

Briefing Note – 10 November 2014

Ebola in West Africa

Potential Impact on Food Security



Need for international assistance	Not required	Low	Moderate	Significant	Urgent
Expected impact of the crisis	Insignificant	Minor	Moderate	Significant	Major

Crisis Overview

Around 22 million people are estimated to live in the three countries most affected by the Ebola epidemic, Guinea, Liberia, and Sierra Leone. As of 3-4 November, the estimated cumulative number of confirmed Ebola virus disease (EVD) cases reported by WHO in the three most affected countries is **13,241 including 4,950 deaths**. However, the numbers of registered cases and deaths seem to underestimate the real magnitude of the outbreak.

If not addressed in the coming weeks, the consequences of the outbreak will lead to long-lasting impacts on farmers' food livelihoods and household economies, resulting in a major food security crisis by March 2015. The most affected areas within each country are also the most agriculturally productive. Reduced food trade and rising prices, as well as expected reductions in domestic harvests, are all undermining a fragile food security situation.

Control measures implemented to contain the outbreak, such as border closures, quarantine, movement restrictions, curfews, have curtailed the movement and availability of food, goods, and services in the region, leading to panic buying, food shortages and increased basic food and commodity prices. Higher food prices and the loss of purchasing power mean an increasing number of vulnerable households are resorting to negative coping strategies in order to access food.

Food insecurity and lack of access to markets have been increasing community tensions. Lack of food in quarantined areas has led to violence.

A multidimensional and multi-sector approach is required to contain the outbreak and stabilise affected areas while safeguarding against a long-term food security crisis.

Key Findings

Anticipated scope and scale

- The current food assistance response plan targets 1.3 million people but will not be sufficient if the EVD outbreak is not contained within the next few weeks.
- Contingency for the scale-up of emergency food assistance beyond current planning is urgently needed given the high levels of malnutrition.

Priorities for humanitarian intervention

- Priorities remain the containment of the outbreak, treatment of EVD patients, and body management.
- Food assistance is a high priority to avoid further deterioration of the nutritional status of the most vulnerable affected population or those with limited movement due to quarantine.
- Vulnerable groups include families with members who are ill or have died of Ebola, especially if they are the bread winner. EVD survivors and affected children who are stigmatised and isolated by the community. Market-dependent families in areas worst-affected by EVD.
- Other vulnerable groups affected by the crisis (pregnant women, people with disabilities, chronically ill, elderly, etc.).

Humanitarian constraints and response gaps

- Logistics and transport constraints continue to challenge the humanitarian community's response.
- Border closures, quarantine, disruptions to the local, regional and international supply chain and markets, custom delays have hampered food access.
- Threats, attacks and security issues are increasing as fear and mistrust among the populations are growing.
- Limited number of international staff with the required skill set and competencies are available for this unique crisis.
- Limited regular and large-sample size assessments available. Credible estimates of the food-insecure population are needed.

Information Gaps and Needs

There are difficulties obtaining information on the consequences of the Ebola outbreak. Information becomes outdated very quickly and regular field-based assessments are not taking place. In addition, it has been difficult to assess the reliability of information collected on humanitarian needs due to the Ebola outbreak. Commodity price trends need careful interpretation because comparing current prices with seasonally adjusted price trends could be misleading, given the widespread loss of purchasing power caused by job losses (WFP, 11/2014). There is an urgent need for estimates of food insecurity, of how many people became or will become food insecure because of the Ebola outbreak.

- Currently, limited information is available regarding the food security situation in each county in each country. Local and ad hoc reports do not provide a clear picture of the situation. Regular updates on the performance of local markets (prices, food availability, supply chain, market integration, etc.) are urgently needed in order to assess the severity of the situation. Regular assessments in multiple locations are also needed.
- Location of official and self-imposed restrictions on population movements and related impacts on markets and livelihoods. Assessments on the impact of EVD and movement restrictions on food security and market prices in neighbouring countries.
- Changes in port functioning, food availability, and rural markets.
- 2014/15 crop production levels/labour availability.
- Numbers of affected have been difficult to confirm. It is unclear if the numbers available relate to the pre-crisis situation or the context of Ebola.

(FEWSNET, WFP, FS Cluster Liberia)

Projected Impact in the Region

Food insecurity is being driven by: (FEWSNET 08/10/2014)

- Rising prices in some areas, significantly below average incomes, and reduced household purchasing power.
- Restrictions on internal population movements and trade.
- Insufficient international response, which is mainly focused on containing the epidemic. Underfunded programmes.
- Limited access to the most affected areas because of logistical, funding, and weather constraints (rainy season, poor road quality).

It can be assumed that the Ebola caseload will increase exponentially – based on available information, FEWSNET used the CDC projected figure of 200,000–250,000 cases by 20 January 2015, although future Ebola caseloads are extremely uncertain. The increasing numbers, associated with the loss of life and/or health, will impact upon the income generated by household members and purchasing power (FEWSNET 08/10/2014; CDC 26/09/2014). Labour shortages will also result in average to below-average harvests. And fear of Ebola will disrupt markets. Social stigma and quarantines will also affect food access (FEWSNET 08/10/2014)

While agricultural households will be able to rely on their own production for some time, stocks are likely to deplete in early 2015. A major food crisis can be expected by March 2015, when at least 20% of the population living in the areas worst-affected by Ebola in Sierra Leone and Liberia are likely to be Stressed (IPC Phase 2) food insecurity or higher. For households with family members who are ill or have died from Ebola, moderate to extreme food consumption gaps and a sustained deterioration in the nutritional quality of household diets, equivalent to Crisis (IPC Phase 3) or Emergency (IPC Phase 4) food insecurity, is likely between October 2014 and March 2015. In the worst-affected areas of Guinea, a smaller proportion of the population are facing illness and market disruptions, and Minimal (IPC Phase 1) acute food insecurity is expected. (FEWSNET 08/10/2014)

Emergency food assistance needs would significantly exceed levels currently planned for, funded, and likely (plans cover only 1.3 million people and are only 27% funded). Contingency planning for an expanded emergency food assistance response is urgently needed given that the size of the food insecure population could be two to three times higher than currently planned.

