

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

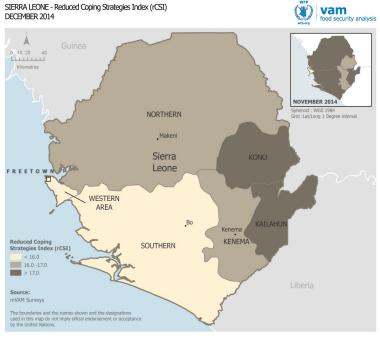
Highlights

- Ebola-induced food insecurity remains a concern in northern and eastern areas of Sierra Leone. Households in these areas have been using negative coping strategies more frequently than those in other parts of the country.
- Compared to November, wage-to-rice terms of trade have deteriorated in parts of the country that are experiencing continued Ebola virus disease (EVD) transmission.
- Thanks to the harvest, the prices of basic foodstuffs appear to have dropped in Sierra Leone between November and December. However, markets are still being disrupted by movement restrictions, resulting in lower stocks and reduced operating levels.

Methodology

mVAM round three data for Sierra Leone was collected by text message (SMS) in early December 2014. Approximately 800 households were surveyed. More information on the mVAM survey methodology is available here.

Map 1: Sierra Leone—Reduced Coping Strategies Index (rCSI)
December 2014



Source: WFP mVAM

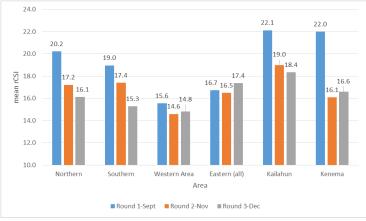
The reduced coping strategies index (rCSI) expresses the frequency and severity of the mechanisms that households use to access food. The more negative coping strategies households implement, the higher the rCSI.

Although there were nominal changes in rCSI between November and December 2014, rCSI values remain constant at high levels in much of the country. The rCSI is highest in the eastern districts of Kailahun (rCSI=18.3) and Kono (rCSI=17.8). Even though only a single new EVD case was reported in Kailahun between 1 November and 30 November, negative coping remains high. Kailahun is a major trade hub in the eastern part of the country and was classified as relatively food secure according to baseline data collected before epidemic. In neighbouring District, the higher rCSI could be linked to the effects of increasing EVD transmission there. Thus, high levels of negative coping in these eastern districts may be an indication of indirect EVD impacts on market access and trade, and possibly agriculture as well, as the outbreak occurred during harvest time.



Although the mean rCSI remained constant from November (14.6) to December (14.8) in Western Area, which includes the capital Freetown, it is still lower than in other parts of the country. By contrast, higher rCSI is seen once again in Northern Province (rCSI=16.1), where there has been an increase in new EVD cases. In December, restrictions on movement were reported to be in force in the districts of Moyamba, Bombali, Port Loko, Kono, Kenema and Tonkolili (International Growth Center report) as well as in other parts of the country.

Figure 1: mean rCSI for Sierra Leone: September, November and December 2014



Except in Southern Province, households throughout Sierra Leone reported employing more negative coping strategies in December compared November. In December, 78.8 percent of surveyed households reported consuming less preferred and less expensive food to cope with food insecurity. In Northern Province and Western Area, where the frequency of new EVD cases remained high during the reporting period, the percentage of households employing various negative coping increased overall, indicative strategies of worsening food security situation despite the recent Province, harvest. Southern however, In households reported using fewer negative coping strategies in December compared to November.

Source: WFP mVAM

EVD incidence rates for 24–30 November 2014

EVD transmission remains intense in Sierra Leone, with 537 new cases during the week ending 30 November 2014. Freetown, the capital, remains the worst-affected area, with 202 new confirmed cases reported during that week. Transmission rates are still elevated and intense in much of the country, except in the south. Cases were reported in the districts of Bo (23 cases), Bombali (66 cases), Kambia (14 cases), Kono (15 cases), Koinadugu (6 cases), Moyamba (3 cases), Pork Loko (94 cases), Tonkolili (40 cases) and Western Rural Area (72 cases). It is not yet confirmed if the overall number of cases in these areas is increasing. In the south, the district of Kailahun reported 1 new case, while Kenema reported no new cases for the last week of November and has had just one new case since 1 November 2014.

