

# Findings from the Joint Rapid Food Security Assessment

Impact of EVD on Food Security situation in Liberia

November 2014, data collected between the 27 September and 12 October

#### Assessment led by the Ministry of Agriculture





#### With support from FAO and WFP









#### In collaboration with the Food Security Cluster Partners



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#### CONTEXT OF THE ASSESSMENT

The current Ebola Virus Disease (EVD) outbreak that still rages in some areas of Liberia, originated in the Gueckedou forest in Guinea, where the first cases appeared in December 2013 but were only diagnosed in March 2014. From there, the virus spread to Sierra Leone and Liberia, as the three countries have intense cross-borders exchanges. In Liberia the virus was first diagnosed in rural communities in the Lofa and Nimba counties, then spreading to other counties and to the capital city Monrovia, which accounted as of November 4<sup>th,</sup> for more than half of the total EVD cases<sup>1</sup>. In August (exact date?) the Government declared the State of Emergency, including the closure of land borders, suspension of schools and universities, and placement of quarantine on worst-affected areas. Now, Liberia is the most affected of the three countries in terms of overall number of cases and percentage, with more than 50% of the total EVD cases of all countries for this outbreak.

While the absolute priority was to fight the virus on the Health front, to stop the spreading and then eradicate it, partners in the food security and livelihoods sector were mobilized to monitor its impact. A Food security cluster was activated on September 12<sup>th</sup>, chaired by Government and co-led by FAO and WFP, with 35 members<sup>2</sup>. A Rapid Food Security Assessment was jointly conducted in the 15 counties between September 27<sup>th</sup> and October 12<sup>th</sup>. This report presents the key findings on the impact of EVD on agriculture, markets and livelihoods, and the overall outcome in terms of food insecurity for rural populations. This rapid assessment did not cover Monrovia capital. It also aims at providing preliminary recommendations and identifying potential areas for monitoring.

The report is split into two main sections: as first a summary of the key results for counties severely and less affected by EVD with recommendations, which were endorsed at the Food Security Cluster meeting in Monrovia on the 13<sup>th</sup> of November 2014, and in a second part a more detailed presentation of the different impacts of the EVD outbreak on the food security situation.

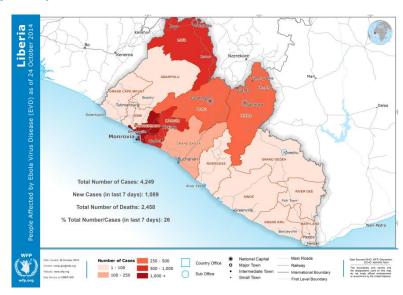


Figure 1 People affected by EVD in Liberia

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<sup>&</sup>lt;sup>1</sup> 3711 in Montserrado county which includes Monrovia, out of 6619 total suspected, probable and confirmed EVD cases in Liberia as of November 4<sup>th</sup>, source <u>Ministry of Health and Social Welfare</u>

<sup>&</sup>lt;sup>2</sup> http://foodsecuritycluster.net/countries/liberia

#### **METHODOLOGY**

The Liberia Joint Rapid Food Security Assessment was conducted in the 15 counties by the Government of Liberia (LISGIS, MoA), FAO, WFP, and ACF, between the 27th September and 12th October 2014. The report was drafted with the technical contribution of Food Security Cluster partners.

30 assessors participated in the exercise. 5 from the Ministry of Agriculture (MoA), 18 from the Liberia Institute of Statistics and Geo Information Services (LISGIS), 1 from WFP, 1 from ACF and 5 from FAO.

Sites visited were selected based on their level of affection and a control area was used as reference (non-affected). Information was gathered through focus group discussions using key informants (community leaders, women, youth, traders, local administration, CAC, DAO, Food Security NGOs, Producers groups, Agriculture Associations and local Ebola Task Force). Key informants were selected based on their potential knowledge on assessment subjects.

The assessment interviewed a total of 301 key informants and 298 market informants. This limited sample does not make the assessment representative but provides a solid indication of trends and dynamics of the current situation and the impact of EVD, and can therefore guide the response option discussion for relevant stakeholders.

Figure 2 JFSA Communities visited by assessment



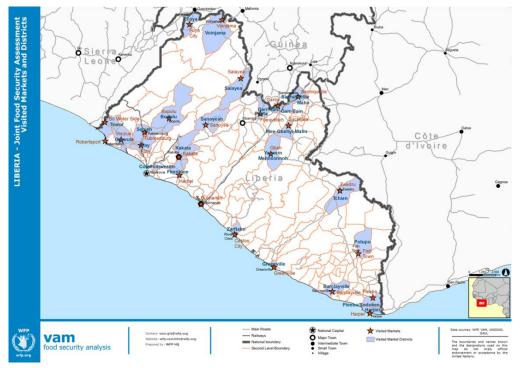


Figure 4 Administrative map of Liberia



#### **KEY FINDINGS**

The assessment objective was to evaluate the impact of the current EVD outbreak on the food security and livelihoods situation. The effects of EVD are complex and indirect effects also play a major role to understand the impact of this epidemic. Therefore, two different "affected" categories based on EVD incidence level (number of EVD cases per county) and direct effects through quarantines have been created. Southern counties, although less directly affected by EVD incidence, also appear to have major food security concerns due to a combination of indirect effects of EVD and their structural constraints.

In fact, the isolation of people in quarantined communities has caused trade disruption throughout the country. In rural areas, where most communities do not host a market, community members had very limited access to food supplies outside of their community. In urban areas, which normally do host a market, the flow of commodities in the quarantined communities was heavily restricted. Traders were restricted to access some the quarantined areas, and makeshift markets were created in and outside the quarantined perimeter. At the same time, the cost of transportation has risen, constituting an additional barrier to trade.

As of mid-November, the State of emergency has been lifted, periodic markets have reopened and most quarantines on areas have ended, but the impact is still present in terms of loss of income and lack of cash, and the evolution of the disease is uncertain. In October the food security situation should have improved in some areas where the harvest reached some markets and households. However the food security situation could still deteriorate in the next months as household stocks from reduced production might run low earlier than normal and access to markets is still limited due to the lack of cash, and therefore the next agricultural season could be compromised. This will need to be closely monitored early 2015.

The EVD outbreak had a different impact according to the severity of the disease incidence and the related market disruptions caused by quarantines measures. Based on this combination, two groups of counties were identified, more or less severely affected by EVD, with different implications for the food security situation.

Table 1 EVD incidence in counties

EVD incidence in counties as of Nov 4 <sup>th 3</sup>					
Number of EVD cases Population (2008) Affected people/10					
Montserrado <sup>4</sup>	3,711	1,118,241	3.32		
Margibi	1,159	209,923	5.52		
Lofa	642	276,863	2.32		
Nimba	320	462,026	0.69		
Bong	267	333,481	0.80		
Bomi	188	84,119	2.23		
Grand Bassa	127	221,693	0.57		
Grand Cape Mount	76	127,076	0.91		
Grand Kru	30	57,913	0.52		
Sinoe	27	102,391	0.26		
Maryland	18	135,938	0.13		
River Gee	18	66,789	0.27		
River Cess	17	71,509	0.24		
Gbarpolu	15	83,388	0.12		
Grand Gedeh	4	125,258	0.03		
NATIONAL	6,619	3,476,608	1.90		

## Counties severely affected by EVD: Lofa, Margibi, Bomi, Bong, Nimba, and Grand Cape Mount and Grand Bassa

#### **EVD** incidence

The EVD outbreak started in Lofa in March 2014 and counties in the North and Central part of the country still report most of EVD cases. In terms of severity of EVD incidence and quarantine measures, we can distinguish two subgroups according to the number of cases: Bomi, Bong, Lofa and Margibi as more severely affected, and in second Grand Cape, Nimba and Grand Bassa, as per table above.

#### Agricultural production

These counties are situated in the North and Central area of the country where the main planting season for rice goes from April to June and the main harvest starts in October. Despite good weather conditions, preliminary estimates indicate that rice production is below normal levels, with a decrease of up to 25% in most affected districts in Lofa and Margibi. This was caused mainly by the limited maintenance of the fields (weeding and fencing) during the growing season, because of quarantine measures and restrictions on group work, called "Kuu". The "Kuu" system was however used for the

<sup>&</sup>lt;sup>3</sup> Total suspected, probable and confirmed EVD cases, source Ministry of Health and Social Welfare.

<sup>&</sup>lt;sup>4</sup> Including Monrovia, which accounts for more than half of total cases in Liberia. Only Montserrado rural was covered by this assessment.

planting season before the peak of the outbreak, and is being used with caution for the harvest currently under way. Cassava production is slightly below normal but less affected.

#### Livelihoods

Communities in most affected counties have been quarantined for nearly eight weeks, but this measure has been progressively released since mid-September. Household incomes have decreased as border closure, quarantines and market disruptions have affected sale of agricultural products, while sale of bush meat was banned, and affected petty trade and commerce as well. Financial capital of women savings and loans groups have also been drastically affected as members were not able to pay back their loans. Most of the vegetable production for sale takes place in these counties as they are well connected to Monrovia, but because of road blockades the sale prices dropped, resulting in loss of income. Communities report reduced portion and frequency of meals as coping strategies. Households are also affected by health issues such as malaria as all personnel was deployed for EVD treatment.

#### Markets

These counties are mainly supplied by Monrovia for imported goods, but cross-border trade is also important for both purchase and sale. International borders have been closed since late July and weekly markets have been closed for nearly ten weeks in most affected counties. These counties also indicated to suffer from quarantines measures (e.g. road blocks), which limited supply and increased transportation costs. Prices of food items have slightly increased, including imported rice, which can also partially be attributed to the depreciation of exchange rate between the Liberian Dollar and the USD. Household financial access to food was further limited due to the loss of income.

