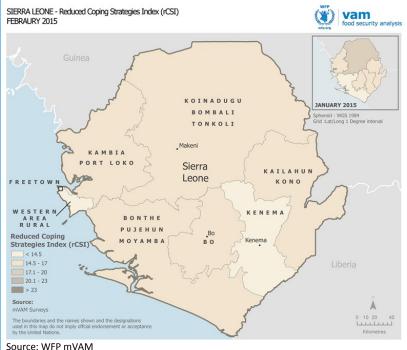


Tracking food security during the Ebola Virus Disease (EVD) outbreak in Sierra Leone

Highlights

- In February, households in Sierra Leone used fewer negative coping strategies than in January. Food security continues to improve thanks to the recent harvest and measures to control Ebola.
- Coping is highest in the districts of Bombali, Koinadugu and Tonkolili in the north. Use of negative coping strategies fell significantly in the districts of Bo (in the south) and Kenema (in the east). Residents of Freetown continue to be relatively better off.
- Local and imported rice prices rose slightly in February. Wage rates declined, especially in the south and in Port Loko/Kambia, because of reduced demand for labour as the rice harvest ends. High staple food prices and low wages are hampering food access in northern Sierra Leone.

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



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 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 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, Koinadugu and Tonkolili (rCSI=16.5) and Kambia/Port Loko (rCSI=15). Coping levels continue to be lower in Western Area (urban rCSI=11.9; rural rCSI=12.5). Interestingly, the rCSI in Kenema

Ebola transmission in western Sierra Leone

In Sierra Leone, Ebola 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).

Source: WHO Ebola Situation Report 18 February 2015

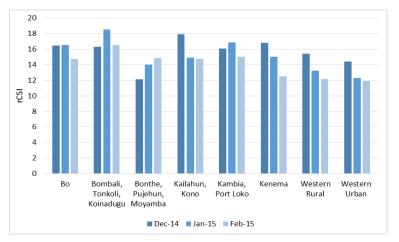


district is now one of the lowest in Sierra Leone, after having been one of the highest in September at the peak of the Ebola outbreak.

As shown in Figure 2, the rCSI for households without toilets in Sierra Leone (the poorest households in the sample) nominally increased from 17.7 to 19.2 (p=0.47). This 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. This hypothesis will be verified further by monitoring the situation over coming months.

Households headed by women engage in negative coping behaviour more frequently than those headed by men. In February, the mean rCSI dropped for both types of household in Sierra Leone; however, the rCSI difference between them remained the same.

Figure 1: rCSI levels in Sierra Leone



Source: WFP mVAM

Figure 2: rCSI by latrine type

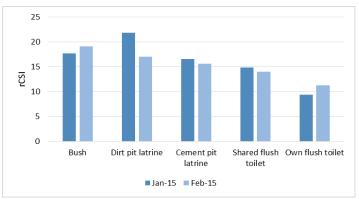
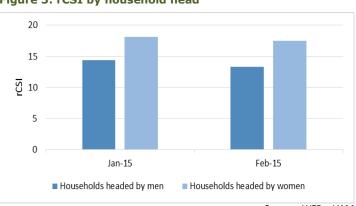


Figure 3: rCSI by household head



Source : WFP mVAM Source : WFP mVAM

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 Sierra Leone. In some areas, production has declined moderately because of Ebola-related restrictions on group labour. In previous months, there was 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 Sierra Leone, trade is resuming, especially in the capital and bigger cities.

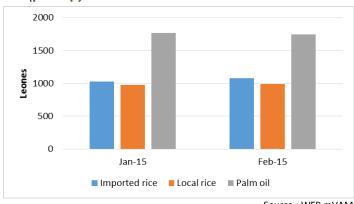
In Kenema, key market informants report that periodic markets are resuming activities with the informal agreement of local authorities, now that Ebola cases have dropped. Moreover, the increased freedom of movement has removed some of the barriers that deterred farmers from reaching daily markets. Supplies are thus flowing to markets, explaining a drop in the price of cassava to normal levels in the district.

According to WFP data (Figure 4), the retail price of local rice rose by 2 percent and imported rice increased by 5 percent in February. Palm oil prices fell by 1 percent.

Imported rice prices rose in Bo and Kenema in February, perhaps as a consequence of the 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. The modest increase in local rice prices may be the result of a poor swamp rice harvest; crops were damaged by abnormally high rains in October and November which led to flooding. Labour restrictions further constrained normal activities, causing a modest decrease in rice production countrywide. In the case of palm oil, small 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 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.

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 1,050 questionnaires were collected in Sierra Leone. The map below shows the cellphone towers from which responses were received. Details on methodology are available online.

Wage rates fall for the second consecutive month in Sierra Leone

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.

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.

In Kenema, the drop in Ebola case incidence due to better treatment allowed for the resumption of public works. Young people and road workers are being employed on road construction, feeder road rehabilitation and the construction of water supply systems.

Figure 5: Wage rates, unskilled labour in USD/day

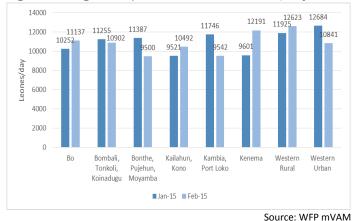
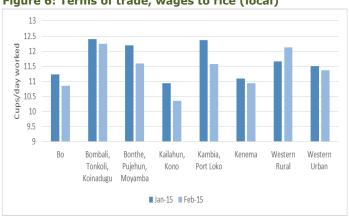


Figure 6: Terms of trade, wages to rice (local)



Source: WFP mVAM

Perceptions of food security in January

During the survey, 60 percent of respondents took the opportunity to describe their perception of food security in their community. The following word clouds illustrate the terms most commonly found in their responses.

In areas such as Bombali, Tonkoli, Koinadugu where food related coping is high (Word cloud 1), the words 'transport' and 'lack' were mentioned frequently. It seems that a lack of transportation for food is a major cause of high prices and food insecurity. In Western Area (Word cloud 2), the words 'available', 'market' and 'expensive' were salient, while 'transport' was not mentioned at all. It seems that while Western Area has relatively good access to transported food, prices are perceived to be too high.

Figure 7: Word clouds

Word cloud 1 (Northern Province)



Word cloud 2 (Western Area)



In the words of the respondents:

- "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

Conclusion and Outlook

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

Some Ebola-affected areas – such as Kenema – 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 Koinadugu, Bombali and Tonkolili. 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