Projected Food Security Outcomes

	Population Group	Current situation	Oct-Dec 2014	Jan-Mar 2015	
Directly affected	HHs with family members who are ill or have died from Ebola	Crisis (IPC Phase 3)	Crisis (IPC Phase 3)	Emergency (IPC Phase 4)	<ul style="list-style-type: none"> Loss of productive family members, resulting in below-average harvests and incomes Difficult physical access to food due to quarantines and social stigma
Indirectly affected	Poor, market-dependent HHs in areas worst-affected by Ebola	Stressed (IPC Phase 2)	Crisis (IPC Phase 3)	Emergency (IPC Phase 4)	<ul style="list-style-type: none"> HH are particularly vulnerable to expected market-related shocks. Significantly below-average HH incomes and food shortages will limit food availability and access
	Poor, agricultural HHs in areas worst-affected by Ebola	Minimal (IPC Phase 1)	Stressed (IPC Phase 2)	Crisis (IPC Phase 3)	<ul style="list-style-type: none"> HH will rely on own crop production to meet short-term needs, although a significant drop in HH incomes limit non-food expenditures. Once food stocks deplete (earlier in SL and LB), major market shocks and significantly below-average purchasing power will make food access difficult
	Poor market-dependent HHs in other Ebola affected areas	Minimal (IPC Phase 1)	Stressed (IPC Phase 2)	Crisis (IPC Phase 3)	<ul style="list-style-type: none"> HH are vulnerable to expected market-related shocks. Below-average HH incomes and food shortages will limit food availability and access
	Poor, agricultural HHs in other Ebola affected areas	Minimal (IPC Phase 1)	Minimal (IPC Phase 1)	Stressed (IPC Phase 2)	<ul style="list-style-type: none"> In areas less affected by Ebola (particularly Guinea), food stocks will last through March 2014, although a significant drop in HH incomes will cause HH to have difficulties meeting non-food expenditures.

Source: FEWSNET

Current Impact in the Region

- Lower household income and purchasing power
- Decrease in food production
- Limited availability and increased prices of food
- Decreased access to financial services and credit
- Drop in volume of traded commodities
- Deteriorated markets prospects

Food Production

The food chain is threatened at many levels, starting with production. Farmers in affected areas are abandoning their farms and food stocks. Expected reductions in domestic harvests are anticipated to undermine the fragile food insecurity situation (FAO 05/09/2014). Farmers are abandoning crops and livestock as they move to areas perceived as safer from exposure to the EVD virus (WFP 09/10/2014).

The season's crop harvest has started and the **shortage of labour** is placing food and cash crop production at risk in affected areas, jeopardising the food security of tens of thousands of people (FAO 10/2014).

Food Availability

The **availability of food** at local markets is severely disrupted, due to traders' increasing fears of contracting Ebola, official and unofficial restrictions on population movement, increased operating costs for traders and importers, market closures, and the possibility of currency depreciation (FEWSNET 10/10/2014).

Transport disruptions have led to excess food in certain areas, resulting in high food waste, while other areas are facing shortages. Farmers are facing the double challenge of conserving their produce until markets are restored while simultaneously searching for a way to access the market to ensure their income (FAO 10/2014).

The bans on eating traditional protein sources, such as bush meat, because some species are potential carriers of the virus, also have implications for food security and nutrition, especially in worse affected communities (WFP 09/10/2014). Government bans and discouragement of eating bush meat have diminished demand, and incomes from bushmeat sales have fallen. Purchasing power is affected for households currently earning below-average incomes (FEWSNET 08/10/2014). However, limited information is available on the impact of the ban on the food consumption.

Food Access

The majority of Ebola victims fall within the 15–45 years range and are often the main income providers. The reduction in household income combined with food price rises is deteriorating the food security situation further (WFP 09/10/2014). Reduced incomes limit household food access, even if food is still available (FEWSNET 10/10/2014).

Both rural and urban households are experiencing significant declines in income from most sources (i.e. agricultural labour, petty trade, and the sale of forestry products, bush meat, and crops) due to the effects of a general economic slowdown and major market disruptions (FEWSNET 10/10/2014). Household incomes are suffering losses, businesses are suffering losses as a result of death, illness, and fear. Mining and agriculture, as well as production and services (hospitality, tourism, etc.) have slowed significantly. The loss of income will take years to recover (WB 08/10/2014).

Lack of access to food is resulting in increased tensions, security problems, and violence. On 23 October, in Grand Cape Mount, 43 people quarantined for Ebola monitoring were reportedly threatening to break out of isolation because of a lack of food (UNMEER 24/10/2014).

Market Functioning

Recent field reports indicate that some rural, weekly markets, such as the Pita market in Guinea, have been closed as result of concerns related to congregating in large groups. Urban daily markets tend to remain operational but in some areas weekly rural markets have been suspended (WFP and FEWSNET 10/2014).

Market disruptions have exacerbated seasonal price increases. Seasonal food price increases during the lean season, between July and September, were exacerbated by the Ebola outbreak, which restricted trade flows and caused market disruptions (GIEWS 03/09/2014). Given that a large proportion of household income is spent on food (nearly 80% in some locations), the sharp price increases are having a severe impact on food security (GIEWS 02/09/2014).

Urban households are more affected by market closures, given their greater reliance on market supplies. Although diminished purchases by traders are also having a negative impact on rural household income (GIEWS 02/09/2014).