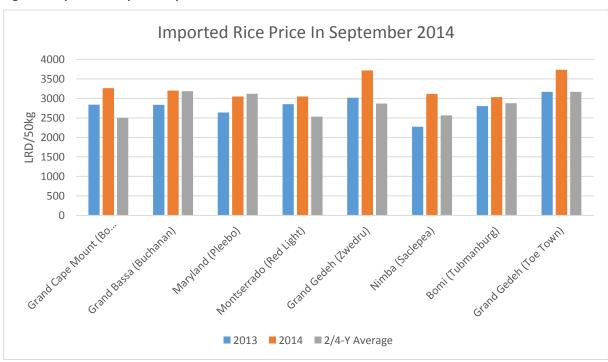


Figure 5 Imported rice prices September 2014

Source: Joint Food Security Assessment/LISGIS, November 2014IS

#### **Food consumption**

No direct measurement of household food consumption was conducted. Outbreak coinciding with the peak of the lean season had worsening effects on household food insecurity, but no major food gap should be expected for most of the population in the short term as agro ecological conditions are favourable, with cassava and wild foods (fruits) available all year long. Deterioration of dietary diversity will likely decrease with limited access to markets, shifts on less preferred foods and limited protein intake due to ban on bush meat.

#### Worst affected households

Households with direct incidence of EVD have been the most severely affected through the loss of labour force and income, increased expenses and decreased agricultural production as they could not access their fields. Women groups involved in trade and savings and loans activities are also particularly affected by the market disruptions.

#### **Prospects**

Ongoing harvest will likely improve food consumption for a short period but does not allow households and communities to recover from their income losses, as the sale of agricultural production is affected by market constraints and lower sale prices, and overall economic activity is still disrupted. Although some weekly markets have reopened, international borders remain closed and price of imported rice is higher than usual (see figure 5). Evolution of EVD over the next months is still uncertain and hence market situation remains very volatile due to lack of cash to stimulate the market of harvested agricultural products. The next lean season will likely start well before July as it usually does in the North and Central areas, both because of likely below average harvest and because of limited access to markets.

## Counties less affected by EVD: Gbarpolu, Grand Gedeh, Grand Kru, Maryland, River Gee, River Cess, Sinoe

#### **EVD** incidence

EVD incidence in South-Eastern counties is very limited with less than 30 cases and quarantine measures were not implemented, but the counties suffered from the indirect impact of EVD combined to chronic conditions such as poor road network in some counties.

#### **Agricultural production**

These counties are situated in the East and Southern area where the main harvest for rice starts earlier as in the North, in August, and the lean season is slightly longer. The harvest was almost completed at the time of the survey and the Kuu had not been disrupted. However communities expected lower than usual production, because of bad weather conditions with heavy rains, which affected both farming and fishing.

#### Livelihoods

There were no quarantine measures implemented in these counties, but starting from early August they have been affected by border closure as most of their exchanges take place with Ivory Coast. This has limited market outlets for farmers resulting in loss of income, together with income from trade activities and sale of bush meat. Households have also been indirectly affected by disruption of health systems as all personal was deployed for EVD treatment.

#### Markets

The market system has been highly affected by indirect effects of EVD combined to structural issues. The Southern counties are not well connected to Monrovia, with no paved road as of Grand Gedeh County, which isolates them further from Monrovia during the rainy season, starting in June-July. With the border with Ivory Coast closing in August, market supply became limited as quarantines and road blockades were implemented on the first part of the road from Monrovia, and then trucks remained swamped in the mud starting in Grand Gedeh, and as a result prices rose together with transportation costs. In Maryland and Sinoe, some price increases were observed, both for food (rice) and non-food (gasoline, diesel and cement) items<sup>5</sup>. Household access to food was further limited by loss of income.

#### **Food consumption**

No direct measurement of household food consumption was conducted. Most effects of the outbreak, in particular the border closure occurred at the peak of the lean season in July-August, but harvest started shortly after. Cassava is also available all year long as well as wild food. Deterioration of dietary diversity is nonetheless likely with decreased access to market and limited protein intake due to ban on bush meat and decreased fishing during the last months due to unfavourable weather conditions.

#### Worst affected households

Households depending on market as source of food and on cross-border trading with Ivory Coast are expected to be the most affected. Women groups involved in trade and saving and loans activities are also particularly affected as they report that loans are not being reimbursed and they lack capital.

#### **Prospects**

Harvest will likely improve food consumption in the short term but transportation remains difficult as roads are still in poor conditions due to the rain, international borders remain closed and price of imported rice is higher than usual. The lean season usually starts earlier in the South-East counties, in April and might arrive sooner this year as the access to food through market purchase is limited and households will have to rely more on their own production which is structurally unsufficient to cover their food requirements.

#### **Conclusions**

Food security has been affected by EVD mainly through market disruptions and households' loss of income and limited purchasing power. The outbreak and its related restrictions coincided with the peak of the lean season in July-September, likely aggravating the effects of food security. Many community leaders reported the community was eating fewer meals per day as usual, although it is difficult to clearly distinguish the effects of EVD from the lean season, as supported by other

<sup>&</sup>lt;sup>5</sup> UNMIL, Prices Hike analysis in Counties due to Ebola outbreak, October 2014

assessments<sup>6</sup>. It should also be noted that the agro-ecological conditions allow for good harvest, with cassava being available all year long and wild foods accessible. At the time this report is written, harvest has been completed in the South East and is near completion in the North and Central counties, hence making food available.

Households directly affected by EVD face high level of food insecurity and will continue in the coming months. The outbreak had widespread indirect effects on the rest of the population, especially in affected counties in the North and Central area, but also in a lesser extent in the Southern area due to a combination of border closure and seasonal conditions. Nonetheless, income from agricultural production has been hampered by market disruptions while other labour opportunities are still limited, resulting in a lack of cash at household level. This could lead to an early start of the next lean season as a combination of the slightly lower production and decreased capacity of households to access food from markets. But prospects are very difficult as the reopening of borders remains uncertain, and the outbreak is still not under control, and the situation will have to be closely monitored over the coming months.

#### Recommendations

Based on the analysis results, the following preliminary recommendations have been made by the Food Security Cluster partners.

Recommendations are valid for all counties, besides activities targeting households and communities directly affected by EVD. Priority may be given to most affected counties. It has been noted that the recommendations are also subject to the actual availability of financial and human resources as well as accessibility to areas of intense and widespread transmission. Furthermore, it has to be highlighted that some of the recommendations will have to be reviewed against the overall evolution of EVD and availability of additional information. The recommendations may therefore change in terms of priorities and implementation. Lastly, the below recommendations are inter-linked and should not be seen as individual and separated activities.

#### General

- Continue monitoring the food security situation through field assessments and remote data collection
- Liaise relevant line ministries to ensure that actions that are planned at Food Security level will have a positive impact in line with their strategy
- Continue addressing structural constraints by investing in infrastructures in line with relevant ministries
- Communicate key findings to counties
- Work at both community and HH level

#### **Food assistance**

- Continue targeted (health) food assistance to quarantined areas/households/communities
- Assist food insecure households directly or indirectly affected by EVD

<sup>&</sup>lt;sup>6</sup> See mVAM, FEWSNET HEA or Mercy Corps assessment.

- Continue assessing markets functionality to inform the capacity of local market to support local purchase/cash based food assistance (on-going)
- Release an household food security assessment in most affected counties to determine needs and priorities for food assistance early 2015<sup>7</sup>

#### **Agriculture**

- Support food production during dry season (lowland rice and vegetables) in most affected counties
- Perform Seed System Security Assessment (SSSA)
- Promote fodder/feeds production
- Promote animal protein access including innovative options such as guinea pigs (fast breeding)
- Anticipate seed provision system if confirmed by SSSA

#### Support to market and livelihoods

- Promote cash transfer intervention on conditional basis (for establishment of productive facilities, Ebola social mobilization, etc.)
- Ensure rural women (through their associations) regain key role in terms of finance/economy (savings & loans, markets, local transport), social mobilization (against Ebola) and food security (production, storage and processing)
- · Continue local procurement activities where market conditions allow it
- Facilitate access to food processing machines to generate incomes

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<sup>&</sup>lt;sup>7</sup> Subject to availability of funds and human resources and accessibility to areas of intense and widespread transmission.

#### IMPACT OF EVD AND OUTCOMES FOR THE FOOD SECURITY SITUATION

## Impact of EVD on the main agricultural season is localised, but next season might be at risk

Rice and cassava are the main food crops in Liberia, and crops prospects before EVD incidence were good as weather conditions have been favourable The Assessment only provided indirect information on crop conditions and difficulties faced by communities, and not a production estimate.

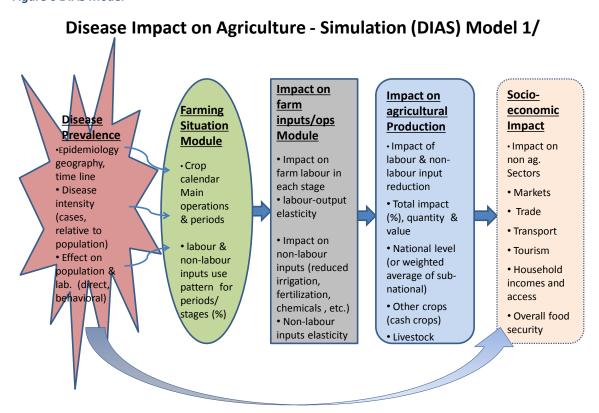
The main impact on the agricultural sector has been in the disruption of agricultural group work for rice crops, either because of public ban or communities' self-imposed restrictions. Nevertheless, when the EVD incidence and its public awareness reached a peak in August, the more labour-intensive activities, land preparation and planting, had already been completed through the "Kuu" system, traditional community-based cooperative work for agricultural activities. In the North-West and Central counties, restrictions on group work have affected the weeding and fencing, resulting in a slight decrease in agricultural production. But the harvest time started in October and local informants confirmed that harvest was underway win group work with caution (keeping space between workers, drinking in separate pots). In the Southern counties instead, as the agricultural season is more advanced, the harvest was almost completed at the time of the Assessment and no significant impact on agricultural production has been observed. As for cassava, being grown year-long and less labour-demanding, no significant impact has been observed across the country.

