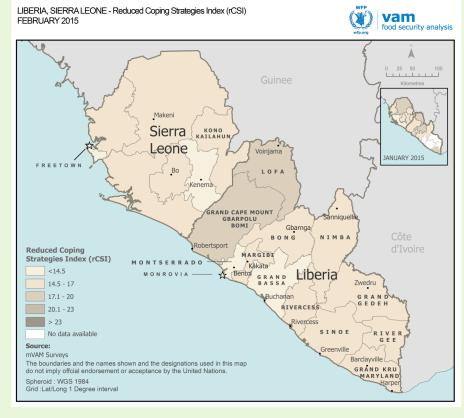


Tracking food security during the Ebola Virus Disease (EVD) outbreak

## **Highlights**

- In February, households in Liberia and Sierra Leone 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 in both countries used more coping strategies than in January.
- In Liberia, negative coping strategies are most prevalent in the northern western counties and Lofa, Bomi, and Grand Cape Gbarpolu Mount. In Sierra Leone, coping is highest in the of districts Bombali, Koinandugu and Tonkolili in the north. Monrovia and Freetown continue to be relatively better off.
- Liberia opened its land borders 22 **February** 2015. All three Ebolaaffected countries now have open land borders, 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 and northern Sierra Leone.



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, and 1,050 were collected in Sierra Leone. For technical reasons, primary data was not collected in Guinea this month. The map below shows the cell phone towers from which responses were received. Details on methodology are available online.

# 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 Sierra Leone and Liberia has continued to stabilize.

In Sierra Leone, the national average rCSI dropped from 15.6 in January to 14.4 in February (p=0.06) as many households continued to benefit from the recent harvest. Statistically significant declines in the rCSI were observed in the eastern district of Kenema (15.1 to 12.5, p=0.03) and in the adjacent district of Bo (16.5 to 14.7, p=0.09). The highest rCSI in Sierra Leone is still in Northern Province, including the districts of Bombali, Koinandugu and Tonkolili (rCSI=16.5) and Kambia/Port Loko (rCSI=15). Coping levels continue to be lower in Western Area urban (rCSI=11.9) and Western Area rural (rCSI=12.5). Interestingly, the rCSI in Kenema district is now one of the lowest in Sierra Leone, after having been one of the highest in September at the peak of the Ebola outbreak.

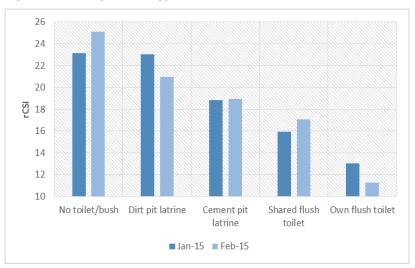
In Liberia, February's results were statistically similar to those in January (rCSI= 15.9 in January, 15.4 in February, p=0.29). Coping strategies are still high in Lofa (rCSI=18.6) and in a

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).

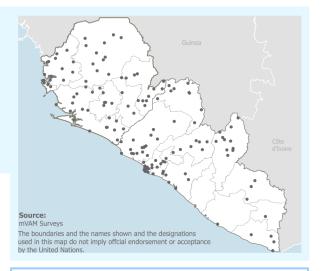
Although households in Lofa had been better off than average before the Ebola outbreak, high levels of food insecurity were recorded in the western zone and in the southeast in a WFP baseline survey carried out in 2010.

February data also indicates that while coping levels for the general population have fallen 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 income. As shown in Figure 1, the rCSI for households without

Figure 1: rCSI by latrine type, Liberia, Jan-Feb 2015



Source: WFP mVAM



# **Ebola transmission in Western Sierra Leone**

In **Sierra Leone**, transmission remains widespread. Weekly case incidence has stabilized since the week ending January 25, at between 60 and 80 confirmed cases per week. A total of 74 cases were reported in the week to 15 February. The capital, Freetown, reported the majority of new confirmed cases (45).

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

Source: WHO Ebola Situation Report 18 February

toilets in Liberia (the poorest households in the sample) increased from 23.1 to 25.1 (p=0.04, n=88). The same phenomenon is also observed in Sierra Leone, but in a smaller sample. The trend might suggest 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.

Households headed by women engage in negative coping behaviour more frequently than those headed by men in both countries. However, in Sierra Leone, the mean rCSI for households headed by women has dropped from 18.1 to 17.5 (p=0.08). In Liberia, 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.