Food Prices

The availability of recent market price data is limited. As of July, prices across Ebola-affected countries, and neighbours (Mali, Senegal) were relatively stable due to good availability of local and imported rice. But WFP reports from September indicate a price increase in some areas of Sierra Leone and Liberia between July and August (FEWSNET 08/10/2014). Travel restrictions and displacement are affecting food prices, as is the reduction in food supply (WFP 09/10/2014).

Livestock: The Guinea–Mali border, where cross-border livestock flows are the greatest, is currently open. Normal livestock trade flows are reported between the two countries, with no major anomalies on livestock prices. In Senegal, atypically low livestock prices for the past several months are more likely due to poor livestock body conditions caused by below-average pasture, not the Ebola outbreak (FEWSNET 08/10/2014)

Household incomes and purchasing power: Information on current household income levels is limited. Informal reports indicate that non-essential government employees in Liberia were furloughed. It is not clear if they continue to receive wages.

Movement restrictions: The Governments of Sierra Leone, Guinea, and Liberia have imposed formal restrictions on movement in areas worst-affected by the outbreak. These change frequently and precise information about the areas affected at a given time is limited. Trusted reports indicate that the blockades vary considerably from strict restrictions in certain urban centres to looser checkpoints in rural areas where travellers are screened for Ebola symptoms. Access to markets are limited and weekly rural markets suspended in many areas (FEWSNET 02/10/2014).

Key Cross-border Trade

With the exception of the Mali–Guinea border, all main border crossing points between Guinea, Sierra Leone, Liberia, Côte d'Ivoire, Senegal, and Guinea-Bissau have officially closed (FEWSNET 08/10/2014).

Trade flows between Guinea, Mali, and Senegal are ordinarily large, due to strong cultural and economic ties. Guinea usually exports gari, palm oil, and fruit to Mali and Senegal and imports millet, cowpeas, onions, groundnuts, and livestock (FEWSNET 08/10/2014). **Informal trade** continues at low levels due to the difficulty of monitoring the borders. Traders in Senegal report that groundnuts from Guinea are still available on Senegalese markets, but those imports are arriving via Mali, whose border is open. Senegalese traders also report that palm oil sourced from Côte d'Ivoire is being transported via Mali, instead of Guinea as in a typical year (FEWSNET 08/10/2014).

A few large cross-border trade flows exist between Liberia and Sierra Leone and other countries in West Africa, but most staple food trade flows in Liberia and Sierra Leone are internal or oriented towards wider global markets (FEWSNET 08/10/2014).

In all three countries, the major ports (Monrovia, Freetown, Conakry) supply inland markets with rice, and locally-produced staples flow from surplus-producing areas to urban centres and other deficit production zones (FEWSNET 08/10/2014).

Guinea

Pre-crisis Food Security

PREVALENCE OF FOOD INSECURITY AND MALNUTRITION BY REGION

Region	Severe food insecurity (%)	Moderate food insecurity (%)	Global food insecurity (%)	Global acute malnutrition measured by weight-height ratio	Global chronic malnutrition (%)
Boké	2,4	9,1	11,5	4,6	29,6
Faranah	4,5	20,2	24,7	1,5	39,6
Kankan	4,1	19,5	23,6	4,3	38,7
Kindia	10,2	17,1	27,3	5,0	32,4
Labé	10,4	27,6	38,0	5,8	40,1
Mamou	2,8	28,5	31,3	4,4	37,9
N'Zérékoré	16,9	35,8	52,7	2,1	39,4
TOTAL	8,4	23,7	32,1	5,0	34,5

Sources: National survey on food insecurity in 2009 et SMART survey 2011 (WFP, 2011)

57% of Guinean households had poor or borderline food consumption before the crisis, indicating chronic food insecurity, which has been exacerbated by the EVD epidemic. Baseline pre-crisis data indicate there was already a high prevalence of food insecurity in Forest Guinea, especially in Macenta prefecture in Nzerekore region (WFP 27/10/2014).

The food security situation is the result of limited financial and physical access, inadequate food habits, and poor management of revenues and food stocks. These difficulties have often forced households to sell their agricultural products at the wrong time of the year, only to purchase the same products later at elevated prices. Poorly

organised supply routes between production zones and markets have increased difficulties in accessing food. Remoteness or isolation of communities is one of the most significant determining factors of food security in the country (WFP 01/2014).

Food Access and Availability

EVD is a shock to a precarious situation of chronic food insecurity, especially in Forest Guinea (the most EVD-affected area), where people are using more severe coping strategies (WFP 27/10/2014).

With harvesting almost over, Guinea is entering the time of year when rural households are consuming more. The country is also approaching the market period for cash crops, which, during normal times, leads to increased incomes in rural areas. The impact of the EVD epidemic on these activities will be critical to the livelihoods and food security of households; reports indicate a reduction in agricultural produce entering some markets, especially in areas near the borders with Liberia and Sierra Leone, resulting in upward pressure on food prices (WFP 27/10/2014).

Trade

Guinea exports small volumes of rice, maize, and millet, and the border closure is having a negative impact on export opportunities and farmers' incomes, while concurrently reducing available supplies for Liberia and Sierra Leone (GIEWS 02/09/2014). However, import inflationary pressure less significant than in Liberia and Sierra Leone, given the stable exchange rate and the relative low import dependency ratio (16%) (GIEWS 02/09/2014).

Trade restrictions caused by country border closures have reduced the volume of cross-border trade to Senegal, according to analyses conducted by WFP in September. These restrictions have already led to a sharp drop in potato prices in Upper Guinea and could eventually affect other sectors' annuity, damaging income and food access for people who depend on these markets (WFP 27/10/2014).