These observations still need to be confirmed by crop assessments that will be led in December by the Ministry of Agriculture. In the meantime, FAO used the DIAS (Disease Impact on Agriculture – Simulation) model to estimate the impact on agricultural production. This model looks at the impact of disease prevalence on availability of inputs (labour and non-labour) for agricultural activities, and subsequent impact on agricultural production. The preliminary results show a decrease of around 15% of the national rice production, with greater impact in local areas of most affected counties such as Lofa and Margibi.

Considering that Liberia imports more than 60% of its cereal requirements, this decrease in production, although greater than for Guinea (around 5%) and Sierra Leone (around 10%) is not expected to have a major impact at national level in the short term.

However, the impact is significant at household level in most affected areas, especially with the combination of production decrease, difficulty to market the products and decrease in sale prices. The lack of cash could pressure farmers to sell their production at unfavourable prices, which would jeopardize their ability to invest in the next agricultural season. Diminished access to market, both because of disruptions and lack of cash, also increases reliance on own consumption as source of food. If the situation persists, the lean season will therefore start earlier than usual (June for the Northern and Central counties). This will need to be monitored early 2015, in particular through Seed System Security Assessment (SSSA).

Figure 6 DIAS Model



Regarding livestock conditions, key informants from Bong, Nimba, Margibi and River Cess reported that poultry farming has been affected by the closure of borders as most chicks and feed are imported from Ivory Coast or from Guinea where the same reports have been shared. This also affects Women groups involved in poultry who cannot restock as long as the border remains closed. This situation requires close monitoring as the poultry value chain does not seem able to adapt to the border closure.

Livestock was also likely affected by the lack of veterinary services. The vaccination services usually provided by the Ministry of Agriculture although with a limited coverage, have been suspended since the outbreak. Many farmers administered vaccines based on advice from vaccine dealers, but with quarantines and travel restrictions, these services have been disrupted as well. This may result in higher mortality for the cattle, especially over the next months if the situation persists.

#### Livelihoods have been mainly affected through decrease in purchasing power

The main livelihoods for rural households overall are farming and trading, with fishing along the coast, and mining and hunting in a minor extent with differences across the country (see livelihood zones map in annex). With the same differences, main income sources are sale of agricultural products (including fish), trade and petty trade, sale of charcoal, wage labour on commercial farms, rubber plantations, fishing boats and construction, and sale of bush meat.

Households with members contaminated by EVD have been severely affected in their livelihoods through the loss of labour force as EVD mainly affects the 15-44 years age bracket, invalidity and burden for care of the sick members. Households with sick members also have been quarantined, with food portions distributed by WFP, but resulting in incapacity to complete work and subsequent loss of income.

But EVD impact on livelihoods is not limited to EVD affected households. Although there is no information to assess the severity of EVD impact on incomes over the last months, interviewed traders in all counties report that the number of customers has decreased compared to last year and estimate for 30% that the decrease in demand is the main reason for decrease in sale (see figure 9 below). In Northern and Central counties it was still the lean season, a time in which households are more dependent on market as source of food, hence this suggests a decrease in households purchasing power. This is confirmed by the focus groups discussions with community leaders, who indicate for 93% that income has decreased compared to last year, and also that the type of income generating activities implemented has changed. Some communities also reported selling off livestock in order to cope, but information on type of sales and prices is not available.

Vegetables sales provide income for rural households especially in North and West counties better connected to Monrovia. Information is lacking on production levels, but reports indicate a significant decrease in farm gate prices due to difficulties to transport the perishable products to Monrovia during the main season for marketing, July. The ban on bush meat hunting and consumption is likely to have a significant impact for some specific communities in forest areas for which it is an important livelihood.

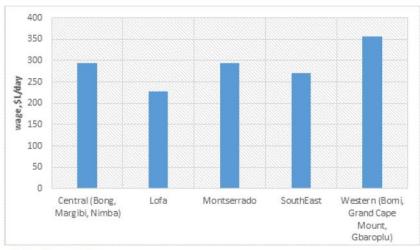
Income from trade and petty trade has also been affected, with the quarantines and restrictions resulting decrease in sales. The number of wholesalers and even more for retailers appears from the assessment to have decreased in all counties.

The FEWS NET livelihood zoning report<sup>8</sup> suggests that casual labour is an important source of income in both urban and rural areas of Liberia. October data from the WFP mVAM report<sup>9</sup> shows that casual wage rates are very low in Lofa (\$L227/day), around 25 percent lower than in the rest of the country (\$L300/day). The data suggests that casual labour opportunities are presently scarce, and that fear and quarantine measures may have led to less buoyant economic conditions. Respondents in Lofa, the central zone (Bong, Nimba and Margibi) and Montserrado reported a change in income sources, reflecting the impact of the EVD crisis on employment and economic opportunities. The data collected does not mention exactly how income sources have changed; in-depth face-to-face assessments could help understand the phenomenon better.

Figure 7 Wage rates for manual labour, \$L per day

<sup>&</sup>lt;sup>8</sup> Liberia Livelihoods zoning plus, Fewsnet, 2011

<sup>&</sup>lt;sup>9</sup> WFP Special mVAM bulletin #3, Liberia, November 2014



Source: WFP mVAM

It has been reported that people have significantly withdrawn their savings during this period, and did not access or demand provision of credit. 71% of traders interviewed in the Assessment reported to be willing to provide credit but that customers did not request it (53% less), while other sources report a difficulty for households to access credit due to a lack of (functioning) financial institutions. This shows a pressure on economic access to food, but also to non-food items, as all surveyed communities report that price of non-food items has increased.

EVD does not seem to have led to any major population movements and displacements. Only a few community leaders report movements due to EVD. It appears many local chiefs had forbidden to community members to spend the night outside the village, with threat of being excluded.

Indirect effects of EVD on households livelihood can also be expected with the diversion of health care from other diseases such as malaria and HIV/AIDS, resulting in illness and diminished labour force in affected households, from sick members and care providers – although no data is yet available.

Figure 8 Liberia rCSI Map



Source. Will myAn

## EVD has disrupted market flows, resulting in decreased supply and slight increase in food prices

Markets play a major role in national food supply as Liberia imports over 60% of its cereal requirements. International market flows have been disrupted by the closure of land borders with Sierra Leone, Guinea and Ivory Coast in August, nonetheless marine ports have been functioning, allowing import of food commodities, in particular rice.

Market flows have been disrupted in the Northern and Central counties by quarantines and sanitary blockades along the main roads, but traders reported that sources of commodities remained generally unchanged. Sanitary check-up and blockades changed quickly and have been difficult to monitor. A map in annex provides a view of the main blockades by early September, before the assessment. It appears that the counties most quarantined have been Bomi, Bong, Lofa and Margibi, with weekly markets being closed for 10 weeks. Other counties suffered the disruptions of neighbouring quarantined counties on market flows, in particular Grand Cape, Nimba, and Grand Bassa. This led to higher transportation time and costs, and limited supply, with traders in almost all counties reporting lacking commodities. By November however all quarantines have been lifted.

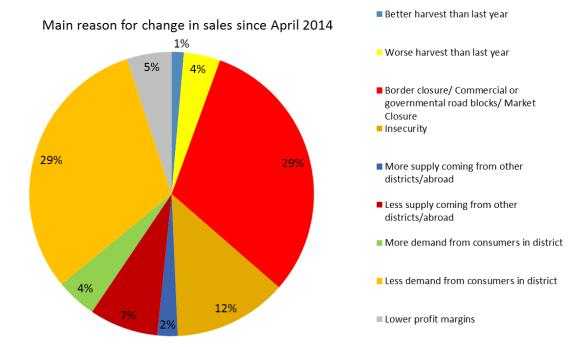


Figure 9 Main reasons for changes in sales

Source: Joint Rapid Food Security Assessment, 2014

As for the South-East counties who have not been quarantined, but were cut from Guinea and Ivory Coast from where they supply most of the food, they also suffered difficult and more expensive supply as they had to bring the food from Monrovia with which they are poorly connected.

Traders from all counties reported during the assessment that food prices had increased, which can be attributed to the seasonal increase. The rapid assessment also show that price increase affected mainly imported rice, with prices both higher than last year and 4 years average. One reason for this is likely caused by degraded terms of exchange since June 2014. Other commodities did not show significant prices peaks.

In parallel with difficulties in supply, traders reported a strong decrease in demand, likely caused by household's loss of income as explained above. In fact, 77% of the traders reported that their traded volumes were lower compared to last year. While most weekly markets have now reopened and quarantines are relaxing, and local rice is now available as harvest is completed in the South and near completion in the North, the main obstacle to household access to food might be financial due to the loss of income suffered over the past months.

#### Chronic conditions are important contributors to current food insecurity

Rural populations in Liberia suffer from chronic issues such as poverty (64% of Liberians live below the poverty line), unsufficient infrastructures limiting market opportunities, poor health services and access to safe water and sanitation, and chronic malnutrition (36% at national level<sup>10</sup>). These factors have worsened the impact of EVD, even in areas with limited EVD incidence: in particular the South East, which suffers price increase and limited supply both because of border closure with Ivory Coast, and because of poor road network and quality, as the main road is not paved and becomes muddy

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<sup>&</sup>lt;sup>10</sup> Comprehensive Food Security and Nutrition Survey (CFSNS), 2013, data from 2012, Government of Liberia.

during the rainy season, making access from Monrovia very difficult. Although counties with higher EVD incidence were more severely affected, the outbreak and related measures had considerable indirect effects in all counties.

