

RAPID FOOD SECURITY LIVELIHOODS NUTRITION AND MARKETS ASSESSMENT RFSLNMA 2022



ACKNOWLEGEMENT

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The Liberia Rapid Food Security, Nutrition Livelihoods, and Markets Assessment (RFSNLMA) was an integrated endeavor involving many organizations in its design, the data collection, and the development of this report.

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INTRODUCTION

Liberia continues to rebuild infrastructure and basic social services following protracted events including the civil war, Ebola outbreak and the COVID-19 pandemic that have had lasting impacts. eight months into the Russia-Ukraine war, with unfortunately no foreseeable end soon, Liberia is impacted at both the macro and household level. By 2016, the estimated gross national income per capita was \$620 and the national poverty headcount was 50.9 % (LISGIS HIES, 2016). Currently the country ranks 178 of 191 in the UNDP 2021 Human Development Index.

Growth is projected at 3.5% in 2022 and 4.3% in 2023, driven by expansion in mining, manufacturing, services, and agriculture. Inflation eased from 17% in 2020 to 8.0% in 2021 (AfDB, April 2022). Liberia is richly endowed with water, mineral resources, forests, and a climate favorable for agriculture. Agricultural production makes up 26% of direct and 27% of indirect gross GDP through other services.

Box 1: Rapid Assessment 2022 in numbers

- 15 counties, 112 districts and Monrovia (urban Montserrado) surveyed
- 15 days data collection (29 July-15 August 2022)
- 4,160 randomly selected households interviewed
- Middle Upper Arm Circumference of 1,213 children (6 to 59 months) measured and their mothers interviewed for morbidity
- 334 mothers with children 6 to 23 months interviewed for dietary diversity
- 4131 women interviewed for dietary diversity
- FGDs in 34 markets and 383 traders interviewed.

The agricultural sector is also the primary livelihood source for 80% of the population at smallholder, subsistence level and cash crop such as rubber, palm oil, cocoa, sugarcane and coffee. Sixty-nine percent of farming households engage in rice production, and 40% in cassava. However, low agricultural production and productivity results in Liberia importing 50-70% of staple food, making the country vulnerable to global food price volatility (National Rice Development strategy, 2021).

According to the 2018 Comprehensive Food Security Nutrition Survey (CFSNS), the average household buy 81% of its food from the markets and 11% from their own production. It has been reported that inflation is causing an increase in staple food prices (GIEWS, xxx). The average household purchasing power is increasingly constrained as the economy stagnates, opportunities for income generation continue to decline, and consumer prices rise. Higher prices will translate into a further increase in expenditure on food to the detriment of other needs such as health, education, and nutrition.

The Government is concerned about the impact these will have on food security and malnutrition considering that implementation of Liberia Social Safety Net (LSSN) project is still slow given the myriad challenges facing the economy. The most affected households are likely those mostly the urban poor, daily wage laborers and most smallholder farmers.

According to the Liberia Demographic and Health Survey (LDHS), Liberia has shown certain progress in nutritional status of children under age 5 since 2007. Stunting decreased from 39% to 30% in LDHS 2019-20, while underweight decreased from 19% to 11%, and wasting decreased from 8% to 4%.

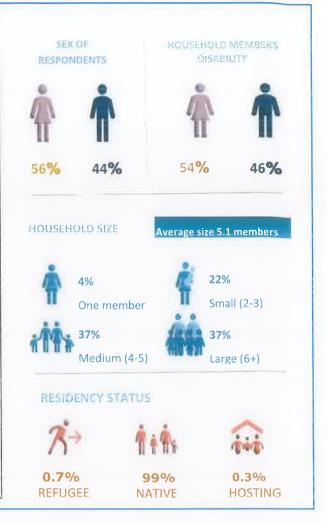
Food insecurity and malnutrition in Liberia is a result of interrelated factors, namely i) widespread poverty and insecure livelihoods ii) low food availability iii) Susceptibility to diseases such as respiratory infections and diarrhea iv), limited access to safe water and sanitation; v) shocks resulting from climate change that increase vulnerability to food insecurity; and (VI) inflation and price fluctuations that reduce access to food and negate any nutrition gains to date.

Box 2: Objectives and methodology

The overall objective of the RFSLNMA is to assess the impact of the economic and food prices shock on the agricultural production, livelihoods, food security and nutritional status of households and communities. This is captured by establishing the distribution of food insecure and vulnerable households and the various risks that households are exposed to as well as evaluating the causal relationships between factors that determine food and nutrition security.

RESPONDENTS AND HOUSEHOLD

- Majority of respondents were woman
- 196 households (5%) reported a family member with a disability, majority of them were women. Majority of family member living with disabilities were from River Gee (9.2%), Margibi (8.5%) and Grand Cape Mount 8.3%).
- The median size of a surveyed households nationally is 5 members. Households with largest size were from Grand Kru, with median size of 6. This is higher than the average size of 4.3 members reported in the 2016 LISGIS Household Income & Expenditure Survey.
- 37 households (1%) were refugees or native households hosting refugees.