Within Guinea, prices are varying greatly from one place to another, indicating a reduction in trade between production areas and other regions (i.e., higher prices for palm oil and local rice in Forest Guinea compared to other regions). This decrease in trade flows is caused by the rainy season when road access is often limited. There may also be a link to EVD; some traders are no longer willing to purchase products from areas that are heavily affected by EVD, even if they are normally high production areas (WFP 27/10/2014).

Prices

Price data until August indicate little effect to date of lower agricultural production on food prices. Prices fell between April and June, with an uptick since July. Annual inflation for 2014 is still projected at 8.5% (WB 08/10/2014). Prices for basic commodities

vary across the country. Prices for palm oil and *gari* (local word for cassava) are relatively in Upper Guinea (WFP 27/10/2014).

Labour shortages and border closures have resulted in a reduction in agricultural produce, which drove up the seasonally adjusted price of palm oil for the third quarter in the Kankan district (+34%). The price for local rice was at *alert* level at Marché central at the same time (WFP 27/10/2014).

Liberia

Food Access and Availability

According to preliminary findings from a Rapid Food Security Assessment (FSA) conducted jointly by FAO, WFP, Food Security Cluster partners and the Government of Liberia in 15 counties (FS Cluster 15/10/2014):

- Most affected and food insecure communities are in districts with high cases or deaths of EVD due to the collapse in income-generating activities, quarantine measures, and movement restrictions and stigmatisation. As for example Seykimpa community in Sanniquellie District in Nimba County and Gbalaketella in Salala District Bong.
- Farming (food and cash crop production), petty trade, hunting, transportation, entertainment business, skilled labourers and contractors are the main livelihoods affected across the country.
- Markets suspended in some areas. Local cross border exchanges remains disrupted due to border closures between Guinean, Sierra Leone, Ivory Coast and Liberia.
- Negative coping strategies are being used by households in affected districts to meet their food shortfall.
- Prices of most local and imported food products as well as non-food items are perceived to be very high by the local population.
- EVD survivors and communities that were quarantined have been facing stigmatisation and rejection, preventing them from having access to food.

Prices

Monrovia: Cassava and palm oil prices rose by up to 30%, but imported rice prices remained relatively stable. The relationship between impacts of the Ebola outbreak and the observed price trends is unclear. Prices normally increase at this time of year due to the rainy season due to increased transport costs and the increased seasonal demand from households at the end of the lean season (FEWSNET 08/10/2014)

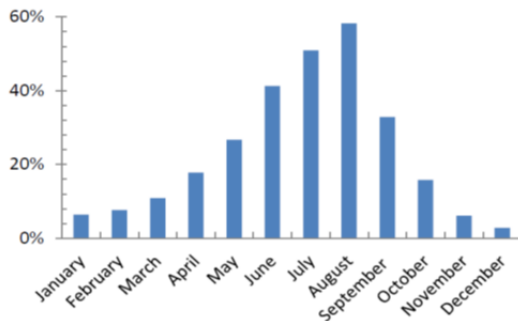
Liberia remains highly dependent on rice imports. Tight restrictions on cross-border trade following the Ebola outbreak and currency depreciation have resulted in sharp price increases for imported rice in the most affected districts, including Bomi (+18%), Lofa (+12%), Maryland (+42%) and Nimba (+36%)(WFP 27/10/2014).

Income

Lofa county is considered the country's "bread basket", and Ebola has affected income, livelihoods, and agriculture. Savings consolidated over several years have been completely depleted as income-generating opportunities have been wiped out. Some people have not been able to repay loans for the past two months (FAO and local media 10/2014).

SIERRA LEONE

Sierra Leone: Share of households with insufficient food stocks (Pre-Ebola)



Source: WFP, 2011.

Pre-crisis Food Security

Nationally, food accounts for 62% of household consumption expenditure, and 59% of rice growers are net buyers of rice, an indication that food insecurity is an important issue. Household consumption expenditure increases sharply during the lean season of June to August – referred to locally as the hungry season – which is also the planting season. During this period about 45% of the population, or 2.5 million people, do not have access to sufficient food. In the districts of Kenema, Kailahun, and Bo, an estimated 30% of the population is considered food insecure, a figure which will surely rise due to the spread of Ebola (WB 08/10/2014).

Disruption to agriculture and food production have particularly strong adverse effects on nutrition given the underlying rates of chronic malnutrition. 35% of children aged 6-59 months are chronically malnourished and 10% severely chronically malnourished. Chronic malnutrition rates for Kenema and Kailahun were 41% and 42%, respectively, considered critical by WHO (WB 08/10/2014).

Results of the mobile Vulnerability Analysis and Mapping (mVAM) survey from WFP show that food markets, rather than own production, are the main source of food for respondents, especially in the pre-harvest harvest period, when the survey was conducted (WFP 10/2014).

Food Availability

A study from Welthungerhilfe (DWHH) has concluded that, by the beginning of 2015, the effects of the Ebola epidemic in Sierra Leone could have an even more dramatic impact than the illness itself and that "serious hunger is anticipated from March" (DWHH 09/10/2014).

According to a study from Welthungerhilfe (DWHH), **food production is decreasing**: 80% of households surveyed in Kailhuna and Kenema expect lower returns than last year. 47% of the respondents claimed that Ebola is having considerable adverse effects on farming activities (FAO, 22/10/2014). By-laws restricting movement have discouraged many farmers from harvesting their fields. 71% of the interviewed households struggle to find labourers for their farms. EVD is a **driver for migration**: 50% of people who left their communities within the past four months, did so because of the epidemic, moving to areas perceived as 'safe' (DWHH 09/10/2014; FAO, 22/10/2014).

In Sierra Leone, thousands of people in Sierra Leone are being forced to violate quarantines to find food because deliveries are not reaching them (Associated Press, 04/11/2014).