### **ANNEXES**

#### Annex 1: Assessments results for each county

## Lofa

Population	
<b>Total County</b>	276,863
Population	
Districts interviewed	3: Voinjama (42,790), Foya (73,312), Salayea (23,578)
Communities	5: Sheriff Community, Power Quarter, Salayea Quarter, Gorlu, Kpormbu
interviewed	Road and Korwuline

Agriculture				
Production				
Commodity	Comments/ Perceived s	ituation		
Rice	faintly decrease in affect	ted communities because of la	ck of weeding	
Cassava	Normal levels			
Palm oil	meaningful decrease because of border and market closures (where these			
	commodities are sold) number of producers reduced significantly			
Vegetable	a bit less than the 2012/2013 agricultural season because there is no buyer			
	(market closure)			
Livestock	Lack of vaccines to treat	Lack of vaccines to treat animals		
Cash crop	Closure of border (main point of sales- Guinea), buyers are not present in field and			
	middlemen would offer any price			
2014 is worse than 2013 2014 is the same as 2013 2014 better than 2013				

#### Harvest

Yields may be reduced due to limited weeding when kuu system was affected. Preventive measures and sensitisation campaigns allowed for the kuu system to restart and harvests are ongoing normally at the time of the report.

#### **EVD Impact**

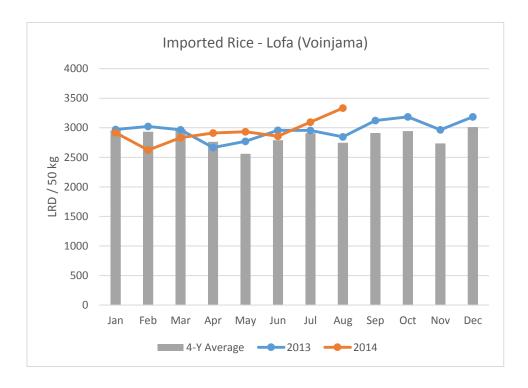
Especially in **Quardu Gboni** and **Foya** districts which are the most affected, key informants are concerned that land preparation may be affected by restrictions on group work

#### Seed provision system

At the time of assessment respondents could not estimate the seed provision proportionately but think that EVD measures may affect the supply of seed for the next planting season 2014/2015 and the current situation continues.

Livelihood	
Farming	First source of income and will be affected if yields are affected by the lack of
	weeding and the low price offered as markets are congested with harvests.
Trading	Second source of income has been negatively affected due to road blocks. This is leading to unemployment according to key informants.
Coping	Key informants reported that they had to borrow food or reduce portion &
Strategies	frequency of meals. However, as the lean season was ending and harvest had
	already started, the food security situation should have improved after the survey.

Markets	
Main commodity	Palm oil and local rice
Customers	Decreasing severely
Traders	Lack own capital to expand their business if facing an increased demand.
Stocks	Low – running out
Prices	See figure
Obstacle	« Insecurity » (issue in the early outbreak and may not be true anymore)



- Monitor evolution of food security as households become more accessible for surveys with EVD coming under control.
- Immediate support to households affected by EVD and to ETC through food assistance.
- Lead a seed security assessment early 2015
- Implement community level activities in communities affected by EVD, and not only for directly affected households to avoid stigma.
- Continue local procurement activities if market conditions allow it
- Continue activities of social mobilization and sensitization at community level.
- Support recovery of livelihoods, in particular for women groups affected by disruption of trade and saving and loans activities.
- Implement cash based activities in view of early start of next lean season (such as cash for work activities at community level) to improve household access to food through market purchase while addressing structural rural constraints.
- With longer term perspective, improve marketing and processing of products to build resilience to shocks.

## **Bong**

Population		
Total	333,481	
Districts interviewed	3 : Sanoyea (30,330), Panta (16,473), Salala (43,617)	
Communities	4: Miamu, Sanoyea, Foequelleh, Gbalakatala	
Key informants	14	

Agriculture			
Production			
Commodity	Comments/ Perceived	situation	
Rice	Rice production in EVD affected areas is expected to significantly drop due to abandoned/incomplete farms while production in less affected areas may experience slight decrease linked to scarce labor and quarantine related measures		
Cassava	No change		
Palm oil	No change		
Vegetable	Lower production as Some farmers were discouraged to plant as the infection rate increased in the county		
Livestock	poultry is affected due to lack of feed explained by border closure (main supply source is Guinea & CIV)		
Restrictions on movement and closure of markets will not permit regular buyers to come in field to buy at farm gate price; middlemen would give price of their choice			
<b>2014</b> is worse than <b>2013 2014</b> is the same as <b>2013 2014</b> better than <b>2013</b>			
11			

#### Harvest

Yields may be reduced due to limited weeding when kuu system was affected. Preventive measures and sensitisation campaigns allowed for the kuu system to restart and harvests are ongoing normally at the time of the report.

#### **EVD Impact**

**Salala Jorquelleh** and **Fuamah** are the districts where agricultural production is most affected. EVD may also have an impact on the next agricultural season if the rate of infection continues to rise; farming HHs will be discouraged to farm next season at the normal levels.

#### Seed provision system

According to key informants, EVD measures may affect the supply of seed for the next planting season. There is still a need to ensure provision of seeds

Livelihood	
Farming	First source of income and will be affected if yields are affected by the lack of weeding and the low price offered as markets are congested with harvests.
Trading	Second source of income has been negatively affected due to road blocks.
Coping Strategies	Key informants reported that they had to borrow food or reduce portion & frequency of meals. However, as the lean season was ending and harvest had already started, the food security situation should have improved after the survey.

Markets	
Main commodity	
Customers	Rely mainly on suppliers from outside of the county
Traders	Lack capital and good means of transport to respond to an increased demand
Stocks	Low – running out
Prices	
Obstacle	Inconsistent external supply during the last months.

- Monitor evolution of food security as households become more accessible for surveys with EVD coming under control.
- Continue support to households and communities affected by EVD and to ETC through food assistance.
- Lead a seed security assessment in early 2015
- Implement community level activities in communities affected by EVD, and not only for directly affected households to avoid stigma.
- Continue activities of social mobilization and sensitization at community level.
- Support recovery of livelihoods, in particular for women groups affected by disruption of trade and saving and loans activities.
- Implement cash based activities in view of early start of next lean season (such as cash for work activities at community level) to improve household access to food through market purchase while addressing structural rural constraints.
- With longer term perspective, improve marketing and processing of products to build resilience to shocks.

## Margibi

Population		
Total	209,923	
Districts interviewed	3: Firestone (61,988), Kakata (44,667), Mambah Kaba (44,981)	
Communities	6 : Zoequerre Town, Gotomo Town, Silver Compound, River View	
interviewed	Community, Golls Town and Kissi Community	

Agriculture				
Production				
Commodity	Comments/ Perceived	situation		
Rice	Decrease in affected co	Decrease in affected communities because of unsufficient weeding		
Cassava	Little decrease because the numbers of farmers this year were not many			
Cassava	compared to last year	compared to last year		
Palm oil	Not affected			
Vegetable	A bit lower because buyers will not come to buy since market is closed			
Livestock	Lack of animal feeds for chickens due to closure of border			
Cach srap	Closure of border (main point of sales- Guinea), buyers are not present in field			
Cash crop	and middlemen would offer any price			
2014 is worse than 2013 2014 is the same as 2013 2014 better than 2013				

#### Harvest

Yields may be reduced due to limited weeding when kuu system was affected. Preventive measures and sensitisation campaigns allowed for the kuu system to restart and harvests are ongoing normally at the time of the report.

#### **EVD Impact**

Especially in kakata and Firestone, key informants think that EVD may have an impact on the next agricultural season as farmers might not farm at their normal levels because no one knows when EVD would be contained for restrictions to be lifted on our "group work".

#### Seed provision system

Most of the seeds (75%) were provided by NGOs. According to key informants, EVD measures may affect the supply of seed for the next planting season if the current situation of heightening prices of food and non-food item remains the same.

Livelihoods	
Farming	First source of income and will be affected if yields are affected by the lack of weeding and the low price offered as markets are congested with harvests.
Trading	Second source of income has been negatively affected due to road blocks. This is leading to unemployment according to key informants.
Coping Strategies	Key informants reported that they had to borrow food or reduce portion & frequency of meals. However, as the lean season was ending and harvest had already started, the food security situation should have improved after the survey.

Markets	
Main commodity	Deficit in cassava and rice
Customers	Decreasing
Traders	Rely on suppliers from outside of the county for their stock replenishment.
Stocks	Low – running out
Prices	
Obstacle	

- Monitor evolution of food security as households become more accessible for surveys with EVD coming under control.
- Continue support to households and communities affected by EVD and to ETC through food assistance.
- Lead a seed security assessment in February March
- Implement community level activities in communities affected by EVD, and not only for directly affected households to avoid stigma.
- Continue activities of social mobilization and sensitization at community level.
- Support recovery of livelihoods, in particular for women groups affected by disruption of trade and saving and loans activities.
- Implement cash based activities in view of early start of next lean season (such as cash for work activities at community level) to improve household access to food through market purchase while addressing structural rural constraints.
- With longer term perspective, improve marketing and processing of products to build resilience to shocks.

### **Bomi**

Population	
Total	84,119
Districts interviewed	3: Dowein (13,188), Klay (11,884), Senjeh (15,442)
Communities	6 : Zordee, Klay Town, Liagn, Stuart Camp, Cooper Town and Weajor
interviewed	
Key informants	11

Agriculture			
roduction			
Commodity	Comments/ Perceived	situation	
Rice	the county may signific unable to weed) while	ents production of local rice in cantly decrease because farme areas not affected may have a ing and measures i.e quarant ry road block, etc).	ers abandoned farms (were a slight drop due to news of
Cassava	No change as Cassava can withstand weed/drought and MoA and WAAP supported this activity		
Palm oil	slightly drop because of border and markets closures		
Vegetable	Number of vegetable farmer this year lower than the one last year		
Livestock	Structural issues are still present (free roaming cattle)		
Cash crop	Restrictions on movement and closure of markets will not permit regular buyers to come in field to buy at farm gate price; middlemen would give price of their choice.		
2014 is worse	than 2013	2014 is the same as 2013	2014 better than 2013
arvost			

#### Harvest

After the fear of Ebola that affected the kuu system, most farmers restarted it with safety measures.

#### **EVD** Impact

**This season**, EVD had an impact as the outbreak occurred during the weeding season. This could lead to lower yield by 10 to 20%. However, harvest are going well as this report is being finalised (mid-November). Regarding **next season**, there is concerns about the possibility to gather enough workers in a kuu for land preparation.