HOUSEHOLD FOOD CONSUMPTION

Twenty- eight percent (28%) of Liberians household have low dietary diversity¹ consuming less than 4 of the

recommended 7 food groups. There is a wide gap between households in the urban and rural (5.5% vs. 37.8%). At county level, households with low dietary diversity were highest in Sinoe (61%) followed by Maryland (52%), River Gee and Grand Kru (41%). A worrying 7% of households in Grand Bassa, 5% in River Gee and 4.1% in Sinoe consume a diet that consists only of staples and fats.

One in two households (53%) have inadequate food consumption. Of these, 27% have poor food consumption which means they consume an extremely unbalanced diet that is likely calorie deficient and mainly consists of a daily staple (generally rice) flavored with fish condiment. The 26% of households with borderline consumption supplement their daily staple with vegetables and oils about six days a week.

They eat lesser amounts of fish and meat regularly, but as condiments rather than as a source of protein.

Box 3: The food consumption score

The food consumption score (FCS) combines household food diversity and food frequency (the number of days each food group is consumed) weighted by the relative nutritional importance of different food groups. Cereals, tubers, and root crops are assigned a weighing of 2; pulses, 3; vegetables, relish, and fruits, 1; meat, eggs, fish and dairy 4; sugar, oils, fats and butter, 0.5. It uses standardized thresholds that divide households into three groups: poor, borderline, and acceptable food consumption.

Rural households are more likely to have unacceptable food consumption than urban (61% vs. 44%). It is important to note that urban populations (Monrovia) are becoming increasingly more food insecure (45 percent).

¹ Households that, over the course of seven day recall period, consumed foods from four or fewer of the seven food groups are classified as having low dietary diversity

FOOD SECURITY

The national prevalence of food insecurity stands at 47 percent using the Consolidated Approach for Reporting Indicators of Food Security (CARI)'s consumption, coping and food expenditure share. One in two of the interviewed households had inadequate current food consumption at the time of the survey.

Nearly half (47%) of the households are food insecure and 8% were severely food insecure, meaning that they are faced with extreme food consumption gaps or extreme loss of livelihood assets. The 39% household who are moderately food insecure may be experiencing some food consumption gaps and inability to meet food needs.

The assessment also found that 60% of the households spend over 65% of their income on food. The data indicates that 62% of those in the moderately and severely food insecure spend over 75% of their income on food and 47% of food insecure households spend 65-75% of their income on food. Households that spend high proportion of income on food have no buffer to protect them when prices rise and are vulnerable to food insecurity.

At the national level Liberia is highly dependent on food imports and is therefore vulnerable to global food price fluctuation. At the household level Liberians are highly reliant on purchasing rather than producing their own food. The findings indicate that 86% of households rely on cash to access food, while 64% of respondents reported decrease in their income. This comes on a backdrop of increasing prices. This suggests that the current food insecurity arises from access constraints and weak purchasing power. These national data obscure a much more serious county level prevalence of food insecurity as shown in figure 1.

Counties in the southeast and northern parts of the country have the highest estimate levels of food insecurity, with three in every five households being food insecure as shown in map 1. Since and Lofa stands out as the worst-off counties.

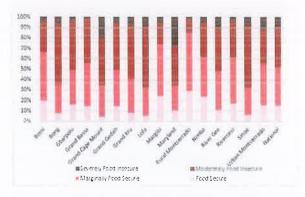
Box 4: Consolidated Agentsch for Reporting Indicators of as

The Consolidated Approach for Reporting Indicators of Food Security (CARI) assesses availability and access to food through measuring the current status of household consumption. It measures the ability of a household to stabilize consumption over time by measuring the coping capacity through economic vulnerability and livelihood coping strategies. The CARI aggregate different food security indicators into one index to report on population overall food security status. It uses classifications that divide households into four categories: food secure, marginally food secure, moderately food insecure and severely food insecure.

Map 1: Percentage of food insecure by County



Figure 1: Food Insecurity by County



Rural Montserrado and Margibi counties have the highest levels of marginally food secure at 56% and 50% respectively. These households are highly vulnerable to becoming food insecure if there is a change in their situation or food prices rise.

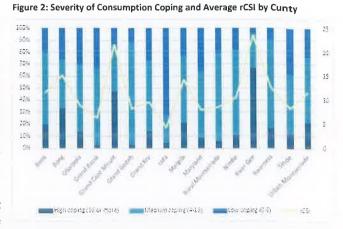
CONSUMPTION-BASED STRATEGIES

When households cope with a lack of food or money to buy food by engaging in behaviors such as relying on less preferred and less expensive foods, reducing portion sizes, limiting the number of daily meals, or restricting adults' consumption to allow children to eat, this is considered 'consumption-based coping'. The reduced or consumption-based Coping Strategies Index (rCSI) encompasses five strategies that can be summarized into an index from zero to 56. The higher the rCSI score, the more frequent/extreme the coping mechanisms are adopted.

Results showed that 85% of households relied on at least one consumption-based coping strategies in the

previous week. Four in every five households (79 %) rely on less preferred and less expensive food. More than two-third (64%) of households reduced the portion size of their meals as a coping strategy. A similar proportion limited the number of daily meals, and 45% of households reported adults restricting their consumption to allow children to eat.

