

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

Highlights

- In February, households in Liberia used the same number or fewer negative coping strategies than in January. Food security continues to improve thanks to the recent harvest and lower incidences of Ebola. However, the poorest households used more coping strategies than in January.
- Negative coping strategies are most prevalent in the northern and western counties of Lofa, Bomi, Gbarpolu and Grand Cape Mount.
- Liberia opened its land borders on 22 February 2015, allowing trade to resume. While there are signs that markets and trade are recovering, high staple food prices and low wages are hampering food access in north-west Liberia.

Map 1: Liberia — Reduced Coping Strategies Index (rCSI) - February 2015



Ebola cases continue to drop in Liberia

The frequency of new Ebola cases continues to decrease. Only 2 confirmed cases were reported in the four days to 12 February. Both cases were in Montserrado, the county that includes the capital, Monrovia.

Source: WHO Ebola Situation Report 18 February

Poorer households are resorting to more negative coping strategies

The reduced Coping Strategies Index (rCSI) measures the frequency and severity of the behaviours households engage in when faced with food shortages. A higher score indicates that households are resorting to more frequent or severe negative coping strategies. Following the end of the harvest, the rCSI in Liberia has continued to stabilize.

February's results were statistically similar to those in January (rCSI=15.9 in January, 15.4 in February, p=0.29). Coping strategies are still high in Lofa (rCSI=18.6) and in a western zone that includes the counties of Bomi, Grand Cape Mount and Gbarpolu (rCSI=18.3). A relatively high rCSI is also found in the south-east (rCSI=16.7), which has not been directly affected by Ebola. Lower levels of coping are observed in Grand Bassa (rCSI=13.4) and in Montserrado (rCSI=13.8).

Although households in Lofa were better off than average before the Ebola outbreak, high levels of



food insecurity were recorded in the western zone and in the south-east in a WFP baseline survey carried out in 2010.

February data also indicates that while coping levels for the general population have remained stable since January, the poorest households are resorting more frequently to negative coping strategies. During the survey, households were asked about their latrine type, a proxy for household wealth. As shown in Figure 2, the rCSI for households without toilets in Liberia (the poorest households in the sample) increased from 23.1 to 25.1 (p=0.04). This trend suggests that although the main harvest has just ended, and the Ebola epidemic has abated, the poorest households seem to be increasingly reliant on negative coping strategies. This could indicate that the seasonal post-harvest improvement in food security has come to an end for the poorest households in the country.

Households headed by women engage in negative coping behaviour more frequently than those headed by men. The rCSI for households headed by men has fallen significantly (from 15.7 to 15.3; p=0.02), but it has remained stable for women (nominal decrease of 2 percent, p=0.29).

Trade is increasing now that markets and borders have reopened

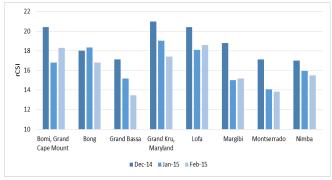
Liberia opened its land borders on 22 February 2015. All three Ebola-affected countries now have open land borders, allowing trade to resume.

The latest field assessment conducted in February found no major food shortages in the markets and communities visited in Liberia. In some areas, production has declined moderately because of Ebola-related restrictions on group labour. Over the past months, there has been a fall in trading activities because of border closures, poor purchasing power and limited or no credit availability for households and traders. But with increased freedom of movement in Liberia, trade is resuming, especially in the capital and bigger cities.

According to WFP data, the retail price of local rice increased seasonally by 2 percent in Liberia compared to January. Imported rice prices remained largely stable at high levels, partly because of the depreciating exchange rate. Palm oil prices increased by 2 percent. Prices rose more markedly in Lofa County (+7%), an area that produces a rice surplus and that has been hard hit by Ebola. These increases could signal the end of the post-harvest decline in local rice prices in Liberia. Rice and palm oil prices are highest in Lofa, Bomi, Gbarpolu, Grand Cape Mount and in the south-east, all areas where household coping is most severe.