#### Seed provision system

According to key informants 50% of producers depend on their own production to get seeds. Lower yields might have an impact on farmers' capacity to plant next season.

Livelihoods	
Farming	First source of income and will be affected if yields are affected by the lack of weeding and the low price offered as markets are congested with harvests.
Trading	Second source of income has been negatively affected due to road blocks.
Mining	Not affected
Coping Strategies	Key informants reported that they had to borrow food or reduce portion & frequency of meals. However, as the lean season was ending and harvest had

already started, the food security situation should have improved after the
survey.

Markets	
Main commodity	Imported broken rice
Customers	Most severe drop in sales due to the low number of customers
Traders	
Stocks	Low
Prices	Despite the drop in sales, the price for imported broken rice follows a seasonal pattern slightly higher than in 2013.
Obstacle	

- Monitor evolution of food security as households become more accessible for surveys with EVD coming under control.
- Continue local procurement activities if market conditions allow it
- Continue support to households and communities affected by EVD and to ETC through food assistance.
- Lead a seed security assessment in early 2015.
- Implement community level activities in communities affected by EVD, and not only for directly affected households to avoid stigma.
- Continue activities of social mobilization and sensitization at community level.
- Support recovery of livelihoods, in particular for women groups affected by disruption of trade and saving and loans activities.
- Implement cash based activities in view of early start of next lean season (such as cash for work activities at community level) to improve household access to food through market purchase while addressing structural rural constraints.
- With longer term perspective, improve marketing and processing of products to build resilience to shocks.

### **Nimba**

Population	
Total	462,0263
Districts interviewed	3: Garr Bain (61,225), Sanniquelleh Mahn (32,934), Meanpea Mahn (24,157)
Communities	5 : Airfield Zone 2, Blapa, LPRC, Seykempa and Karnwee
Key informants	20

Agriculture			
Production			
Commodity	Comments/ Perceive	ed situation	
Rice	Production may con NGOs	siderably increase due to the	e many interventions from
Cassava	Slightly drop than 2012/2013 agricultural season because EVD related death of family members		
Palm oil	Lack of seeds due to	border closure	
Vegetable	Due to the closure of market, there is be no competition, middle men(buyers) will give farmers at low price		
Livestock	Livestock will be reduce due to shortage of animal feeds as a result of border closure with neighbour		
Cash crop	Production may considerably increase due to the many interventions from NGOs		
2014 is worse t	<b>2014</b> is worse than <b>2013 2014</b> is the same as <b>2013 2014</b> better than <b>2013</b>		2014 better than 2013

#### Harvest

Despite some fear from key informant that kuu system might not be functional at harvest time, secondary data following the survey confirmed that harvest is going on normally with safety measures in place.

#### **EVD Impact**

Especially in **Sanniquelleh Mah** and **Saclepea Mah**, key informants said that if EVD is not contained, it would have an adverse effect on farming the next season.

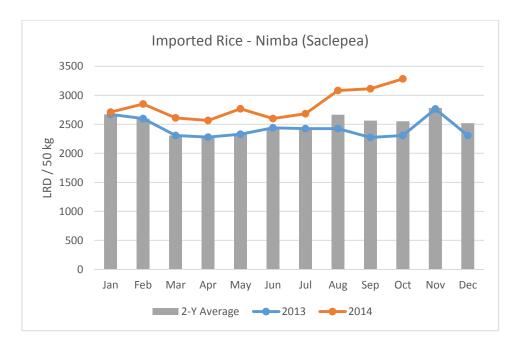
#### Seed provision system

Only 50% of the seeds were coming from own production while 45% came from GoL, NGOs and UN. According to key informants, EVD measures may affect the supply of seed for the next planting season 2014/2015 if market and border remains closed.

Livelihoods		
Farming	First source of income and will be affected if yields are affected by the lack of weeding and the low price offered as markets are congested with harvests.	
Trading	Second source of income has been negatively affected due to road blocks. This is leading to unemployment according to key informants.	
Coping Strategies	Key informants reported that they had to borrow food or reduce portion & frequency of meals. However, as the lean season was ending and harvest had	

already started, the food security situation should have improved after the
survey.

Markets		
Main commodity	Structurally a rice deficit but cassava surplus area.	
Customers	High	
Traders	High	
Stocks		
Prices	See figure	
Obstacle		



- Monitor evolution of food security as households become more accessible for surveys with EVD coming under control.
- Continue support to households and communities affected by EVD and to ETC through food assistance.
- Lead a seed security assessment in early 2015
- Implement community level activities in communities affected by EVD, and not only for directly affected households to avoid stigma.
- Continue activities of social mobilization and sensitization at community level.
- Support recovery of livelihoods, in particular for women groups affected by disruption of trade and saving and loans activities.
- Implement cash based activities in view of early start of next lean season (such as cash for work activities at community level) to improve household access to food through market purchase while addressing structural rural constraints.
- With longer term perspective, improve marketing and processing of products to build resilience to shocks.

### **Gran Bassa**

Population	
Total	221,693
Districts interviewed	2: # 3 (49,525), # 2 (24,612)
Communities	6 : Wayzohn, Jozohn, Old Barrack, Civil Compound, Compound #2 and
Communities	Tubmanville
Key informants	39

Agriculture			
Production			
Commodity	Comments/ Perceive	ed situation	
Rice	No impact from Ebola	a, slight change in rain patern	
Cassava	No change		
Palm oil	price is usually attrac	tive during the rainy season	
Vegetable	Number of farmers p	lanting veg this year have incr	eased
Livestock	_	, prices of food items, especial ope are selling livestock more	
Cash crop	If the road block, restriction of movements continue, main buyers will not come to buy, middle men will give farmers low price		
2014 is worse than 2013		2014 is the same as 2013	2014 better than 2013

#### Harvest

According to informants production activities were faintly affected only affected communities weeding activities were disrupted. However, harvest should not be impacted as sensitisation has been effective.

#### **EVD Impact**

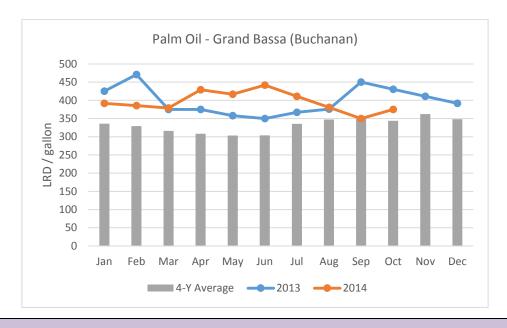
Even if impact has been limited so far, there is a fear that big kuu cannot be organised for land preparation next season

#### Seed provision system

key informants they think EVD measures (quarantine, restrictions of movements, military road blocks, etc. may affect the supply of seed for the next planting season 2014/2015(if the current situation remains the same)

Livelihoods	elihoods	
Farming	<b>Farming</b> is the second main source of income. Production has faced a limited impact.	
Trading	Main livelihood is <b>trading</b> , it is affected by the closing of the border and leading to unemployment.	
Coping Strategies	Key informants reported that they had to borrow food or reduce portion & frequency of meals. However, as the lean season was ending and harvest had already started, the food security situation should have improved after the survey.	

Markets	Markets	
Main commodity	Palm Oil	
Customers	The strong drop in sales in Grand Bassa is due to the drop in local customers	
Traders	Rely mainly on traders and consumers within the district.	
Stocks		
Prices	See figure	
Obstacle		



- Monitor evolution of food security as households become more accessible for surveys with EVD coming under control.
- Continue support to households and communities affected by EVD and to ETC through food assistance.
- Lead a seed security assessment in early 2015
- Implement community level activities in communities affected by EVD, and not only for directly affected households to avoid stigma.
- Continue activities of social mobilization and sensitization at community level.
- Support recovery of livelihoods, in particular for women groups affected by disruption of trade and saving and loans activities.
- Implement cash based activities in view of early start of next lean season (such as cash for work activities at community level) to improve household access to food through market purchase while addressing structural rural constraints.
- With longer term perspective, improve marketing and processing of products to build resilience to shocks.

## **Grand Cape Mount**

Population	
Total	127,076
Districts interviewed	3: Garwula (26,936), Tewor (27,460), Commonwealth (6,547)
Communities	5: Bo- Water Side, Sweet Land, Pujunhun, Kpalan and Sinje
Key informants	

Δ	Agriculture			
P	Production			
	Commodity	Comments/ Perceived	situation	
	Rice	No change		
	Cassava	Normal levels		
	Palm oil		because of border and mar number of producers reduced	· · · · · · · · · · · · · · · · · · ·
	Vegetable	a bit more than the 2 services in that area	012/2013 agricultural season	because of MoA extension
	Livestock	Lack of vaccines to treat animals  Closure of borders, main buyers are not present in field		
	Cash crop			
	2014 is worse than 2013		2014 is the same as 2013	2014 better than 2013

#### Harvest

According to key informants, the main issue will come from post-harvest losses.

#### **EVD Impact**

Key informants think that EVD may have an impact on the next agricultural season in the county because of closure of border, markets and no one knows when EVD would be contained

#### Seed provision system

Key informants said that 50% of the seeds comes from own production. They think EVD measures may affect the supply of seed for the next planting season if the current EVD situation remains the same.

Livelihoods	
Farming	Not too much affected in the area apart from cash crops
Hunting	Negatively affected because of the ban on bush meat
Trading	Negatively affected by market and border closure resulting in unemployment,
Mining	Not affected
Fishing	Not affected
Coping Strategies	Key informants reported that they had to borrow food or reduce portion & frequency of meals. However, as the lean season was ending and harvest had already started, the food security situation should have improved after the survey.

#### Markets

Main commodity	Major production area for cassava and has a large market for gari
Customers	Less suffered from a drop in customers
Traders	
Stocks	
Prices	
Obstacle	Border closure.