Figure 2 presents the proportions of households relying on low, medium, and high coping, based on severity and frequency of the strategies applied, as well as the average rCSI by county. The highest percentage of households relying on coping strategies were River Gee and Grand Cape Mount Counties.



INCOME AND LIVELIHOODS

Table 1: Top 20 income sources for rural and urban households

Livelihood Source	Rural Househol d Count	Rural % of Household	Urban Househol d Count	Urban % of Household
Production and sale of lood crops	945	31.6%	79	6.9%
Petty trading	255	8.5%	248	21.8%
Wood cutting/charcoal burning for sale	202	6.7%	.56	4.9%
Unskilled wage lisbour –agriculture	187	6.2%	24	2,1%
Production and sale of cash crops	156	5 2%	11	1.0%
Mining of minerals (gold, diamond, iron, bauxite)	178	6.9%	31	2.7%
Salaries and wages (employees, longer-term)	141	4.7%	164	14.4%
Paim oil production	135	4.5%	11	1.0'X
Fishing	116	3,9%	36	3.2%
Unskilled wage labour -non-agriculture	109	3,6%	85	7.5%
Tracing, Seller, Commercial activity	92	3.1%	108	9.5%
Gift (family, friends)	87	2.9%	28	2.5%
Hunting and selling bush meet (i.e. cutting	84	2.8%	5	.4%
Skilled wage labour (including tax), keh keh.	72	2.4%	106	9.3%
Transport/motorcycle business	41	1.4%	27	2.4%
Remittances/ Migrating labour	20	9%	15	7 3%
Handitratts /Artisan (tailoring, weaving,	27	9%	30	2.6%
Rubber tapping	27	9%	10	9%
Palm wine selling	20	7%	4	4%
Production and sale of vegetables and/or fruits	17	.6%	2	2%

more than half (64%) of the households reporting that their purchasing power of income decreased due to the high price of petroleum products.

These declines in purchasing power of income were reported by large percentages of households across all livelihoods, from 89% of palm wine sellers and 88.2% of vegetables and fruits sellers. Many households (1,074, or 26%) reported that they were unable to engage in their primary livelihood over the past 30 days.

Many households resorted to taking loans (857, or 20.7%) within the last six months. Most households borrowed from either a Susu club (42.6%) or family and friends (40.2%). The most frequently reasons for borrowing were for food (33.1%) or school expenses (19.8%), with many other households reporting business and farm labour expenses.

Agriculture or natural resources was the most common livelihood sources for most rural households while urban households engaged in trading or salaries, as shown in Table 1. Households reported the reduction in purchasing power of their incomes due to the high fuel prices. A reduction in purchasing power of income since the start of the high fuel prices was consistently reported by most households across the counties. Over 80% of households in Maryland (89%), Lofa (87%), River Gee (83%) reported monthly income losses compared to pre-crisis period last year. Livelihoods

have been widely impacted by the global energy crisis, with

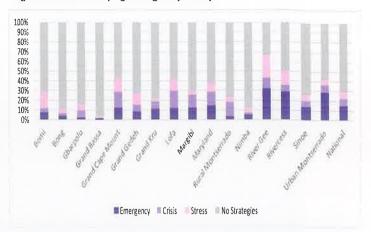
Household Income Admist Global Energy Crisis 224 ☼ Income Indicasad ■ Income Displace ■ Maintained Through Alternative Means ■ No change

Figure 3: Change in Households Income since High Fuel Prices

LIVELIHOOD COPING STRATEGIES (LCS)

The LCS measures if a household experienced asset depletion and livelihood stress due to a lack of food or money to buy food based on a 30-day recall on whether they used livelihoods strategies to cope with food shortages. The strategies are classified by severity into stress, crisis, and emergency coping strategies². On average, 7% of households used stress coping strategies, 8% used crisis strategies and 15% used emergency strategies, while 70% of households did not use any LCS. Households in River Gee, Rivercess and Urban Montserrado had the highest emergency coping strategies which is begging (Figure 4).

Figure 4: Livelihood Coping Strategies by County



MARKETS

The Market Functionality Index (MFI) is a WFP standardized market assessment approach that aims to quantify market functionality in a score per marketplace, while also identifying weaknesses or areas of interventions to guarantee the continuity or effectiveness of the assistance. On a scale of 0 to 10, the full package analyses nine different dimensions of a market, to help make informed transfer modality decisions and detect changes in market functionality over time. The higher the MFI, the better a market is deemed to function. Having a common scale allows to compare a wide range of marketplaces, some of which are barely functioning, others highly functional.

The MFI showed that markets both in rural and urban areas were generally not functioning across most of the counites covered with 5 out of 9 dimensions scoring less than 6 points. The dimensions on access and protection (9.1), competition (8.4) and assortment (8.1) scored the highest while service (2.9) and infrastructure (3.7) scored the lowest. This showed that the assessed markets lacked adequate infrastructure available in more developed markets.

Figure 5: MFI 2022 Liberia Dimension Score



Box 5: Market Functionality Index (MFI) Methodology

The methodology relies on a standard survey where questions are organized under nine dimensions deemed crucial to make a judgement statement around market functionality. These are: Assortment, Availability, Price, Resilience of Supply Chains, Competition, Infrastructure, Service, Food quality and Access and Protection.