Source: WHO Situation Report on 3 December

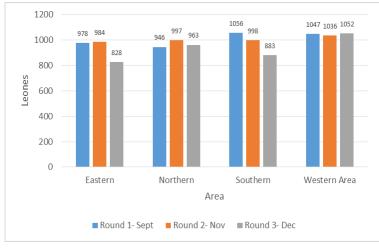
Food Prices: local rice prices fall while markets remain disrupted

Overall, the prices of basic foodstuffs appear to have dropped in Sierra Leone between November and December, potentially the result of the recent harvest. Limited market access has led to a surplus of supply in some local areas and shortages in others, as traders are not able to transport goods to markets. The provision of targeted food assistance may also have reduced beneficiary household's market reliance, lowering demand.

Local rice prices decreased slightly from November to December across Sierra Leone except in Western Area, where no change was observed. Local rice prices fell by around 10 percent in Eastern Province (p=0.00) and Southern Province (p=0.07), and by 3 percent in Northern Province (p=0.06). Between late September and December, imported rice prices were less volatile than local rice prices.

In addition to the effect of the harvest, low or fluctuating food prices may also be linked to the evolution of EVD across Sierra Leone. According to a December 2014 FEWS NET report, traders in six districts (in quarantined and non-quarantined areas) have reported that although markets are functioning, they are often operating at reduced levels. Further, many traders said they have lower-than-normal stock levels compared to previous years because of high transport costs and travel restrictions that have impeded trade both within the country and outside.

Figure 2: Local rice prices per cup: September, November and December 2014



Source: WFP mVAM

Text messages received from respondents

- "Some market goods are perishing due to the lockdown"
 male respondent in Bombali
- * "We live near the Liberian border and with the border closed, all our economic life came to a standstill" -male respondent in Pujehun

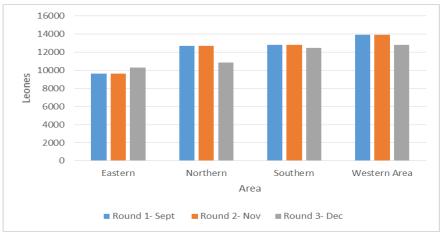
Wages and terms of trade

Unskilled wage rates across the country are mixed: they remained constant between November and December in Southern Province and Eastern Province, while declining in Northern Province and Western Area. Wage decreases in the latter may be an indirect consequence of the spike in EVD cases in the north and in Freetown. EVD has reduced unskilled service employment in Freetown, with effects on petty trade and small businesses - a major source of income. The direct and indirect impacts of EVD on incomes and livelihoods should be studied further through face-to-face assessments, once these become possible.

While wage-to-local rice terms of trade improved in December in eastern Sierra Leone, they fell in the north. The decline may be linked to EVD-related transportation restrictions.

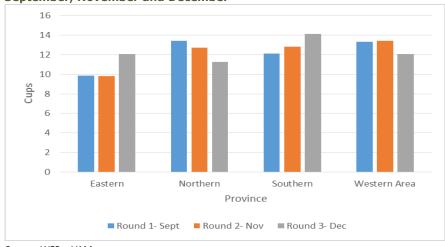


Figure 3: Unskilled wage rates: September, November and December



Source: WFP mVAM

Figure 4: Daily wage-to-local rice terms of trade: September, November and December



Source: WFP mVAM

Conclusion and Outlook

As in previous rounds, December 2014 rCSI and price data provides some evidence that the EVD epidemic is affecting the food security of rural households more than that of urban ones.

This impact may be long-lasting as food security patterns across the country are not yet returning to pre-outbreak levels. According to baseline data, Kailahun was relatively food secure before the outbreak. Now, however, the rCSI remains abnormally high in this area despite the fact that EVD has largely subsided there.

More information on indirect EVD impacts on household incomes and assets should be sought through dedicated field assessments.



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