- Monitor evolution of food security as households become more accessible for surveys with EVD coming under control.
- Continue local procurement activities if market conditions allow it
- Lead a seed security assessment in early 2015
- Continue activities of social mobilization and sensitization at community level.
- Support recovery of livelihoods, in particular for women groups affected by disruption of trade and saving and loans activities.
- Implement cash based activities in view of early start of next lean season (such as cash for work activities at community level) to improve household access to food through market purchase while addressing structural rural constraints.
  - With longer term perspective, improve marketing and processing of products to build resilience to shocks
- Continue support to households and communities affected by EVD and to ETC through food assistance.

## **Gbarpolu**

Population		
Total	83,388	
Districts interviewed	2: Gbarma (15,851), Bopolu (17,719)	
Communities	4: Totoquelleh, Chief Jallah Lone Town, Gbarma Town and Zuo Town	
Key informants		

A	Agriculture				
P	roduction				
	Commodity	Comments/ Perceived	situation		
	Rice	Marginal increase main	Marginal increase mainly because of NGOs interventions		
	Cassava	Marginal increase mainly because of NGOs interventions			
	Palm oil	Marginal drop because of early erratic rainfall			
	Vegetable	Marginal increase mainly because of MOA interventions			
	Livestock	Poultry is affected due to lack of feed explained by border closure (main supply source is Guinea & CIV)			
	Cash crop	Restrictions on movement and closure of markets will not permit regular buyers to come in field to buy at farm gate price; middlemen would give price of their choice			
	2014 is worse than 2013 2014 is the same as 2013 2014 better than 2013			2014 better than 2013	
	•				

### Harvest

Yields may be reduced due to limited weeding when kuu system was affected. Preventive measures and sensitisation campaigns allowed for the kuu system to restart and harvests are ongoing normally at the time of the report.

### **EVD Impact**

Only Bopolu and Gbama are faintly affected. According to key informants, EVD may also have an impact on the next agricultural season if the rate of infection continues to rise; farming HHs will be discouraged to farm next season at the normal levels.

### Seed provision system

Key informants think EVD measures may affect the supply of seed for the next planting season.

Livelihoods	
Farming	<b>Farming</b> is the first source of income and will be affected if yields are affected by the lack of weeding and the low price offered as markets are congested with harvests.
Trading	<b>Trading</b> , as second source of income has been negatively affected due to road blocks, by market and border closure resulting in unemployment.
Coping Strategies	Key informants reported that they had to borrow food or reduce portion & frequency of meals. However, as the lean season was ending and harvest had already started, the food security situation should have improved after the survey.

### Markets

Main commodity	Palm oil
Customers	Most important drop in customers (50% reported less than 10 customers in previous week; other 50% less than 70)
Traders	
Stocks	
Prices	
Obstacle	Market closure

- Monitor evolution of food security as households become more accessible for surveys with EVD coming under control.
- Continue local procurement activities if market conditions allow it
- Lead a seed security assessment in early 2015
- Continue activities of social mobilization and sensitization at community level.
- Support recovery of livelihoods, in particular for women groups affected by disruption of trade and saving and loans activities.
- Implement cash based activities in view of early start of next lean season (such as cash for work activities at community level) to improve household access to food through market purchase while addressing structural rural constraints.
  - With longer term perspective, improve marketing and processing of products to build resilience to shocks
- Continue support to households and communities affected by EVD and to ETC through food assistance.

## **Montserrado (rural)**

Population	
Total	1,118,241
Districts interviewed	3 : Greater Monrovia (970,824), Todee (33,998), St. Paul River (71,831)
Communities	5 : Nyehn, Zuannah Town, Zannita, Frank Town, Tuan Town and Samuka
Communities	Town
Key informants	

griculture			
roduction			
Commodity	Comments/ Perceive	ed situation	
Rice	abandoned due to I	istricts may decrease margin EVD whereas in other parts, lue to the interventions of sev	local rice production may
Cassava	Normal		
Palm oil	Slightly drop than 2012/2013 agricultural season because EVD related death of family members		
Vegetable	Lack of planting in m NGOs and MOA in les	ost affected districts this seas ss affected districts	ons but good support from
Livestock	Due to the closure of market, there is be no competition, middle men(buyers) will give farmers at low price		
Cash crop	Yields in affected districts may decrease marginally because weeding was abandoned due to EVD whereas in other parts, local rice production may marginally increase due to the interventions of several NGOs		
2014 is worse than 2013 2014 is the same as 2013 2014 better than 2013		2014 better than 2013	
larvest			

Yields may be reduced due to limited weeding when kuu system was affected. Preventive measures and sensitisation campaigns allowed for the kuu system to restart and harvests are ongoing normally at the time of the report.

### **EVD Impact**

Especially in St. Paul River and Greater Monrovia farmers are presently working on

### Seed provision system

During this assessment respondents could not do proportional piling of the seed system but were quick to note that if the situation of intensifying food price remains the same, farmers may eat up seeds to cope and it may impact the supply of seeds for next season.

Livelihoods	
Farming	<b>Farming</b> is the first source of income and will be affected if yields are affected by the lack of weeding and the low price offered as markets are congested with harvests.
Trading	<b>Trading</b> , as second source of income has been negatively affected due to road blocks. by market and border closure resulting in unemployment,

### **Coping Strategies**

Key informants reported that they had to borrow food or reduce portion & frequency of meals. However, as the lean season was ending and harvest had already started, the food security situation should have improved after the survey.

- Monitor evolution of food security as households become more accessible for surveys with EVD coming under control.
- Lead a seed security assessment in early 2015
- Continue activities of social mobilization and sensitization at community level.
- Support recovery of livelihoods, in particular for women groups affected by disruption of trade and saving and loans activities.
- Implement cash based activities in view of early start of next lean season (such as cash for work activities at community level) to improve household access to food through market purchase while addressing structural rural constraints.
- With longer term perspective, improve marketing and processing of products to build resilience to shocks
- Continue support to households and communities affected by EVD and to ETC through food assistance.

## **Maryland**

Population	
Total	135,938
Districts interviewed	2 : Harper (38,024), Pleebo/Sodoken (43,223)
Communities	5: Zone 3, Middle Cess, Central Harper, Green Street and Philadelphia
Key informants	23

griculture				
Production				
Commodity	Comments/ Perceived s	ituation		
Rice	Lack of weeding due to l Heavy rainfall	Lack of weeding due to kuu system adaptation to EVD prevention measures.  Heavy rainfall		
Cassava	Farmers encouraged to	Farmers encouraged to plant thanks to support to agro processing		
Palm oil	Good price this year	Good price this year		
Vegetable	Less HH planted as EVD prevention awareness messages were no understood			
Livestock	Routine vaccination exercise has not been done			
Fishing	Bad weather			
Cash crop	Participants are divided 50/50. 50% says that there will be no impact if market suspensions are lifted			
2014 is worse th	an 2013	2014 is the same as 2013	2014 better than 2013	

### Harvest

Yields may be reduced due to limited weeding when kuu system was affected. Preventive measures and sensitisation campaigns allowed for the kuu system to restart and harvests are ongoing normally at the time of the report.

### **EVD Impact**

As seed systems are structurally weak in this county and communities benefited from the support of GoL (80% of seeds), key informants feared that the impact of EVD on yield will limit the availability of seeds for next season.

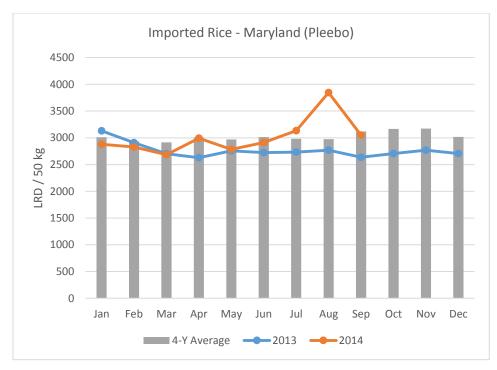
### Seed provision system

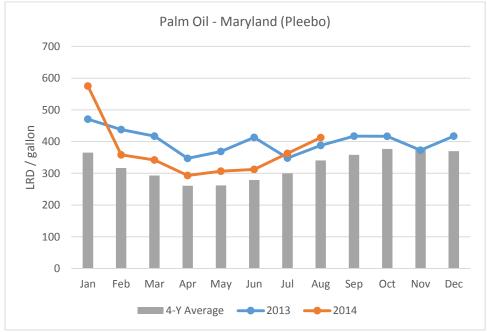
As the kuu system requires a lot of people for land preparation, there is a fear that this activity faces difficulty may the ECD situation worsen.

Livelihoods		
Farming	Farming is the second main source of income. Production has faced a limited	
ramming	impact marketing is an issue.	
Trading	Main livelihood is trading, it is affected by the closing of the border.	
Hunting	Third source of income, was affected by interdiction of bush meat.	
<b>Coping Strategies</b>	Borrow money/food, reduced portion & frequency of meals	

Markets		
Main commodity	Main commodity Palm oil	
Customers	less suffered from a decrease in customers and sales	

Traders	Maryland has a high number of wholesalers still active in the county.	
Stocks		
Prices	See figure	
Obstacle		





- Monitor evolution of food security as households become more accessible for surveys with EVD coming under control.
- Continue local procurement activities if market conditions allow it

- Lead a seed security assessment in early 2015
- Continue activities of social mobilization and sensitization at community level.
- Support recovery of livelihoods, in particular for women groups affected by disruption of trade and saving and loans activities.
- Implement cash based activities in view of early start of next lean season (such as cash for work activities at community level) to improve household access to food through market purchase while addressing structural rural constraints.
- With longer term perspective, improve marketing and processing of products to build resilience to shocks.
- Continue support to households and communities affected by EVD and to ETC through food assistance

### **Grand Kru**

Population			
<b>Total</b> 57,913			
Districts interviewed 2 : Forpoh (38,024), Barclayville (43,223)			
<b>Communities</b> 6 : Setor, Topo, Zone One, Seedee Compound, Kayken, Dwaken City			
Key informants	23		

Agriculture				
Production				
Commodity Comments/ Perceived situation				
Rice	Flood			
Cassava	Flood			
Palm oil	Heavy rainfall			
Vegetable	Adequate rainfall			
Livestock Lack of vaccines				
Cash crop	Bad weather			
2014 is worse	than 2013	2014 is the same as 2013	2014 better than 2013	

#### Harvest

Yields may be reduced due to limited weeding when kuu system was affected. Preventive measures and sensitisation campaigns allowed for the kuu system to restart and harvests are ongoing normally at the time of the report.