Markets were globally scored on a scale from 0 to 10 to allow worldwide comparability, where a score of 10 (MFI=10) indicates that a market is fully developed, efficient and functional.

The MFI considers three basic categories: Cereals, Food items other than cereals and Non-Food Items (NFI). Questionnaire was applied at markets and with traders with open questions.

² Stress LCS (sell household assets/goods, sell more animals than usual, spend savings, borrowed money); Clisis (reduce non-food expenses on health and education, sell productive assets or means of transport, withdraw children from school); Emergency (sell house or land, sell last female animals, begging)

MFI DIMENSION: ASSORTMENT

The assortment of essential goods dimensions includes whether the beneficiaries can find all their essential needs in the markets and if they have a wide range of choices. The average national score for assortment was 8.1 ranging from 3.5 in Bomi and to 10.0 in Nimba, the highest scored recorded. Higher assortment for food commodities recorded in urban markets compared to rural markets. In rural setups, bigger markets reported higher assortment compared to smaller markets. The common issues reported were that the assortment in country varies differently in the group of non-food items. About 23% of markets report assortment issues with poor assortment with non-food items in shelter and 5% reported issues related to education products. There were no issues on assortment reported generally for food commodities.

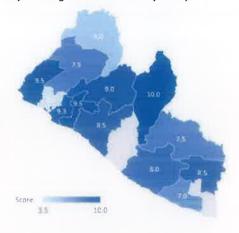
MFI DIMENSION: AVAILABILITY

Availability dimension is the physical presence of goods in sufficient quantities. The dimensions include scarcity of products and which ones are running out. The national average score for availability was 6.6 and shows that generally commodities are available across most of the markets. The findings showed that sampled markets in Bomi reported the lowest score on availability of 2. This is primarily because the markets in the sampled areas are closer to Monrovia and households from those areas rely more on Duala and Red-Light markets in Monrovia for purchases as compared to their local markets. Higher availability for food commodities was reported in urban markets. In most areas, 18% of the markets reported running out of cereals and 12% of other foods, Similarly, 19% reported scarcity of other foods and 7% of non-food items.

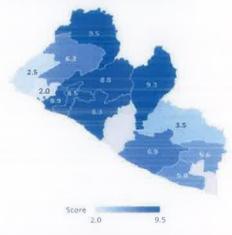
MFI DIMENSION: PRICE

Affordable, stable, predictable prices characteristics of functioning markets. The national average score for the price dimension in Liberia is 4 which showed that during the time of the survey prices were generally unstable and price changes were also unpredictable. Cereals had a higher proportion of traders (81%) that reported observing recent price increases as compared to other food items. This is in line with the general price increase since the start of global energy crisis in comparison to previous months. 72% of markets have experienced price increase on other foods while 35% of markets have experienced price increase on non-food items. Prices of both food and non-food commodities were reportedly unstable at 79% and 46% for traders respectively.

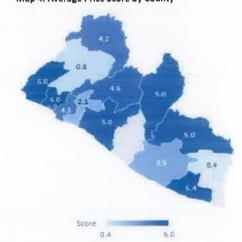
Map 2: Average Assortment Score by County



Map 3: Average Availability Score by County



Map 4: Average Price Score by County



MFI DIMENSION: SUPPLY CHAIN RESILIENCE

The resilience dimension evaluates responsiveness of supply chain and their resilience or vulnerability to shock. Supply chains of assessed markets were not quite resilient with a national average score of 6 and county average scores present great variance, ranging from 2.9 to almost 9.4. Bomi county reported the lowest average score 2.9 and mainly attributed to poor node density for all the commodities that were survey. Supplies from Bomi are mainly sourced from Duala market in Monrovia.

Markets scored high on supply chain responsiveness, indicating that they can respond to shocks in demand except for Bomi. Grand Bassa, Grand Gedeh and Bomi scored low on node density showing that most suppliers are clustered within small geographical area and are vulnerable to (natural) disaster-related disruptions.

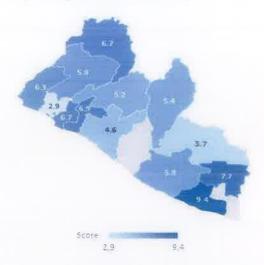
MFI DIMENSION: COMPETITION

Competition among market participants characterizes a functioning market. The competition dimension assesses whether there is a sufficient competition within the market (more than five players in the area) and if there is a unique trader monopolizing the market. The assessed markets were generally competitive with a national average score of 8.4. A greater variance was reported at county level ranging from 6.3 in Gbarpolu to 10 in Bong, Grand Gedeh, Nimba and Sinoe counties. Power distribution among traders was reported to be generally good and guaranteed a reasonable level of competition as there were no monopoly.

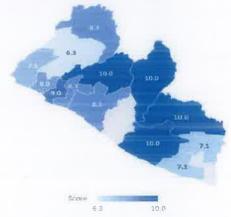
MFI DIMENSION: INFRASTRUCTURE

The infrastructure dimension assesses the type and condition of the physical structures. The assessment findings shows that most of the traders operate from temporary structures with the majority requiring maintenance. The national average score for infrastructure is 3.7, ranging from 1.1 to 6.1. Bomi and Bong counties scored the lowest at 1.1 followed by Grand Cape Mount at 1.8 mainly because of several factors including unavailability of uninterrupted electricity, reliable communication network, dedicated waste collection area, public toilets, and water sources. The severity of the impact of these factors differs across counties and markets but in general pose a challenge for most markets in the country.

