. There was a slight increase (from 84.7 percent to 88.1 percent) in the number of households who reported limiting portion size at meal times.

Guinea: Coping highest in Nzerekore and Conakry

In Forest Guinea, the area of Guinea most affected by EVD, the rCSI has remained stable at high levels, varying from 21.8 in October to 25.8 in November (p=0.12). The high rCSI in Forest Guinea is of concern because it is registered during the harvest in a surplus-producing food zone at a time of year when households should benefit from access to own production and lower market prices. This may further be a consequence of low wages, as explained below.

The rCSI in Conakry (22.7) has remained stable at high levels since last month (p=0.32). Coping strategies in Upper Guinea, Middle Guinea and Lower Guinea remain lower than in the rest of the country. Overall, the November rCSI results for Guinea suggest that people are changing their behaviour to access food. The high rCSI levels in both October and November could reflect high baseline levels of vulnerability, as well as the impact of EVD.

The most common coping strategies reported by households in Conakry are (i) consuming less expensive and less preferred food (85.7 percent of households) and (ii) limiting portion size at mealtimes (84.7 percent of households). In Nzerekore, 91.2 percent of households reported reducing the number of meals they eat in a day, and 87.3 percent stated that they are consuming less expensive and less preferred food. In addition, 87.3 percent of households also said they are borrowing food or relying on help from a friend/relative to meet their consumption needs, a sign of increased food insecurity.
**Markets: prices for local rice fall as the harvest begins**

Data shows that the price of local rice has begun to drop in markets located in production zones across all three countries. This is in line with the start of the main rice harvest, which runs from October to December. The price of a cup of local rice has dropped from 1000 Le to 850 Le in Kailahun (Sierra Leone) and from $L40 to $L30 in Lofa Country (Liberia), reflecting the arrival of new supplies in markets. A drop in the price of local rice is also noted in Nzerekore (Guinea). However, the price of local rice in Lower Guinea is increasing. A reduction in supply caused by restrictions on cross-border trade with rice-exporting areas of Sierra Leone may explain this phenomenon. In Sierra Leone, the International Growth Centre reports that, with the exception of local anomalies, the level of rice prices across much of the country are in line with 2012 prices. In all three countries, quarantines and fear of infection on the part of informal traders — who typically travel from farm to farm collecting rice to sell — may reduce the volume of locally grown staple foods traded.

The prices for a 50 kg bag of imported rice remained stable in November at 140,000 Le in Sierra Leone, 220,000 GNF in Guinea and $L3,200 in Liberia. This confirms FEWS NET reporting that there have been ‘no major disruptions’ to ports in Conakry, Freetown and Monrovia.

According to November staple food price data, cassava prices are increasing, in line with the expected seasonal pattern. The price of palm oil is generally stable across all three countries at $L25 a pint in Liberia; 1500–2000 Le a pint in Sierra Leone; and 4000 GNF a pint in Guinea. However, in Nzerekore (Guinea), the price of palm oil has spiked between October and November, from 3000 GNF to over 4000 GNF. The recent instability of palm oil prices in Forest Guinea, an area that produces marketable surpluses of palm oil, could be linked to EVD impacts on food trade.

**Wage rates remain sensitive to the incidence of EVD**

In October, we noted that low wage levels were limiting household purchasing power in the EVD-affected zones of the three countries. As figure 2 shows, wage levels have generally not changed in Liberia in November. Wages in Lofa remain Liberia’s lowest, at $L200/day. In Nzerekore (Guinea), the median has remained constant at 15,000 GNF/day.

In Sierra Leone, trends are mixed, with wage rates rising in the eastern districts but dropping in all others. Not surprisingly, wage rates seem to have fallen in newly cordoned-off areas. For instance, in Western Area – where a large number of new EVD cases were registered in October – median wage rates have dropped from 14,000 Le/day in October to 10,000 Le/day in November. Wage rates have also dropped in Northern Area in November, a zone that includes the districts of Port Loko and Bombali.

**Wage-to-rice terms of trade remain low in Lofa County and in Forest Guinea. They have declined in newly EVD-affected areas of Sierra Leone**

Thanks to lower prices for local rice, wage-to-rice terms of trade improved in Lofa Country (Liberia), Nzerekore (Guinea) and in Eastern Province (Sierra Leone). In Lofa, wage-to-rice terms of trade have been stable and continue to be the poorest in Liberia. By contrast, wage-to-rice terms of trade fell for wage earners in Northern Province, Southern Province and Western Area of Sierra Leone, reflecting a decline in wage rates that might be caused by the spread of the EVD outbreak to these locations. Should low wages prevail in the coming months, many households might face greater food insecurity.
Conclusions and Outlook

The start of the harvest seems to have had little-to-no effect on indicators in highly EVD-affected zones in all countries, such as Kailahun (Sierra Leone), Nzerekore (Guinea) and Lofa (Liberia), where rCSI levels remain characteristic of an unstable food security situation. However, it seems to have improved food security in all areas of Sierra Leone, where higher rCSI levels were observed in October. Coping levels in Freetown and Monrovia appear lower than in rural areas.

As the epidemic continues to evolve and expand, we are observing changes in its impact on household food security. Households in areas that were amongst the first to be quarantined because of EVD outbreaks have experienced limited improvements compared to what would normally be expected during the harvest period. In addition, the fall in wage rates in newly cordoned areas (e.g., northern parts of Sierra Leone) may be indicative of a risk to household food security in the short-term.

In coming weeks, monitoring should focus on the marketing of the 2014 harvest. Anomalies in prices and/or trade flows for local commodities, especially local rice, would indicate more limited food markets over the next consumption year. Trends in wage rates will be monitored to determine whether the usual end-of-year increase materializes. Continued dysfunction in the labour market would indicate higher food security risks in the coming months, especially in areas that become subject to quarantine measures.

For more information, please contact:

**Arif Husain**  
arif.husain@wfp.org

**Jean-Martin Bauer**  
jean-martin.bauer@wfp.org

**Anne-Claire Mouilliez**  
anne-claire.mouilliez@wfp.org

To download mVAM data on the ebola-affected countries, please visit: [http://vam.wfp.org/sites/mvam_monitoring/index.html](http://vam.wfp.org/sites/mvam_monitoring/index.html)