### **EVD Impact**

No impact so far but informants fear that it might happen if the current situation worsens.

### Seed provision system

Most seeds are given by GoL and by own production and respondents think that EVD measures may affect the seed supply for the next planting season 2014/2015

Livelihoods	
Farming	<b>Farming</b> is the first main source of income. Production has faced a limited impact.

Trading	<b>Trading</b> is the second source of income and has been negatively affected by market suspension, closing of borders and restrictions of movements.
Food Availability &	Limited availability of food commodities, market suspension, EVD related
access	measures/ restricted movement
	Key informants reported that they had to borrow food or reduce portion &
Coping Strategies	frequency of meals. However, as the lean season was ending and harvest had already started, the food security situation should have improved after
	the survey.

Markets		
Main commodity	Cassava, low rice deficit, high deficit in palm oil	
Customers	Customers less suffered from a decrease in customers and sales	
Traders		
Stocks		
Prices		
Obstacle	Irregular external supply.	

- Monitor evolution of food security as households become more accessible for surveys with EVD coming under control.
- Lead a seed security assessment in early 2015
- Continue activities of social mobilization and sensitization at community level.
- Support recovery of livelihoods, in particular for women groups affected by disruption of trade and saving and loans activities.
- Implement cash based activities in view of early start of next lean season (such as cash for work activities at community level) to improve household access to food through market purchase while addressing structural rural constraints.
- With longer term perspective, improve marketing and processing of products to build resilience to shocks.
- Continue support to households and communities affected by EVD and to ETC through food assistance.

## **River Gee**

Population			
<b>Total</b> 66,789			
Districts interviewed 2: Gbeapo (10,934), Potupo (7,337)			
Communities 2: Kanweaken and Fish Town			
Key informants 22			

Agriculture				
Production				
Commodity	Comments/ Perceived	situation		
Rice	Most farmers were en	gaged in lowland farming		
Cassava	According to respondents more acres were planted and the number of farmers planting cassava increased			
Palm oil	Limited production in	this county		
Vegetable	More seeds were distr	More seeds were distributed to farmers by MoA/FAO		
Livestock	Due to border closing, prices of food items, especially staples increased sharply. Farmers in order to cope are selling livestock more than usual.			
Cash crop	Cash crop  If the road block, restriction of movements continue, main buyers will not come to buy, middle men will give farmers low price			
2014 is worse	2014 is worse than 2013 2014 is the same as 2013 2014 better than 2013			
Harvest	Harvest			

According to informants agricultural production in this county was not affected by EVD in any district (agriculture activities were normal)

### **EVD Impact**

As the kuu system requires a lot of people for land preparation, there is a fear that this activity faces difficulty may the EVD situation worsen.

### Seed provision system

Key informants said that normal supply of seeds could not resume if restrictions of movements are maintained and cases of EVD are increasing

Livelihoods			
Farming is the first main source of income. Production was not affected by EVD			
Trading is the second source of income and has been negatively affect market suspension, closing of borders and restrictions of movements.			
<b>Coping Strategies</b>	Borrow		

Markets		
Main commodity		
Customers		
Traders	Rely on suppliers from outside the county	

Stocks	Low
Prices	
Obstacle	Poor road infrastructure

- Monitor evolution of food security as households become more accessible for surveys with EVD coming under control.
- Lead a seed security assessment in early 2015
- Continue activities of social mobilization and sensitization at community level.
- Support recovery of livelihoods, in particular for women groups affected by disruption of trade and saving and loans activities.
- Implement cash based activities in view of early start of next lean season (such as cash for work activities at community level) to improve household access to food through market purchase while addressing structural rural constraints.
- With longer term perspective, improve marketing and processing of products to build resilience to shocks
- Continue support to households and communities affected by EVD and to ETC through food assistance.

## **Grand Gedeh**

Population			
<b>Total</b> 125,258			
<b>Districts interviewed</b> 2: Tchien (31,976), Gbarzon (12,324)			
Communities	9: New Zwedru, Desuah Street, Airfield Community, Webbo Quarter, Kula		
Communities	By-Pass, Totayville, Gwein Town, Gaye Town and Zleh Town		
Key informants	29		

Α	Agriculture					
Р	Production					
	Commodity	Comments/ Perceived	situation			
	Rice	Even if yields may be s	Even if yields may be slightly lower, it is not due to EVD			
	Cassava	Production is always low, most farmers don't plant cassava  No change				
	Palm oil					
	Vegetable  Some farmers may not plant if the EVD related measures (no "group "Kuu") is not relaxed			ures (no "group work" or		
	Livestock	Due to border closing, prices of food items, especially staples increased sharply Farmers in order to cope are selling livestock more than usual.				
	Cash crop	Respondents do not the price to producers	ink EVD has/will impact cash o	crops marketing including		
	2014 is worse	than 2013	2014 is the same as 2013	2014 better than 2013		

### Harvest

According to respondents the 2012/2013 agricultural season was better than 2013/2014. According to respondents Upland harvest is near completion without hindrance, but we may experience labour shortage if this EVD related measure on our "Kuu" system is not lifted.

### **EVD Impact**

According to respondents **Agricultural production** is not affected in any district in Grand Gedeh

### Seed provision system

According to key informants, EVD measures may affect the supply of seed for the next planting season. If the situation at the time of assessment remains the same, farmers might eat what they have harvested to cope with sharp price increase of food and non-food items)

Livelihoods					
Farming	Farming, as second source of income was affected				
Trading	trading as third source of income was negatively affected by market				
ITauling	suspension, closing of borders and restrictions of movements				
Hunting	Hunting is the first source of income in the county. It is very negatively				
nullling	affected by the ban on bush meat.				
	Key informants reported that they had to borrow food or reduce portion &				
Coping Strategies	frequency of meals. However, as the lean season was ending and harvest had				
	already started, the food security situation should have improved after the				
	survey.				

Markets	
Main commodity	Major deficit area for cassava and hence there is a high demand for gari.
Customers	
Traders	Rely on suppliers from outside the county for gari
Stocks	Low
Prices	Cassava prices appear relatively stable in Zwedru market.
Obstacle	suffered most from border closure

- Monitor evolution of food security as households become more accessible for surveys with EVD coming under control.
- Lead a seed security assessment in early 2015
- Continue activities of social mobilization and sensitization at community level.
- Support recovery of livelihoods, in particular for women groups affected by disruption of trade and saving and loans activities.
- Implement cash based activities in view of early start of next lean season (such as cash for work activities at community level) to improve household access to food through market purchase while addressing structural rural constraints.
- With longer term perspective, improve marketing and processing of products to build resilience to shocks.
- Continue support to households and communities affected by EVD and to ETC through food assistance.

# Sinoe

Population		
Total	102,391	
Districts interviewed	2: Jaedae (3,539), Greenville (15,715)	
Communities	3: Po River, Red Hill and Greenvike	
Key informants	20	

Agriculture					
Production					
Commodity	y Comments/ Perceived situation	Comments/ Perceived situation			
Rice	Significant increase because planting was timely, no disruption of a improved varieties were planted.	activities and			
Cassava	Meaningful increase than the 2012/2013 agricultural season because number of farmers this year doubled the number last year.	ise the			
Palm oil	No change				
Vegetable	Significant increase because the demand of veg. had driven more f production	Significant increase because the demand of veg. had driven more farmers to production			
Cash crop	Significant increase because planting was timely, no disruption of a improved varieties were planted.	activities and			
<b>2014 is wor</b>	2014 is worse than 2013 2014 is the same as 2013 2014 better than 2013				
Harvest					
According to k	key informants, there will be no constraints on harvest				
EVD Impact					
Key informants think that EVD may not have an impact on the next agricultural season in the county: Because production has been good and satisfactory.					
Seed provision	n system				
According to k season	key informants, EVD measures may not affect the supply of seeds for ne	xt planting			

Livelihoods					
Farming	Farming has not been impacted by EVD				
Trading	Trading, has been negatively affected due to road blocks.				
Fishing	Fishing is the main livelihood of the county, it was not affected by EVD but by the rainy season as usual.				
Mining	Mining, a minor livelihood and mainly in the northern part of the county, was not affected.				
Coping Strategies	Key informants reported that they had to borrow food or reduce portion & frequency of meals. However, as the lean season was ending and harvest had already started, the food security situation should have improved after the survey.				

Markets	
Main commodity	
Customers	Number of customers has dropped
Traders	wholesalers and retailers have remained the same in the county, compared to before the shock.
Stocks	
Prices	
Obstacle	Governmental road blocks and lack transport means.

- Monitor evolution of food security as households become more accessible for surveys with EVD coming under control.
- Lead a seed security assessment in early 2015.
- Continue activities of social mobilization and sensitization at community level.
- Support recovery of livelihoods, in particular for women groups affected by disruption of trade and saving and loans activities.
- Implement cash based activities in view of early start of next lean season (such as cash for work activities at community level) to improve household access to food through market purchase while addressing structural rural constraints.
- With longer term perspective, improve marketing and processing of products to build resilience to shocks.
- Continue support to households and communities if affected by EVD and to ETC through food assistance.