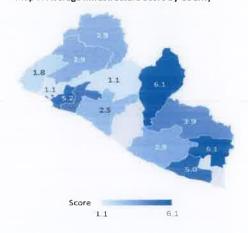
Map 5: Average Resilience Score by County



Map 6: Average Competition Score by County



Map 7: Average Infrastructure Score by County



MFI DIMENSION: SERVICE

The service dimension looks at the service provided while shopping as well as during check-out. The level of service is directly or indirectly associated with different features of a functioning market such as transparency, competition, or reliability. The national average score on service dimension of 2.9 was the lowest compared to all the other dimensions. The regional average scores with a small variance. It ranges from 1.7 to 3.3 in 11 of the 15 counties of Liberia. The 34 assessed markets reported lack of issuance of receipt, 89% reported limited forms of payment, and 9% reported long waiting time while shopping. All markets reported lack of display of price tags and lack of option to purchase online.

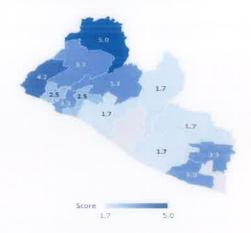
MFI DIMENSION: FOOD QUALITY

The MFI examines food quality against hygiene and cleanliness, material separation, temperature control, and stock management. The quality dimension scored a national average of 3.8. Eight counties scored a minimum of 5 except Rivercess, Margibi, Bong, River Gee, Lofa and Grand Cape Mount. Grand Gedeh county markets require further analysis to understand the challenges being faced by traders to meet quality expectations. Across the different markets, the challenges faced by traders were refrigeration which was affected by unreliable electricity (74%). All markets scored high on all the other dimension considered under quality including selling of expired products, separation of vegetables from meats, and protection of food from contaminants.

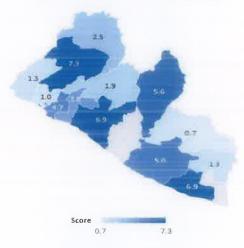
MFI DIMENSION: ACCESS AND PROTECTION

Access and protection dimension scored the highest with a national average of 9.1 showing that this dimension is not currently a risk to the functionality of markets. Five markets scored below the minimum of 9: Montserrado, Bomi, Grand Bassa, Grand Kru and Margibi. The main access-related issues reported were seasonal challenges in markets where some markets become temporarily inaccessible during the rainy season with few traders reporting general security issues.

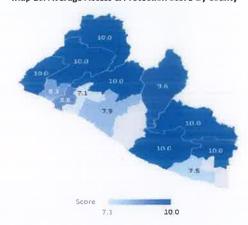
Map 8: Average Service Score by County



Map 9: Average Food Quality Score by County

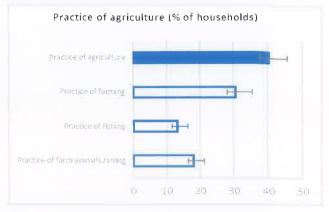


Map 10: Average Access & Protection Score by County



AGRICULTURE

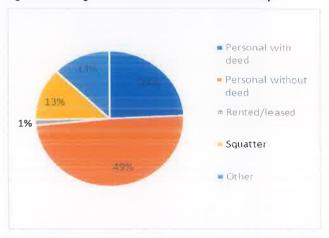
- 40.4% of households practices some form of agriculture Figure 6: Practice of Agriculture (% of households)
- 30.7% of households practice farming
- 18.1% of households practice livestock raising
- 13.2% of the households practice fishing.
- 62% of the farming households exploit lands as squatter or without deed.



ACCESS TO LAND AND OWNERSHIP

- Half of the households (49%) have personal landownership without any deed.
- 24% households have lands with deeds
- 1% of the households have rented/leased lands.
- 13% of households are squatters on government or private lands. In some cases, this is a form of tenancy agreement on condition that the households share a portion of their produce with the landowners.

Figure 7: Percentage of HHs with Access to Land and Ownership



MAIN CROPS STAGES AND PRODUCTION AND SELF-REPORTED YIELDS

- 71% of farmers and 22% of overall households cultivate rice with an average production per household of 2.7 MT.
- 47% of farmers and 14% of total households cultivate cassava with an average production per household of about 7.3
- Commercial/tree crops with high yield and production include cocoa, palm oil and groundnuts with average yield 7.6% 12.4% and 11.4% MT/Ha respectively.
- Vegetable production in Liberia is practiced on a small scale, where the production does not meet the local demand. The vegetable crops grown in Liberia are pepper, plantain, bitter ball, eddoes, okra and eggplant, with average yield of 2.2%, 2.1%, 1.9%, 2.5%, 2.3% and 0.2% MT/Ha.
- Other crops which are grown in Liberia include maize, sugar cane, beans/pulses, wheat and sweet potatoes are considered as vegetable crops

LIVESTOCK

- 9.4% households owned chicken; 1.4% owns goat; 1.1% owns cattle; 1.3% owns duck; 0.71% owns pigs with 0.59% owning sheep.
- Margibi (24.9%), Gbarpolu (12.7%), Rural Montserrado (10.1%), Lofa (9.5%), Rivercess (8.9%) and Grand Gedeh (8.7%) have households owning the most chicken.
- Gbarpolu (6%), Maryland (5.1%), Bong (3.6%), Grand Gedeh (2.5%), rural Montserrado (1.8%), Rivercess (1.6%) and Sinoe (1.3%) have households owning the most cattle.