#### Trade is increasing now that markets and borders have reopened

The latest field assessment conducted in February found no major food shortages in the markets and communities visited in Liberia and Sierra Leone. In some areas, production has declined moderately because of Ebola-related restrictions on group labor. 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 all three Ebola-affected countries,

trade is resuming, especially in the capitals and bigger cities.

According to WFP data, shown in Table 1, the retail price of local rice increased seasonally by 2 percent in Liberia and Sierra Leone in February, compared to January. While imported rice prices remained largely stable at high levels in Liberia, they increased in Sierra Leone. Palm oil prices rose in Liberia, but they fell slightly in Sierra Leone.

In Sierra Leone, imported rice prices have risen in Bo and Kenema in February, perhaps as a consequence of the

Table 1: Food prices, Changes from January to February 2015

Country	Local rice	Imported rice	Palm oil
Liberia	+2%	0%	+2%
Sierra Leone	+2%	+5%	-1%

Source: WFP mVAM

recent depreciation of the Leone against the US dollar. In general, there was a modest increase in local rice prices. However, prices fell by 6 percent in the rice-producing zone of Port Loko and Kambia, indicating that new rice continues to arrive on the market from surplus zones. In the case of palm oil, modest price increases were seen in the palm-oil-producing districts of Kenema (+2%) and Kailahun (+1%), continuing the trend towards a recovery in palm oil prices already seen earlier in January. Food prices were highest in the districts of Bombali, Tonkolili and Koinadugu. This may be part of the reason behind the higher levels of coping in these areas.

In Liberia, imported rice prices remained largely stable at high levels, partly due to a depreciated exchange rate. Nationally, locally-produced rice prices increased modestly in February. 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.

#### Wage rates fall for the second consecutive month in Sierra Leone, but they remain mixed in Liberia

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 around LD200, which is 25 percent below the average for Liberia.

In Sierra Leone, wage rates dropped in February for the second month in a row, particularly in the south (-17%) and in Port Loko/Kambia (-19%). This fall is due to the end of the rice harvesting season and the resulting decline in demand for agricultural labour. By contrast, wage rates improved notably in Kenema, where they stand at 12,000 Leones a day. The lower rCSI in Kenema could be linked to better income and employment opportunities.

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 in other parts of the country) and they are associated with higher levels of coping.

Except in rural parts of Western Area, terms of trade also decreased in Sierra Leone as wage rates fell and food prices increased. The steepest decrease was 6 percent in Kambia and Port Loko. The lowest terms of trade are observed in Kailahun/Kono, where a day's wage is equivalent to 10 cups of local rice, compared to 11 to 12 cups in other parts of the country.

Liberia

Figure 2: Daily wage rates for unskilled labor. USD/day.

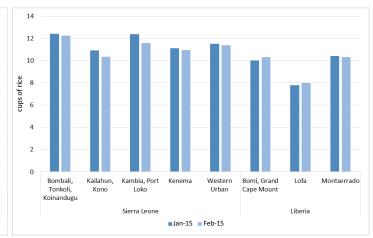
3.50

Bombali, Tonkoli, Kailahun, Kono

Sierra Leone

■Jan-15 ■ Feb-15

Figure 3: Wage-to-rice terms of trade (local rice in Sierra Leone, imported rice in Liberia)



Source: WFP mVAM Source: WFP mVAM

### In the words of the respondents:

#### Sierra Leone

- "The food situation is better, because the roads are now open, so food stuffs can come to our community" Female respondent from Bombali.
- "To get food is hard and some people hardly eat. Local food is available but money is not available because workers haven't been paid" Male respondent from Moyamba.
- "The food situation in my community is very hard due to the Ebola outbreak. Some farmers have decided not to plant rice until after the Ebola epidemic" Male respondent from Kenema.

#### Liberia

- "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 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.

In Sierra Leone, respondents perceive prices to be very high and even increasing. 'Transportation' is a popular topic this month: some respondents complained about bad or closed roads, while others were satisfied that roads had been opened again. Overall, food seems to be available communities, but at prices that are perceived to be high. Only a few respondents reported a particular commodity being unavailable in their community. More respondents in Liberia talked about the food security situation improving compared to respondents in January and those in Sierra Leone. Ebola is far less often mentioned in the responses than in previous months.

## **Conclusions and Outlook**

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

Some Ebola-affected areas – such as Kenema in Sierra Leone – 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 Lofa, Grand Cape Mount, Bomi and Gbarpolu in Liberia, and in Koinadugu, Bombali and Tonkolili in Sierra Leone. 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: <a href="http://vam.wfp.org/sites/mvam\_monitoring/index.html">http://vam.wfp.org/sites/mvam\_monitoring/index.html</a>