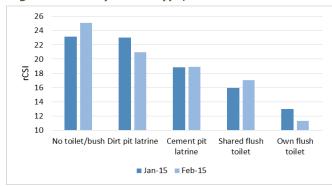


Figure 1: rCSI levels in Liberia



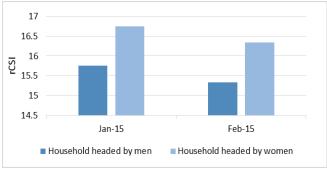
Source: WFP mVAM

Figure 2: rCSI by latrine type, Jan-Feb 2015



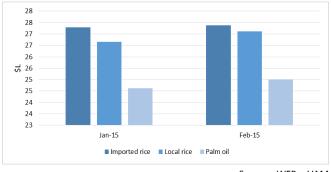
Source: WFP mVAM

Figure 3: rCSI by sex of household head in Liberia



Source : WFP mVAM

Figure 4: Prices of palm oil (per pint) and imported/ local rice (per cup)



Source: WFP mVAM

Methodology

February 2015 marked the fifth round of data collection. The data was collected by SMS over a week in mid-February. A total of 1,100 questionnaires were collected in Liberia. The map on the left shows the cellphone towers from which responses were received. Details on methodology are available online.

Wage rates remain mixed

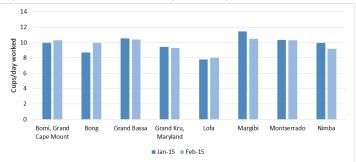
Wage rates trends in Liberia have been mixed. Wages rose in western Liberia and Bong, but they dropped in Margibi and the south-east. Wage rates in Lofa County still stand at around \$L200, which is 20 percent below the national average.

In Liberia, wage-to-imported-rice terms of trade fell in Margibi (-8%) and Nimba (-8%) in February, but they improved in Bong, Bomi, Grand Cape Mount and Gbarpolu. In Lofa, terms of trade are still low (8 cups, compared to 9–10 cups in other parts of the country) and they are associated with higher levels of coping.

Figure 5: Wage rates, unskilled labour



Figure 6: Terms of trade, wages to imported rice



Source: WFP mVAM

Source: WFP mVAM

Perceptions of food security in February

During the survey, 60 percent of respondents texted their perception of food security in their community. The following word cloud illustrates the terms most commonly found in their responses.

As in January, responses were divided between people who thought the food security situation was good and those who were worried about it. Respondents in places where people use more coping strategies (Lofa, Bomi and Grand Cape Mount) tended to mention the word 'farming' frequently – it was the seventh most-mentioned word. This suggests that farming is a concern and a priority in the most food-insecure communities.

Purchasing power seems to be the dominant issue in Montserrado and Grand Bassa, which have a lower level of coping. The word 'expensive' was the fourth most-mentioned word among respondents in low negative coping areas. The term ranked thirteenth in areas where people use more negative coping strategies.

Figure 7: Word clouds

a- Higher rCSI (Lofa, Bomi, Grand Cape Mount) b-Lower rCSI (Montserrado, Grand Bassa)





In the words of the respondents:

- "The food situation in my community is discouraging, many people can't afford daily food due to a lack of money caused by this Ebola crisis" - Male respondent from Sinoe
- "In my community, the food situation is not bad. At least all dwellers can afford a day's meal" - Male respondent from Montserrado
- "We have plenty of food in my community, but it's not easy to get money. To get a contract is not an easy thing" - Male respondent from Maryland

Conclusion and Outlook

Although the results of the February surveys indicate that the overall situation is stabilizing or improving in Liberia, the poorest households seem to be increasingly reliant on negative coping strategies.

Some Ebola-affected areas have seen a rebound in palm oil prices and labour markets and a decline in negative coping, which may signal an economic recovery that could bolster food security. By contrast, food security indicators continue to be poor in the counties of Lofa, Grand Cape Mount, Bomi and Gbarpolu. All of these places seem to be exposed to high staple food prices and relatively low terms of trade.



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