Food Access

A survey conducted by WFP suggests that the extension of the disease to new areas might trigger a degradation of household food security indicators there. The mVAM surveys will continue every month and will provide an opportunity to revisit food security trends in Sierra Leone (WFP 10/2014).

School feeding programmes providing much-needed nourishment to children have stopped due to the government closure of all educational institutions in the country until November. Of the almost 2 million children affected by school closures, almost 1.6 million children were in school feeding programmes. The WFP has made a request to use school feeding programme resources for the immediate emergency response to quarantined households (WB 08/10/2014).

The supervision of farmers is difficult for traders since many agents who usually source agricultural produce from small-scale suppliers refuse to enter certain areas for fear of Ebola. Police checkpoints are also making it difficult to transport fresh produce from the field to other regions, and incidents of corruption have been alleged. Quarantined areas are not accessible at all (DWHH 09/10/2014).

Most-affected Districts Kailahun and Kenema (Eastern Province)

- 97% of the surveyed households indicate a drop in income between May and August 2014. Low casual wage rates seem to be driving down people's food purchasing power and might explain the high use of food coping levels in that part of the country (WFP 10/2014).
- Certain foods have become scarce and rice prices increased an average of 30% since May 2014 (DWHH 09/10/2014).
- People are using severe food coping strategies more often than anywhere else in the country. The Ebola epidemic has affected access to financial services: 77% market vendors interviewed have reduced access to credit since May, and banks and microfinance institutions had halted operations in 5% of surveyed communities (DWHH 09/10/2014).
- Market prospects have deteriorated in the wake of the continuing spread of the EVD: Two-thirds of interviewed traders said that the volume of traded commodities has dropped significantly (DWHH 09/10/2014).

In the Western Area, home to the capital Freetown, households are using fewer coping strategies than in other areas, according to WFP mVAM survey. However the small sample size used in this survey, means it does not give a representative picture of the situation (WFP 10/2014).

Prices

Sierra Leone faces major challenges with the EVD epidemic and weak agricultural infrastructure but rapid economic growth before the crisis, government food deliveries to quarantined areas, and currency appreciation have helped reduce inflationary pressure on the seasonally adjusted price of local rice (-13%), palm oil (-17%) and the nominal price of sorghum (-42%) at the beginning of the summer (WFP 27/07/2014). Since then, price increase ranges from 13% for imported rice to 40% for fish. Other commodities affected include cassava, ground nuts and palm oil (FAO 22/10/2014).

The food prices data from the September survey do not show large anomalies. Indeed, staple food prices are highest in Western Area, where the capital is located and where a large population drives high demand. The traditional rice-producing areas of the north have the lowest prices for local rice. Cassava flour prices are lowest in Southern province, where a surplus is produced. In Kailahun and Kenema, the price of palm oil and local rice are below the national average, which reflects the typical price pattern for the country. This confirms that the geographic pattern of food prices that prevailed before the crisis has not changed. As the main harvest continues in October, local staple food prices are poised to fall. Tracking these prices in October will provide a basis for further analysis (WFP 10/2014).

Wage Rates

Low casual labour rates in the east imply low food access for the population.

Terms of trade analysis shows low wage levels in eastern districts, implying lower purchasing power. For example, people in Western Area are currently able to buy more than 13 cups of rice with a day's wages, while people in Kailahun and Kenema can only buy 8–10 cups. The same is true for other staple foods, such as cassava flour (*gari*): a day's wage is worth 15–18 cups of *gari* in the east, 23 in Western Area, 21 in Northern province and 26 in Southern province (WFP 10/2014).

The performance of the labour market in EVD-affected areas is an important factor in for food security and livelihoods. In a typical year, increased demand for labour (linked to harvesting staple and cash crops) spurs a short-term rise in wage rates. However, uncertainty surrounding how the EVD outbreak could evolve may have an impact on the near-term outlook.

Vulnerable groups

- Households with family members who are ill or have died from Ebola and have below-average harvests and/or incomes due to the loss of productive family members.
- EVD-affected households and/or survivors with difficult access to food due to household, community, or district quarantines and social stigma, resulting in limited food availability and access.
- EVD-affected households dependent on markets to access food, face the most severe food security outcomes.
- Households and vulnerable groups with pre-existing food insecurity (pregnant women, children, people with disabilities, people with chronic illness, etc.).
- Children from food-insecure families who relied on school feeding programmes, because some schools will continue to remain closed for months.
- Non-EVD-affected household with high vulnerabilities are also at risk due to decreased purchasing power and higher prices.

Coping Strategies

- Negative coping strategies are being used by households in affected districts to meet their food shortfall. These include: Consumption of less-preferred foods: Agricultural households are increasing their consumption of locally produced cassava, delaying the need to source food from local markets. However, given the quantity of cassava currently planted or available on markets, this increased

reliance on cassava will only partially mitigate food consumption gaps brought on by reduced market functioning (FEWSNET 10/10/2014).

- Decrease in quality and quantity of food consumed.
- Selling personal, household, and productive assets.
- In Forest Guinea, adult household members are limiting their food consumption for the benefit of their children.
- In Conakry, a large proportion of households reported incurring debt to purchase food (WFP 27/10/2014).

Assessments

Assessments are ongoing or planned to evaluate the impact of the outbreak on agriculture, food security and livelihoods (FAO 22/10/2014).

Regional

CFSAM: FAO, WFP and partners are carrying out Crop and Food Security Assessments missions (CFSAM) to estimate agriculture production and understand food security needs in the most-affected regions of Guinea, Liberia, and Sierra Leone. This report will include outcomes of the rapid assessments and secondary data review agriculture production, prices, trade and stocks.

Guinea

The rapid Food Security Assessment, conducted jointly by FAO, WFP, NGOs, and the Government of Guinea, started on 14 October and will be completed in November.

Sierra Leone

A rapid Food Security Assessment conducted by FAO, WFP, NGOs and the Government of Sierra Leone in September.

