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

Highlights

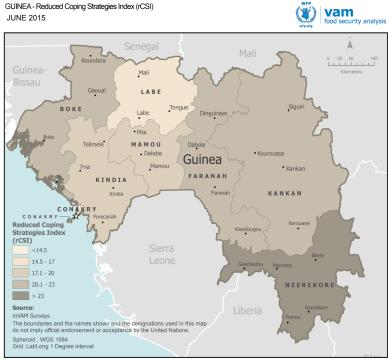
- Guinea is in the midst of the lean-season and the majority of households are resorting to coping strategies.
- Secondary data sources indicate markets are functioning and economic activity is underway with favorable agricultural conditions.

Overall negative coping levels were higher in Guinea than in Liberia or Sierra Leone

The reduced Coping Strategy Index (rCSI) measures the frequency and severity of the behaviours households engage in when faced with food shortages i.e. skipping meals or reduced meal portions. A higher score indicates that households are resorting to more frequent or severe negative coping strategies. Detailed information on the rCSI can be found https://example.com/here/beauty-stategies/.

In Guinea, where data collection resumed after a four month gap, the data suggests that households use more negative coping strategies than in their neighbouring countries, Sierra Leone and Liberia. Similarly, the capital city area was better off (rCSI=16.9) than other administrative areas. Coping levels were remarkably high in Nzerekore (rCSI=23.2), the area most affected by Ebola outbreak. The rCSI was also elevated in Boke (20.7), Farranah (21.1) and Kankan (20.2). The elevated rCSI levels in Guinea may be associated with continued restrictions on movement in Boke as well as the onset of the lean season.

Figure 1: rSCI by region, June



Source: WFP mVAM



Methodology

In Guinea, 2,099 questionnaires were completed from the 11th to the 30th of June. The is the first month of data collection after a fourmonth hiatus and previous months data is not available for comparison. The map shown on the left indicates the cell phone towers from which responses were received. Details on methodology are available online.



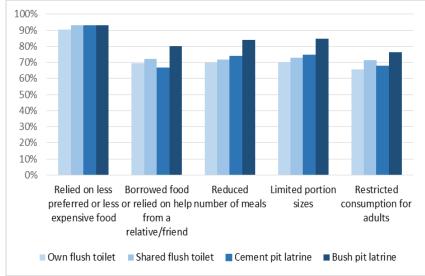
Continued Ebola Virus Disease (EVD) transmission

In the week to 28 June, 12 new Ebola cases were reported in Boke, Conakry and Forecariah prefectures in Guinea. In the preceding four weeks or more all three prefectures had reported cases, but the areas of active transmission within those prefectures has changed. Source: WHO Ebola Situation Report, 1 July 2015

In addition to variation by regions, the rSCI is also associated with the wealth of the household, measured in this survey as the type of toilet used. In the June data, a statistically significant relationship is observed between the type of toilet used by the household and the rSCI score.*** ¹

The table below presents the proportion of households who utilized coping strategies in the 7 days prior to the survey by toilet type. A statistically significant difference between the poorest (bush/pit latrine) and the richest household groups (own flush toilet) exists for all coping behaviours except for "relied on less preferred or less expensive food."** ² In June, nearly all households regardless of wealth group used less expensive food as a coping strategy.

Figure 2: Proportion of households using coping strategies



Source: WFP mVAM

Food prices, manual labour wages and terms of trade.

According to FEWS NET's <u>June monitoring report</u>, owing to favorable rainfall conditions, many households are employed with agricultural activities including land preparation and planting. FEWS NET's report also indicates that markets are well supplied and functioning. WFP's monthly price <u>database</u> indicates that aggregate food prices have remained stable in spite of localized market fluctuations.

In Guinea, the average price of local rice was higher than that of imported rice at 5,027 vs 4,270 CFA per kilogram. The average price of a half-litre of palm oil was 4,106 CFA. In Guinea, the national daily manual labour wage averaged 24,260 CFA. The highest average daily was observed in Conakry and the lowest average daily wage was in N'Zerekore. In Guinea, wage-to-imported-rice terms of trade averaged 5.9 while wage-to-local-rice terms of trade was 5.0. Terms for a half liter of palm oil averaged 6.1. For all commodities including imported rice, local rice, and palm oil, wage rates and terms of trade, a subtle but statistically significant relationship exists between geographical regions.***

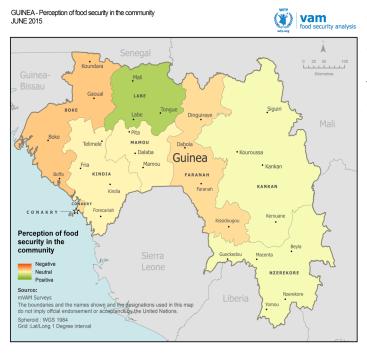
	Food Prices (CFA)			Terms of trade			Daily wage rates
Area	Imported rice (kg)	Local rice (kg)	Palm oil (half-litre)	Imported rice (kg)	Local rice (kg)	Palm oil (pint)	manual labour
Guinea	4,270	5,027	4,106	5.9	5.0	6.1	24,260
Boke	4,249	4,968	4,002	6.1	5.2	6.7	25,403
Conakry	4,158	5,096	4,177	6.8	5.5	6.9	27,378
Faranah	4,251	5,093	4,041	5.3	4.5	5.6	21,774
Kankan	4,337	5,111	4,114	6.2	5.1	6.2	25,379
Kindia	4,221	5,062	4,108	6.2	5.3	6.6	25,635
Labe	4,267	4,851	4,245	5.9	5.3	5.9	23,899
Mamou	4,112	5,122	4,268	5.7	4.3	5.5	22,129
N'Zerekore	4,446	4,889	3,972	4.7	4.2	5.3	20,327

Source: WFP mVAM

Perceptions of food security in June

At the end of the questionnaire, participants are asked an open-ended question, "Tell us about the food situation in your community." To analyze these responses and gauge perceptions of food security in June, we used the Pattern sentiment analysis algorithm developed by the <u>Computational Linguistics & Psycholinguistics Centre at the University of Antwerp</u>. For a given sentence, the algorithm returns the 'polarity': a measure of how positive/negative the statement is on a scale of -1.0 to +1.0.

Figure 3: World cloud for Guinea, June



In Guinea 'lack' and 'price' were the most frequently mentioned words. 'Good' was the third most mentioned, closely followed by "difficult, reflecting mixed food security perceptions. Surprisingly in Guinea sentiment values are on average higher than they are in Liberia and Sierra Leone in spite of significantly higher coping levels. The region with the highest sentiment amongst all countries surveyed, Labe District in Guinea, also had the lowest rCSI values in all of Guinea. sentiment amongst all countries surveyed, Guinea.



Methodological Notes: Reporting statistical tests and significance level

Except where explicitly indicated, only statistically significant results are reported. The level of statistical significance and the type of statistical test are reported after reported values with the following convention:

p-value	reported symbol			
0.10 to 0.05	*			
< 0.05 to 0.01	**			
< 0.01	***			

- 1. ANOVA
- 2. 2-tailed Chi-Square test

Conclusions and Outlook

- Guinea's rSCI is higher than neighboring Sierra Leone and Liberia despite favorable market conditions and improving economic activity. The lean-season is a likely factor.
- July's mVAM bulletin will report trends for rSCI, food prices and manual labour wages, comparing data from June to July.



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

Source: WFP mVAM mVAM Bulletin #22: June 2015