

Sierra Leone

November 2014

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

Highlights

- Despite the harvest, rCSI levels remained largely unchanged in Sierra Leone between October and November, although levels fell slightly in Eastern Province. Coping seems to be less severe in Freetown compared with other areas.
- The spread of the Ebola virus disease (EVD) appears to have affected labour markets, with wages falling in newly cordoned areas (including the districts of Port Loko, Bombali and Waterloo).
- As a result of the harvest, local rice prices have fallen across Sierra Leone.

Map 1: Sierra Leone - Reduced Coping Strategies Index (rCSI) - November 2014

SIERRA LEONE - Reduced Coping Strategies Index (rCSI)
NOVEMBER 2014



Source: WFP mVAM

Methodology

mVAM round one and round two data was collected by text message (SMS) in Sierra Leone. Round one data was collected in late September 2014; round two data was collected in early November 2014. Approximately, 800 households were surveyed during each round.

For more information on survey methodology, visit our [webpage](#).

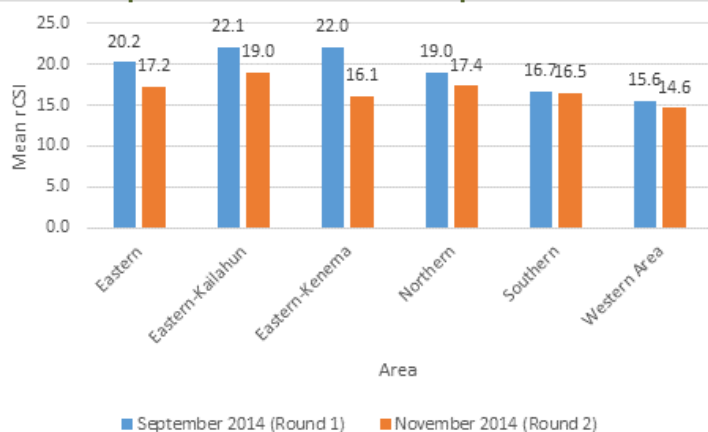
Nationwide, November data shows that rCSI levels have remained stable despite the ongoing harvest. Coping remains the highest in EVD-affected Kailahun District of Eastern Province, but even here, the situation has improved from rCSI=22.1 in September to rCSI=19.0 in November ($p=0.10$). Surveyed households in Kailahun reported employing fewer coping strategies in November compared to late September. This is likely a result of the harvest period. The most frequently used strategy is still consuming less expensive and less preferred

food, which is used by 87 percent of households in Kailahun. In November, the lowest coping levels were found in Western Area (rCSI = 14.6), which includes the capital Freetown. Households in Western Area may have better market access, resulting in higher food security in urban areas such as Freetown. There appears to be a shift in food security risk across Sierra Leone as the EVD epidemic spreads. Western and Northern areas – which previously had low levels of EVD – have recently experienced a surge in the number of cases. Consequently, cordon restrictions are in place, limiting transport and market access in districts including Bombali and Port Loko (Northern Area) and Waterloo (Western Area). Waterloo is a central transportation hub linking Freetown to the rest of the country; (IGC, 2014) therefore, cordoning off parts of this area could affect food security if the restrictions remain in place for several weeks.

¹ The rCSI captures the severity and frequency of consumption-related coping strategies. The more strategies households implement, the higher the rCSI.

As illustrated in figure one, the Eastern Province of Sierra Leone experienced a statistically significant decrease in mean rCSI between September and October ($p=0.004$), while rCSI scores remained statistically stable in all other areas of the country. If the epidemic continues, cordoned-off zones will have limited market access, which could undermine household food security in the coming months.

Figure 1: Comparison of mean rCSI for September and November



Source: WFP VAM

Ebola update as of 19 November 2014

EVD transmission remains widespread in Sierra Leone during the week of 16 November, and intense transmission has been reported in the west and north of the country. Freetown remains the worst-affected area with 168 new cases reported during the week of 16 November. Other areas with high transmission include Bombali (52 cases); Port Loko (95 cases); and the western rural area (102 cases). Low transmission was reported in the eastern districts of Kenema (0 cases) and Kailahun (1 case). (Source: [WHO](#))

Food prices

According to IGC, while local rice prices fluctuated slightly between September and November data collection, price levels are similar to those observed in 2012. The prices of imported rice remain generally stable at 140,000 leones for a 50kg bag, except in the Northern Area where prices dropped from 142,831 leones to 135,604 leones ($p=0.01$).

Palm oil prices have stayed fairly stable in most areas between round one and round two, with small decreases observed. The only exception is the Southern Area, where the price per pint has increased slightly from 1,692 leones to 1,752 leones, reflecting normal seasonal variations, as palm oil prices usually peak in December. According to a study by Casaburi, Glennerster et al. (2013), palm oil prices typically increase by 50 percent between the harvest and December. Thus, minimal or no increases in prices could translate to below-average incomes for palm oil-producing households.