FISHING

- On a national average, 13.2% of households practice some form of fishing. The highest practice of fishing was recorded in Lofa (38.3%), followed by Grand Kru (24.9%), Rivercess (23.9%), Nimba (22.1%), Bomi (21.7%); River Gee (19.2%) and Grand Bassa (17.7%) respectively.
- 59% practice fishing in creeks; 37.6% in rivers; 14.1% in lagoons; 6.5% in the ocean; 2.2% in natural freshwater with only 0.3% in their own farm between 27.7% and 90% of households practice fishing in creeks across all the 15 counties, the exception was Urban Montserrado.

NUTRITIONAL STATUS



GLOBAL ACUTE MALNUTRITION

- Global Acute Malnutrition (GAM) prevalence is 7.1%:
 Moderate Acute Malnutrition (MAM) is 4.6% and
 Severe acute malnutrition (SAM) is 2.5%.
- The deteriorating trend observed from GAM prevalence in 2022 can be explained by the food insecurity that has existed overtime.
- The acceptable threshold for GAM is 5%, Liberia is at the "alert/stress" level, making Liberia vulnerable to further shocks.

Map 11: Percentage of Global Acute Malnutrition by

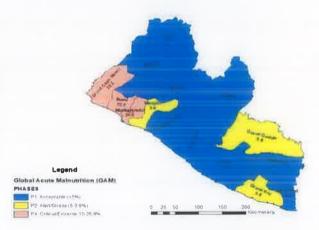


Figure 8: Number of Children Measured by County



- Margibi (9.6%), Grand Gedeh (5.8%), and Grand Kru (5.8%) are in alert/stress phase and require close monitoring
- It is observed that even in the county that are in the acceptable phase of acute malnutrition in general, there are still children in severe and moderate acute malnutrition and will need to be identified and treated. Figure 8 shows the number of acute malnutrition from the number of children measured.

Table 2: Prevalence of Global Acute Malnutrition by County

	MUAC-GAM (%)		Phase 2 Alert/stress	Phase 3 serious/severe	Phase 4 Critical/extreme	Phine's calestrophic	
		<5%	5-9.9%	10-14.5%	15-29.8%	>=30%	
Seat.	24.4						
Boog	0						
Gharpolu	2.6						
Grand Bassa	0						
Count Lagor Married	22.2						
Grand Gedeh	5.8						
Grand Kru	5.8						
Lofa	2.1						
Margital	9.6	Ĭ.					
Maryland	4.4						
Rural Montserrado	4.4						
Nimba	1.1						
River Gee	1						
River Cess	0						
Since	3.5						
	26.6						
National	7.1						

Although the national average shows that Liberia is not in emergency but in the phase 2 classification which is alert/Stress, there are three areas that need attention as thy are in critical/extreme phase.

Three counties Bomi (22.4%), Grand Cape Mount (22.2%) and Urban Montserrado (26.6%) are above national average with a large gap, and its acute malnutrition level is critical or extreme.

Urban population is increasingly becoming more vulnerable to acute malnutrition.

CHILDREN DIETARY DIVERSITY

UNICEF and WHO define minimum dietary diversity as the percentage of children 6–23 months of age consuming foods and beverages from at least five out of eight defined food groups during the previous day.

- The analysis showed that only 4% of children aged 6-23 months consume five or more food groups and therefore meet the recommended minimum dietary diversity.
- This is a reduction from 9% to 4% compared to Liberia demographic survey of 2020. The combine effect of the current food crisis and socioeconomic impact of COVID-19are the main drivers of the severe food poverty being experienced.

Figure 9: Percentage of Minimum Dietary Diversity of Children 6-23 Months

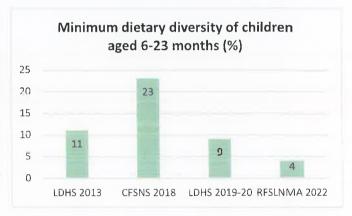
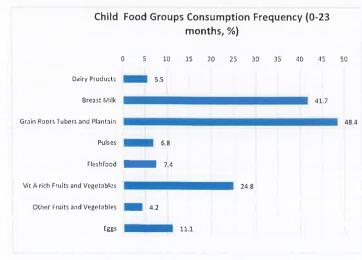


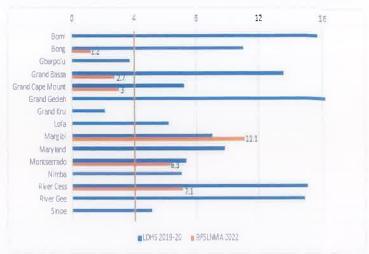
Figure 10: % of Child Food Groups Consumption Frequency of Children 0-23 Months



- About half of the children living in severe food poverty in early childhood are being fed breastmilk/dairy with starchy staples (grains, roots, and tubers). Their diets are severely lacking in nutrient-rich foods such as eggs, fish, poultry, meat, pulses, nuts, fruits, and vegetables.
- The frequently consumed food included cereals, roots, and tubers (48.4%), breastmilk (41.7%) and Vitamin A rich fruits and vegetables (24.6%)
- The proportion of children with the correct diet diversity (5+ food groups) could easily be doubled, just by ensuring that one food group such as animal source foods or legumes/nuts or other fruits and vegetables is added to the daily diet.