Liberia

A rapid Food Security Assessment (FSA) conducted jointly by FAO, WFP, Food Security Cluster partners, and the Government of Liberia from end September to mid-October. Data analysis is ongoing and results will be available early November. In October, FAO also conducted an assessment of the impact of the EVD outbreak on the savings and loans schemes of women's associations.

Lessons Learned

- The international community must learn and act on the knowledge that weak public health infrastructure, institutions, and systems in many African countries are a threat not only to their own citizens, but also to their trading partners and the world at large (WB 08/10/2014).
- This outbreak shows that investments in public health infrastructure, institutions, and systems cannot be separated from investments in economic recovery and development (WB 08/10/2014).
- WHO has warned that the suspension of flights and imposition of travel restrictions raise fears of shortages and could undermine the capacity to respond. Border closures constrain resources to address the epidemic (WHO 09/2014). Previous impacts of border closure have been documented: in South Sudan, in 2012, prices of imports increased because of supply constraints related to border restrictions with Sudan and import bottlenecks along the southern border with Uganda and Kenya. South Sudan's rapidly expanding aggregate demand, combined with logistics constraints for imports, also contributed to bringing prices up across the economy (World Bank, 04/2012).
- Taken together, the containment effort, fiscal support, the restoration of investor confidence, and the expanded disease surveillance, diagnostic, and treatment capacity should stem the Ebola epidemic, and then help to reverse as quickly as possible the aversion behaviour that is causing so much economic damage. Quick action by the international community working in concert with the directly affected governments is crucial to avert a regional and global calamity (WB 08/10/2014).

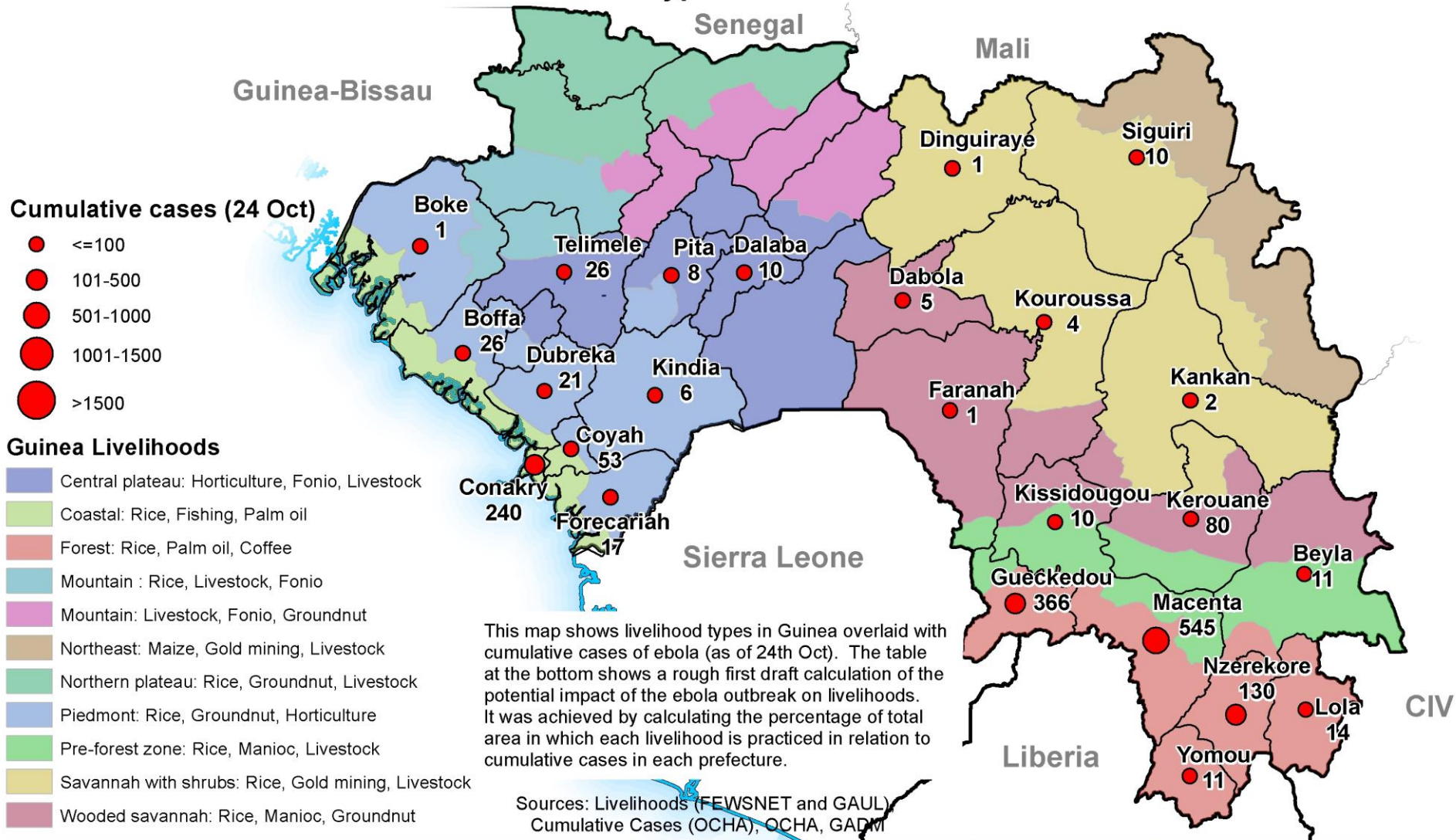
Key Characteristics

Key Indicators	Guinea	Liberia	Sierra Leone
Total population	11.45 million (WB 2012)	4.19 million (WB 2012)	5.98 million (WB 2012)
Outbreak start date	February 2014	29 March 2014	26 May 2014
Age distribution of population	42.9% under the age of 14 (HEWS 25/09/2012)	43.49% under the age of 14 (HEWS 25/09/2012)	43% under the age of 14 (HEWS 25/09/2012).
Nutrition levels	35.8% of under-5s underweight, 16.3% stunting, 5.6% wasting (WHO 2012)	20.4% of under-5s underweight, 39.4% stunting, 7.8% wasting (WHO 2007)	21.1% of under-5s underweight, 44.9% stunting, 7.6% wasting (WHO 2010)
2014 HDI rank	179 (0.392) (UNDP 2014)	175 (0.412) (UNDP 2014)	183 (0.374) (UNDP 2014)
People below the poverty line (%)	58% (UNFPA 2010)	64% (UNFPA 2008)	70% (UNFPA 2012)