# **River Cess**

Population		
Total	71,509	
Districts interviewed	2: Zarflahn (3,742), Central Cess (8,303)	
Communities	3: Daryarzen, Fanti Town, Kru Town and Kaye Town	
interviewed		
Key informants	11	

Agriculture				
Production				
Commodity	Comments/ Perceived s	situation		
Rice	planting was done on tir	ne		
Cassava	NGO intervention			
Palm oil	Not affected			
Vegetable	demand for veg. encour	aged more farmers to plant		
Livestock	Structural issues are still	I present (free roaming cattle)		
Cash crop	Because of restrictions on movement, main buyers will not be in field and			
Casii Crop	middlemen will just offe	er any price		
2014 is worse than 2013 2014 is the same as 2013 2014 better than 2013				
Harvest				
According to ke	ey informants, there will be	e no constraints on harvest		
EVD Impact				
Key informants think that EVD may have limited impact on the next agricultural season in the county and that people will farm at regular levels.				
Seed provision system				
_	he same, farmers may eat	e quick to note that if the situa up seeds to cope and it may i		

Livelihoods	
Farming	Farming has not been impacted by EVD
Fishing	Fishing is the main livelihood of the county, it was not affected by EVD but by the rainy season as usual.
Coping Strategies	Coping Strategies: Key informants reported that they had to borrow food or reduce portion & frequency of meals. However, as the lean season was ending and harvest had already started, the food security situation should have improved after the survey.

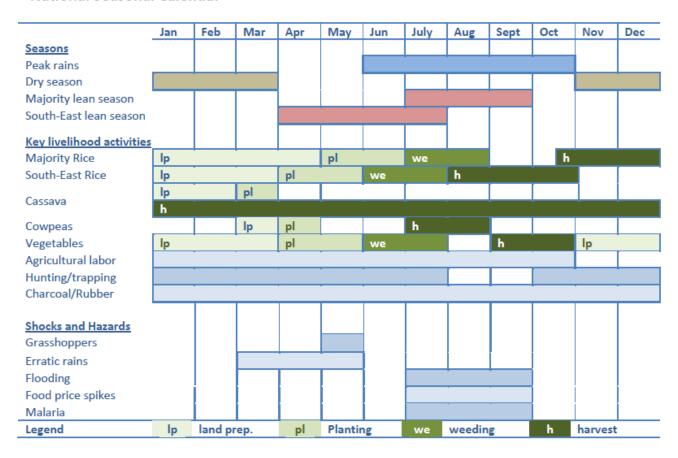
Markets	
Main commodity	surplus area for cassava, largely traded
Customers	Amount of sales and number of customers are good.

Traders	
Stocks	Good
Prices	
Obstacle	Lack of transport means.

- Monitor evolution of food security as households become more accessible for surveys with EVD coming under control.
- Continue local procurement activities if market conditions allow it
- Lead a seed security assessment in early 2015
- Continue activities of social mobilization and sensitization at community level.
- Support recovery of livelihoods, in particular for women groups affected by disruption of trade and saving and loans activities.
- Implement cash based activities in view of early start of next lean season (such as cash for work activities at community level) to improve household access to food through market purchase while addressing structural rural constraints.
- With longer term perspective, improve marketing and processing of products to build resilience to shocks
- Continue support to households and communities if affected by EVD and to ETC through food assistance.

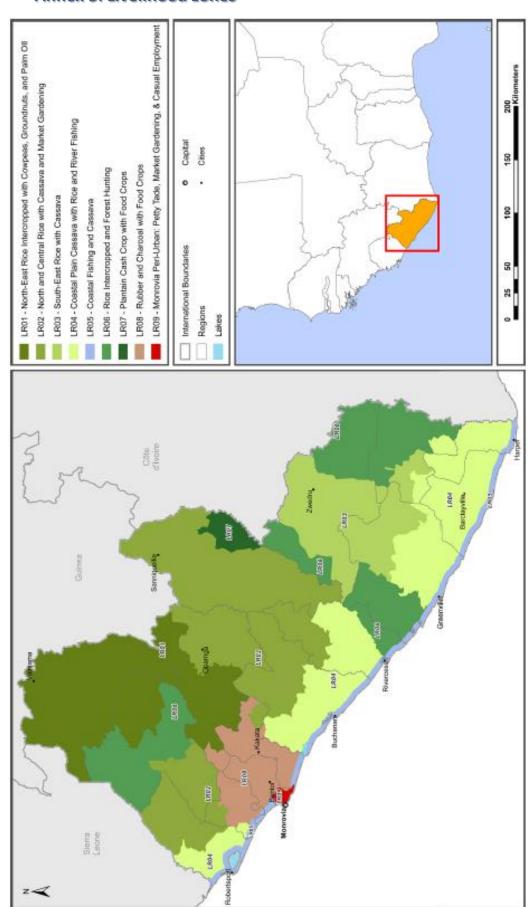
### **Annex 2: Seasonal Calendar**

### **National Seasonal Calendar**



Source: Fewsnet

**Annex 3: Livelihood zones** 



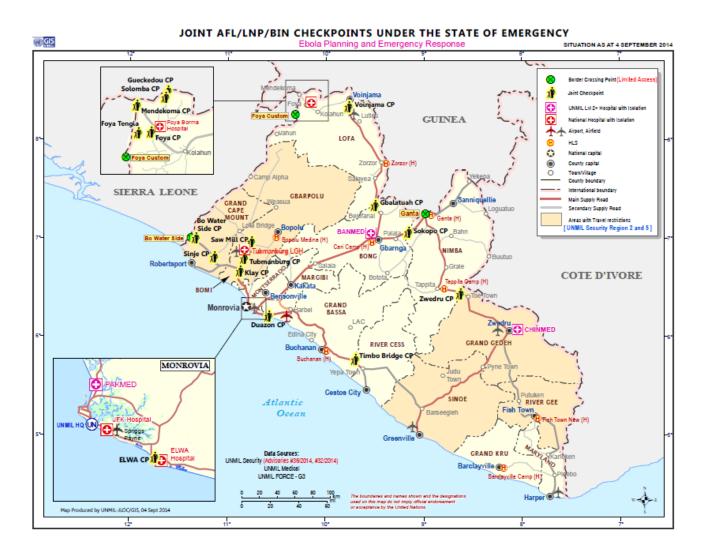
Source: Fewsnet

### Annex 4: Incidence of EVD in counties as of 4th of November 2014

Total suspected, probable and confirmed EVD cases in Liberia as of November 4th, source Ministry of Health and Social Welfare.

County	Cumulative <sup>2</sup> cases 23 May-November 4th 2014					
	Total		Suspect	Probable	Confirmed	Cumulative deaths <sup>2</sup>
Bomi	188	64	42	82	92	50
Bong	267	147	32	88	79	38
Gbarpolu	15	7	2	6	5	2
Grand Bassa	127	40	67	20	50	6
Grand Cape						
Mount	76	28	21	27	43	14
Grand Gedeh	4	2	0	2	3	1
Grand Kru	30	14	13	3	22	3
Lofa	642	169	151	322	365	214
Margibi	1159	367	475	317	520	145
Maryland	18	12	2	4	14	3
Montserrado	3711	1520	683	1508	1493	663
Nimba	320	79	132	109	48	26
River Gee	18	7	4	7	8	5
River Cess	17	10	2	5	14	4
Sinoe	27	10	3	14	10	5
NATIONAL	6619	2476	1629	2514	2766	1179

### Annex 5: Map of road blockades as of September



### Annex 6: Key information from the Community leaders' surveys

This Table is meant to provide an overview of key information collected through the Community leaders' surveys, which provide qualitative information. The data below hence shows the prevalence of communities affected by specific issues rather than quantifying severity of the issue itself. The colours assigned do not refer to a standard severity scale, but only aim at highlighting prevalence of communities affected in the different counties.

	Bomi	Bong	Lofa	Margibi	Nimba	Montserrado rural	Gran Bassa	Grand Cape Mount
Number of cases of Ebola as of November 4 <sup>th</sup>	188	267	642	1 159	320	3 711 (including Monrovia)	127	76
Percentage of key informants saying that they fear that EVD measures will impact (even slightly) next agricultural season	100%	100%	100%	100%	100%	100%	100%	100%
Percentage of key informants saying that there is a lack of market activity (market closed, not yet well supplied)	86%	80%	89%	88%	75%	info not complete	info not available	80%
Percentage of key informants saying that there is a lack of cash to buy products in the market	100%	100%	100%	100%	100%	100%	71%	100%
Percentage of key informants saying that there is a light reduction of production in rice	100%	100%	100%	100%	75%	20%	25%	40%
Percentage of key informants saying that production of cassava is worse than normal	100%	100%	100%	0%	25%	80%	0%	0%
Percentage of key informants saying that seeds came from external assistance	45%	info not available	info not available	75%	45%	info not available	info not available	25%
Percentage of key informants saying that supply of seeds will be affected for next season	100%	info not complete	info not complete	100%	100%	80%	info not available	100%
Percentage of key informant saying that livestock has been affected	50%	info not complete	info not complete	100%	75%	50%	info not available	33%
Percentage of key informant saying that marketing of cash crops has been affected	50%	100%	100%	100%	75%	100%	100%	100%
Percentage of key informant saying that their income has reduced at household level	100%	100%	100%	83%	100%	100%	100%	100%

	Gbarpolu	Grand Gedeh	<b>Grand Kru</b>	Maryland	River Gee	River Cess	Sinoe
Number of cases of Ebola as of November 4 <sup>th</sup>	15	4	30	18	18	17	27
Percentage of key informants saying that they fear that EVD measures will impact (even slightly) next agricultural season	100%	100%	100%	100%	100%	100%	100%
Percentage of key informants saying that there is a lack of market activity (market closed, not yet well supplied)	0%	33%	50%	0%	0%	0%	0%
Percentage of key informants saying that there is a lack of cash to buy products in the market	100%	100%	100%	100%	100%	100%	100%
Percentage of key informants saying that there is a light reduction of production in rice	20%	100%	0%	100%	50%	50%	0%
Percentage of key informants saying that production of cassava is worse than normal	25%	100%	0%	100%	0%	0%	0%
Percentage of key informants saying that seeds came from external assistance	info not available	35%	info not available	65%	40%	info not available	50%
Percentage of key informants saying that supply of seeds will be affected for next season	100%	100%	100%	33%	100%	100%	100%
Percentage of key informant saying that livestock has been affected	100%	50%	0%	0%	0%	info not available	0%
Percentage of key informant saying that marketing of cash crops has been affected	100%	50%	100%	67%	100%	100%	100%
Percentage of key informant saying that their income has reduced at household level	100%	100%	50%	100%	50%	100%	100%