- None of the children 6-23 months from Bomi, Gbarpolu, Grand Gedeh, Grand Kru, Lofa, River Gee and Sinoe consumed %+ food groups as shown in Figure 10.
- Margibi is the only county that showed improvement in dietary diversity for children compared to LDHS 2020 as shown in Figure 11.
- Increase the availability and affordability of nutritious foods — including fruits, vegetables, eggs, fish, meat and fortified foods for young children — by incentivizing their production, distribution and retail.

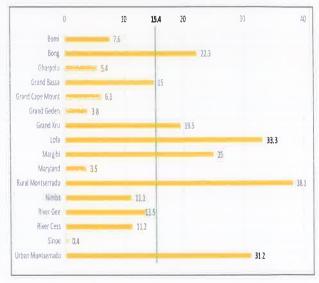
Figure 11: Comparison of Minimum Dietary Diversity of Children Aged 6-23 Months



WOMEN DIETARY DIVERSITY

- This is the first-time women dietary diversity is being collected in Liberia.
- The analysis showed that 15% of the women consume four or more food groups and therefore meet the recommended minimum dietary diversity.
- The proportion of women with the correct diet diversity (4+ food groups) could also double, just by ensuring that one food group such as animal source foods or legumes/nuts or other fruits and vegetables is added to the daily diet of women consume 2 or 3 food groups a day.
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Figure 12: Women Dietary Diversity by County



The findings showed high national prevalence of measles 9.7%, diarrhea 16.4%, Acute Respiratory Infection (ARI)24.7%. The high prevalence of these childhood disease signifies a risk of increase acute malnutrition cases due to sudden illness resulting in cycle of malnutrition.

40% of measles cases recorded in Lofa County is alarming. Diarrhea has similar rate in various counties, and ARI is the biggest problem in Urban Montserrado, Margibi and Bomi Counties. Except Bong and Sinoe that show 0% rate for all three causes for morbidity, it is observed that in all counties, measles, diarrhea and ARI(s) are alarming and call for action.

Figure 13: Prevalence of Measles, Diarrhea and Cough by County

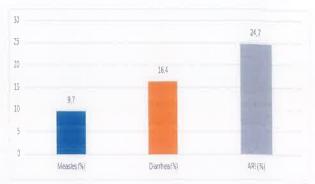
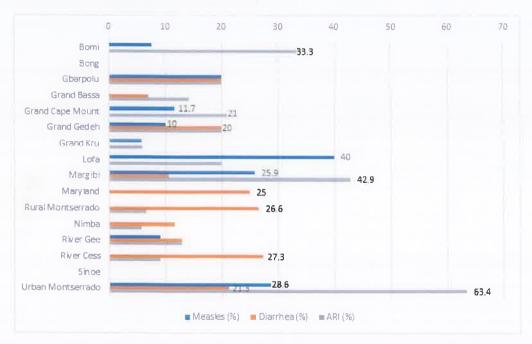


Figure 14: Cases of Measles, Diarrhea and Cough by County



OVERVIEW OF PEOPLE IN NEED

The overall people in need are 2.2 million (440K households). Out of these, xx children and women will need health and nutrition services, 440,000 thousand households will be in need of food and livelihood assistance.

Table 3: Estimated number of people in need

People in need by o	county					
County	People in need		Children	Pregnant &	People in need	
Bomi	37K	County	U5	Lactating Women	Nutrition and Health	1
Bong	287K	Bomi	5941	1857	8K	
Gbarpolu	56K	Bong	45897	14343	60K	Àv.
Grand Bassa	131K	Gbarpolu	9014	2817	12K	
Grand Cape Mount	110K	Grand Bassa	21008	6565	28K	É
Grand Gedeh	84K	Grand Cape Mount	17588	5496	23K	
Grand Kru	46K	Grand Gedeh	13495	4217	18K	
Lofa	248K	Grand Kru	7291	2279	10K	1
	71K	Lofa	39685	12402	. 52K	d
Margibi		Margibi	11368	3552	2 15K	
Maryland	119K	Maryland	18975	5930	25K	
Rural Montserrado	31K	Rural Montserrado	4890	1528	64K	
Nimba	233K	Nimba	37354	11673	3 49K	1
River Gee	49K	River Gee	7844	2451	10K	
Rivercess	34K	Rivercess	5485	1714	4 7K	4
Sinoe	92K	Sinoe	14670	4584	4 19K	
Urban Montserrado	573K	Urban Montserrado	91642	28638	B 120K	
Total	2.2M	Total	352149	11004	6 460K	

