

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

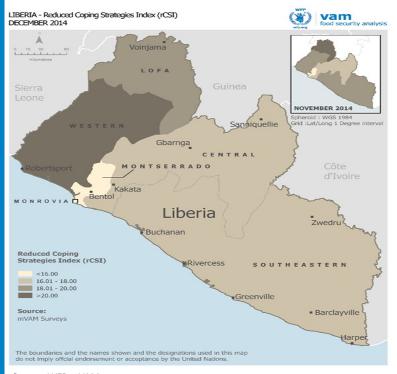
# **Highlights**

- Households continue to rely on high levels of negative coping in Lofa, a county that was generally food secure before the Ebola virus disease (EVD) outbreak.
- High levels of negative coping and declining terms of trade were observed in December in the western zone including the counties of Grand Cape Mount, Gbaroplu and Bomi, where EVD transmission continues.
- By contrast, people were resorting to fewer negative coping mechanisms in the central zone that includes the counties of Bong, Margibi and Nimba.
- Although there are signs of recovery with the reopening of markets and roadways, the effects of EVD on food security may outlast the EVD epidemic.

### Methodology

mVAM round three data for December 2014 was collected by text message (SMS) in Liberia. Approximately 800 households were surveyed. Details on the survey methodology are available <a href="here">here</a>.

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



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.

The mean rCSI for the whole of Liberia nominally decreased from 17.7 to 16.9 (population-weighted averages) between November and December 2014. This decrease may indicate a slowly improving food security situation across the country thanks to a stagnation in EVD cases observed in late November, the recent harvest and the end of the state of emergency, which had been in effect since August. The slowdown in the spread of the epidemic has allowed for the reopening of markets and major roadways.

In Montserrado, which includes Monrovia, levels of negative coping remained constant between November and December, with a rCSI that was lower than in other areas of the country.

Source: WFP mVAM



By contrast, rCSI fell from 17.8 in November to 16.9 in December (p=0.10) in the central zone, which includes the counties of Bong, Margibi, and Nimba. This indicates that households residing there used fewer and/or less severe negative coping strategies to deal with food insecurity compared to the previous month. In Lofa, a county that has been amongst those hardest hit by the EVD epidemic, the rCSI value remained high at 19.5. Given that Lofa is a rice-producing area and despite slight improvements in rCSI levels from past months, the current rCSI suggests a poor food security situation, likely caused by lowered production and/or slow market recovery. Continued high negative coping levels are observed in Lofa, even though no new EVD cases were observed during this reporting period.

#### **EVD** incidence rates up to 28 November 2014

Case incidence rates stabilized during the last week of November, after declining from mid-September to mid-October. Montserrado, County, which includes the capital Monrovia, accounted for 79 percent of all confirmed cases (34 cases) during the week ending 28 November. Other areas with confirmed cases included Bomi (2 cases); Grand Bassa (4 cases); Grand Cape Mount (2 confirmed, compared to 21 the previous week); and Margibi (1 case). Lofa County reported no new cases during this period.

Source: WHO Situation Report on 3 December

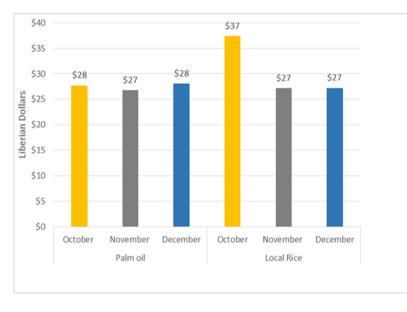
## Food Prices: average prices remain constant between November and December

Aggregate average prices for basic commodities (local rice, cassava flour and palm oil) in Liberia did not fluctuate greatly between November and December.

There was, however, a nominal 10 percent decrease in local rice prices in Lofa from November to December. A fall in local rice prices was also observed in south-eastern Liberia (p=0.01), where the price per cup fell from \$L30 in November to \$L26.5 in December. Imported rice prices were less volatile than local rice prices between November and December, with prices remaining constant at \$L3,000 per bag in Monrovia in December.

Falling local rice prices are typical at this time of year following the rice harvest. Lower prices may also be linked to the reopening of markets after the government lifted the state of emergency. While reports indicate that many markets continued to operate at reduced levels at the time of data collection, trade activities are slowly showing signs of recovery. In a survey conducted in late November of 600 traders across Liberia, 90 percent of respondents reported that weekly markets were open (although perhaps at reduced levels) during the week of 17 November (<u>FEWS NET</u>).

Figure 1: Comparison of average palm oil and local rice prices— October, November and December 2014



# Decreasing wages and terms of trade

Since November, nominal decreases in daily wages of between 12 and 20 percent have been observed across Liberia. The drop in wages in December is probably linked to the type of agricultural labour underway during this period. In November and early December, agricultural day labourers are hired for harvesting, for which labourers are paid lower wages than for tasks undertaken at other times of the year (such as brushing). Wages may also be depressed due to an influx of new supply, as many workers across the country lost their jobs during the EVD outbreak and are thus on the market for new employment.

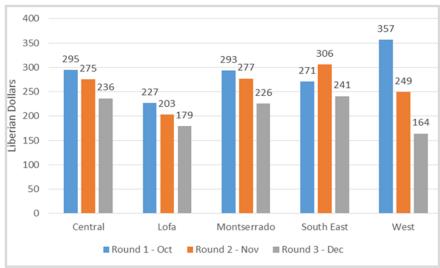
A decrease in the daily reported daily wage was also noted in Montserrado, where the wage rate fell from \$L277 to \$L226 (p=0.03) from November to December.

In Lofa, wage rates continue to be less than \$L200/day – the second lowest in the country. Wages are still depressed in this area, even though no new EVD cases have been recorded. Wages have also fallen in the western zone (Bomi, Gbaroplu, Grand Cape Mount), where continuing EVD transmission may have disrupted markets and trade during the survey period.

Nominal declines in wages across Liberia led to a fall in wage-to-local-rice terms of trade between November and December. The decline was most prominent in the western zone, Montserrado and central Liberia. Although terms of trade have improved since October in Lofa, wage-to-local-rice terms of trade remain amongst the lowest in the country, with households able to purchase approximately 7 cups of rice in December as compared to roughly 5 cups in October for one day's wage. This is perhaps linked to slow economic recovery following several months of high EVD incidence.



Figure 2: Daily wage rates— October, November and December 2014



Text messages received from respondents

- "Today in Liberia, a lot of people are poor and can barely afford items to meet their basic needs."
  - female respondent from Montserrado County
- "Because of Ebola, things have changed from easy to hard in our country."
  - male respondent from Nimba County
- "I have 60 bags of cassava but due to travelling being restricted, I am looking for customers to buy my goods quickly." female respondent in Lofa County

## **Conclusion and Outlook**

Some signs of recovery were noted in December, thanks to the effects of the harvest and the lifting of the state of emergency. Fewer households were using severe coping strategies in the central zones, which had previously been hard hit by the EVD epidemic. Local rice prices have fallen in Lofa, as the harvest comes in and local markets resume. However, food insecurity continues to affect areas outside the capital the most.

Data shows that EVD-inducted food insecurity remains a concern in the long run, because some typically food-secure areas – such as Lofa County – continue to show high levels of negative coping even though EVD incidence has declined over recent weeks.



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To download mVAM data on the ebola-affected countries, please visit: <a href="http://vam.wfp.org/sites/mvam\_monitoring/index.html">http://vam.wfp.org/sites/mvam\_monitoring/index.html</a>