Guinea: Ebola Outbreak

% area of different livelihood types in relation to cumulative cases of Ebola

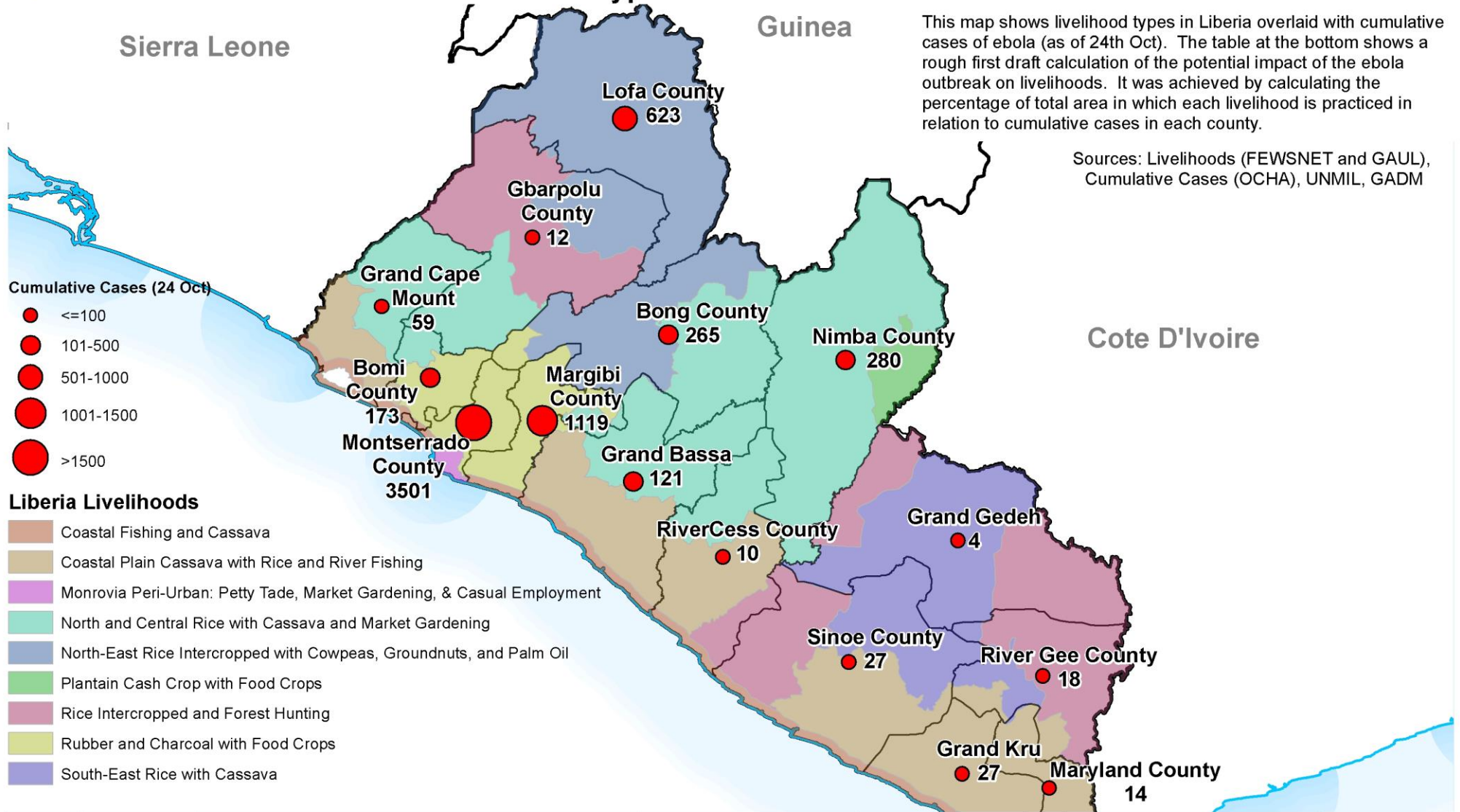


No of cases	% of total livelihood area affected										
	Coffee	Palm Oil	Rice	Manioc	Fishing	Livestock	Horticulture	Gold	Groundnut	Maize	Fonio
> 100 Cases	51	45	9	7	5	2	0	0	0	0	0
10-100 Cases	14	46	33	49	62	28	34	27	24	24	22
1-9 Cases	35	9	44	44	33	30	37	56	42	42	9
0 Cases	0	0	13	0	0	40	29	16	35	35	69



Liberia: Ebola Outbreak

% area of different livelihood types in relation to cumulative cases of Ebola



		% of livelihood area affected by ebola outbreak												
		Peri Urban	Rubber	Charcoal	Food Crops	Coastal Fishing	Market Gardening	Cowpeas	Groundnuts	Palm Oil	Rice	Plantain Cash Crops	River Fishing	Forest Hunting
No of cases	>1000 cases	100	68	68	56	10	2	0	0	0	0	0	0	0
	501-1000 cases	0	0	0	0	0	0	58	58	58	11	0	0	0
	100-500 cases	0	32	32	44	22	71	27	27	27	31	100	21	0
	<100 cases	0	0	0	0	68	27	14	14	14	58	0	79	100



Sierra Leone: Ebola Outbreak

% area of different livelihood types in relation to cumulative cases of Ebola

This map shows livelihood types in Sierra Leone overlaid with cumulative cases of ebola (as of 25th Oct). The table at the bottom shows a rough first draft calculation of the potential impact of the ebola outbreak on livelihoods. It was achieved by alculating the percentage of total area in which each livelihood is practiced in relation to cumulative cases in each district.