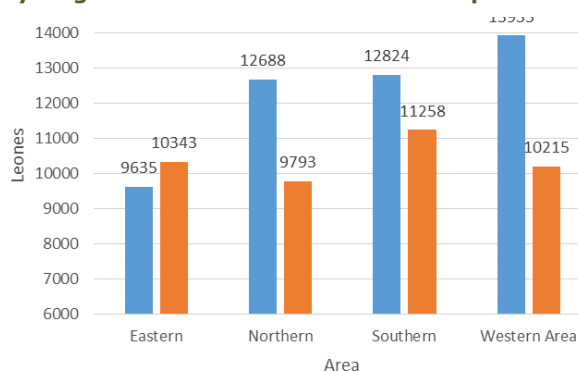
An [IGC report](#) indicates that the prices of recently harvested goods may be affected by an observed decline in the number of informal traders. These traders travel from village to village collecting farmers' cash crops to sell in markets, but some traders are reducing their activity for fear of contracting Ebola. This is particularly a concern for cash crop farmers who cannot consume their own products and thus rely on intermediate traders.

Wage levels

Wage rate trends for manual labour are mixed: wages are rising slightly in the eastern districts of Kenema and Kailahun but falling in all other parts of the country. The wage rate increases in Eastern Province may be the result of the ongoing rice harvest. In many of these areas, agricultural working groups have been restricted, probably pushing up costs for manual labour. Most areas in Eastern Province are agricultural zones. Hence, with the onset of the rice harvest, increased daily wages are to be expected, particularly as group gatherings are increasingly prohibited and potential day labourers view group work on farms as risky.

By contrast, the lower wages in northern Sierra Leone may be linked to a rise in EVD cases. Makeni in the district of Bombali has recently become a 'hot zone,' with quarantines limiting market access and production, potentially putting downward pressure on wages. Wage falls in the Western Area are also not surprising given that unemployment has spiked recently.

Figure 2: Daily wage rates for manual labour for September and November



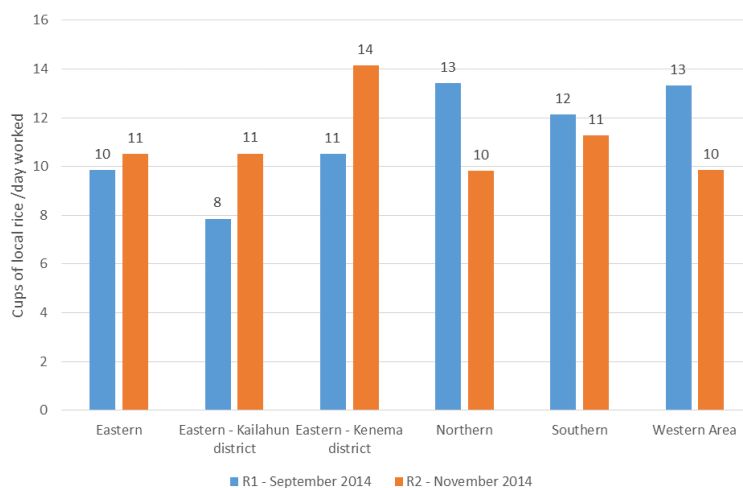
Source: WFP VAM

Wage-to-local-rice terms of trade, September and November 2014

Between September and November, wage-to-local-rice terms of trade appear to have declined for wage earners in Northern Province, Southern Province and Western Area. These decreases might be caused by the spread of the EVD outbreak to new locations. Thanks to lower prices for local rice, wage-to-rice terms of trade have improved in Eastern Province. November data shows that a day labourer's wage in Kenema is sufficient to purchase 14 cups of local rice, compared with 11 cups in late September. A decrease in the frequency of newly reported EVD cases in tandem with the ongoing rice harvest has likely resulted in lower local rice prices and higher wages, thus leading to better terms of trade for households in these areas. In the Western Area – where EVD transmission remains high – a day labourer's wage is sufficient to purchase 10 cups of rice, compared with 13 cups during round one data collection. The same trend is observed when calculating wage-to-imported-rice terms of trade. Households in Northern Province, Southern Province and Western Area have lower purchasing power than those residing in eastern Sierra Leone.

Palm-oil-to-local-rice terms of trade have remained fairly stable between round one and round two data collection, despite falling local rice prices in much of the country.

Figure 3: Wage-to-local-rice terms of trade, September and November 2014



Source: WFP VAM

Conclusions

While rCSI levels have remained stable or dropped since the previous round of data collection, the improvement in food security may be short-lived as EVD spreads to new areas. Specifically, the spread of EVD seems to be impacting the economy and livelihoods, with newly cordoned areas in northern Sierra Leone seeing falling wage rates and a decline in food purchasing power.

However, the marketing season for cash crops (coffee/cocoa/palm oil) begins in December and is an important contributor to household income for both producer and wage labourer households, especially in the east. If the rising trend in wage rates in this area continues in December, food security outcomes should improve.



For further information please contact the VAM Food Security Analysis Unit:

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: vam.wfp.org/sites/mvam_monitoring

mVAM data can also be accessed at: data.hdx.rwlibs.org