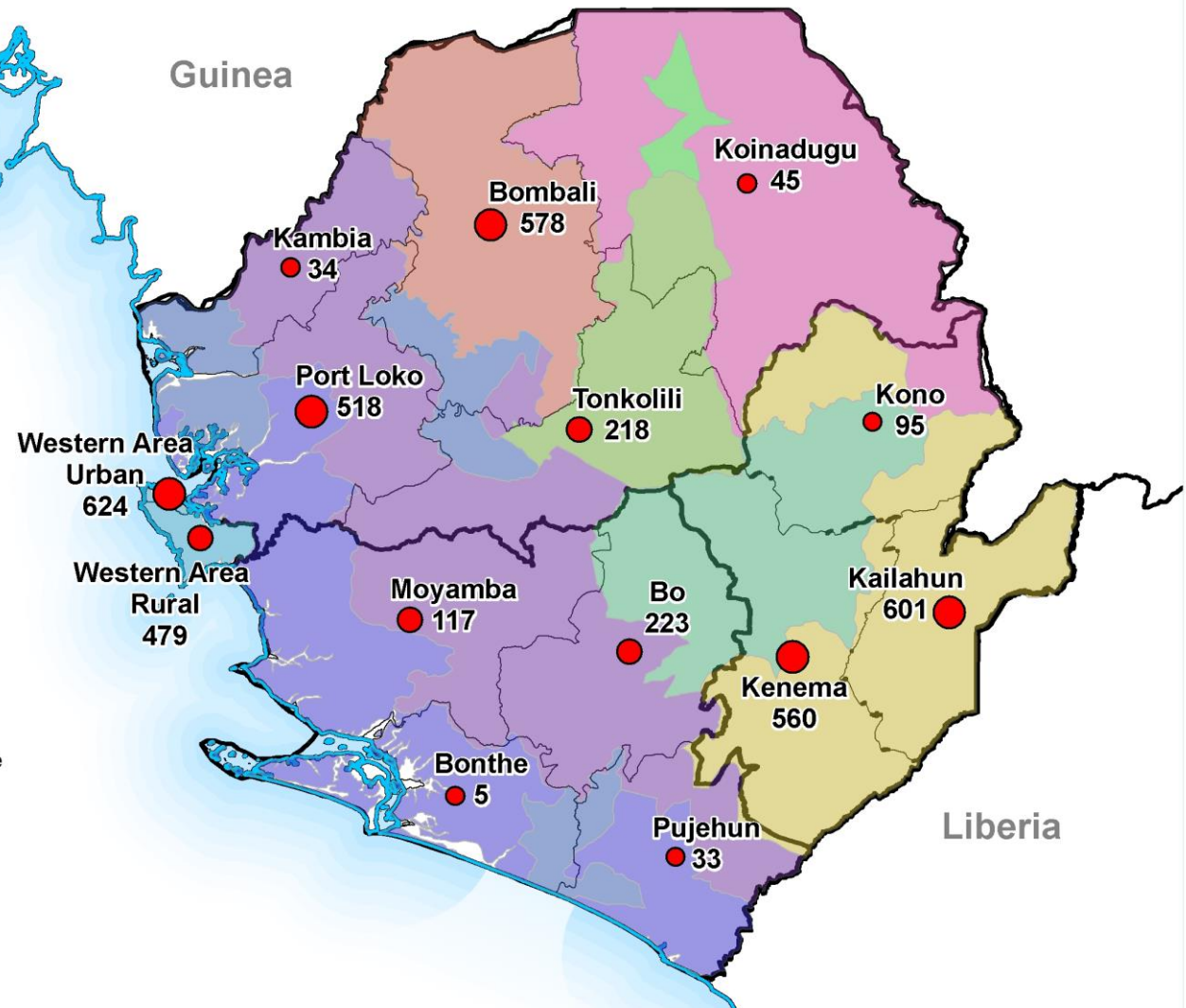
Sources: Livelihoods (FEWSNET and GAUL), Cumulative Cases (OCHA), OCHA, GADM

Cumulative Cases (25 Oct)

- <=100
- 101-500
- 501-1000
- 1001-1500
- >1500

Sierra Leone Livelihoods

- Bombali Food Crops, Peppers, Tobacco and Livestock
- Coastal Food Crops and Fishing
- Folloosaba Dembelia and Wara Wara Yagala Vegetables
- Freetown Peri-Urban
- Kailahun-Kenema-Kono Cash Crops, Food Crops and Trade
- Koinadugu Livestock, Food Crops and Trade
- Kono-Kenema-Bo Rice, Tree Crops and Timber
- Rice Bowl Areas
- Tonkolili Food Crops and Gold
- Western Rice, Root Crops, Cereals and Trade Belt



		% of total livelihood area affected by Ebola Outbreak													
		Peppers	Tobacco	Cash Crops	Food Crops	Tree crops & timber	Livestock	Rice	Trade	Cereals	Root crops	Fishing	Peri-Urban	Gold	
No of cases	>500	98	98	73	38	37	37	29	29	21	21	21	9	2	
	100-500	1	1	1	16	34	1	44	24	56	56	33	91	74	
	<100	1	1	26	46	29	62	27	47	23	23	47	0	24	