RESPONSE ANALYSIS

- The deteriorating trend in nutritional status observed can be explained by the food insecurity that has existed overtime as reported in the assessment. It is a basic human right to have regular access to sufficient diverse and safe food, as a healthy diet is also the first line of defense against disease. With half of the Liberia population considered food insecure, it is vital to mobilize resources for the 2.2 million people at risk of food insecurity who will be identified and supported. This will include the most vulnerable (female headed households, elderly headed households, households with children under-five, households with people living with disabilities, households with pregnant and lactating mothers) to reduce the risk of negative coping mechanisms, morbidity, and mortality.
- Early response to meet immediate needs while also investing in achieving medium and longer-term solutions beyond life-saving interventions are recommended as detailed below. Local networks of first responders and other community-level safety nets will be supported to ensure that critical needs associated with short-term are addressed in a timely manner. Given limited fiscal space, urgency, agro-ecological conditions, and local compounding vulnerabilities, it is critical to prioritize a relevant set of intervention packages that service vulnerable population groups.
- It is imperative to ensure that the agriculture as a primary livelihood and income source for majority of households in Liberia is not disrupted. It is also critical to maintain an enabling food system to secure diversified diets. "A food system gathers all the elements (environment, people, inputs, processes, infrastructures, institutions, etc.) and activities that relate to the production, processing, distribution, preparation and consumption of food, and the outputs of these activities, including socioeconomic and environmental outcomes.

- It is useful to recognize some lessons learned from past resilience building, "Factors that make households resilient to food security shocks and stresses include: income and access to food; assets such as land, home gardening, fishing, or livestock; social safety nets such as food assistance and social security; access to basic services such as WASH, health care and nutrition; the household's adaptive capacity and diversity of income sources; and the household's sensitivity to shocks and stresses".
- There is a need to recognize, assess and strengthen the capacities of communities and of community-based organizations (CBOs) and local communities as they are typically the first responders to crises and best placed to quickly reach people in need. This will also ensure transparency and accountability. Wherever possible, national NGOs will play a key implementing role, with international actors providing capacity building support as required. Emphasis will be placed on multi-sectoral efforts thereby avoiding the worst socioeconomic consequences. To reduce dependency on international humanitarian assistance and enhance the resilience of communities, work closely with communities, national and local authorities, and development partners to increase access to livelihoods and basic services whenever possible. Some inter-sectoral and sectoral interventions will aim to build resilience both to short-term shocks and long-term stresses.
- Ensure mechanisms, greater and equitable participation of all groups, especially women, adolescent girls, young
 people and persons with disabilities in decision-making processes, programming, leadership and economic
 empowerment programming. Increased programme targeting adolescents to mitigate risks of negative coping
 mechanisms.

RECOMMENDATIONS

Recommendation 1

Maintaining supply of rice including three months buffer stocks

Continue to implement the 2020-2021 actions by the Government of Liberia to mitigate adverse effects of dramatic global price increases on the population and thereby ensuring adequate rice supply and increase local food production. The objectives are to improve the food pipeline situation, increase local food production, discourage food exports, encourage dietary diversification, improve market performance, and create income opportunities through diversification of livelihood sources. To ensure coordination and efficiency, the Government will focus on strengthening existing measures which include

- Suspension of consumer tax (2.10 USD) on more than 5kg bag of rice and the suspension of tariffs on agricultural equipment, materials, and supplies.
- Engaging governments and international organizations to tap into resources to meet the immediate and long-term challenges of the global food prices. An institutional framework was developed to monitor food security and nutrition, and the Liberia/ UN Joint Programme was formulated to implement safety nets.
- Initiate immediate measures to further increase stock levels, especially before the onset of rains, such as requiring
 importers to increase stock levels for three months, pre-positioning food stocks to serve as emergency grain reserve,
 through making government budgetary provision or encouraging donations from bi-lateral and international partners
- Invest in local rice purchase and seed bank project as well as create emergency grain reserve through donations and government allocations etc.
- Provide special subsidies for urban and peri-urban agricultural activities in vegetable, cassava, and rice value chains.

Recommendation 2

The mortality and morbidity of 2.2 million affected people in targeted locations is reduced through adequate access to essential food, nutrition and health care and WASH

Life-saving treatment of children with acute malnutrition

- Given that malnutrition is one of the immediate causes of morbidity and mortality, early detection and treatment of
 children with acute malnutrition in the counties with the largest increase reported cases (priority 1) Urban
 Montserrado, Grand Cape Mount, Bomi and Margibi. Out-patient therapeutic programme (OTP) and inpatient
 facilities (IPF) will be intensified with the support of implementing partners. Integration with other health services
 through outreach services, where feasible, and emergency referral points and hospitals, ensuring proper referrals for
 further assessments and treatments. The capacity of health facilities will be further strengthened to ensure adequate
 capacity to provide treatment and caring of acute malnutrition.
- The government to coordinate with, UNICEF and WFP to ensure adequate contingency nutrition supplies arrive on time and are adequate. Coordinate with UNICEF for Ready to Use Therapeutic Food (RUTF) supplies for treatment of severe acute malnutrition (SAM) and micronutrient supplementation and with WPF for Ready to Use Supplementary Food (RUSF) for treatment of moderate acute malnutrition (MAM) at least for the 4 priority 1 counties.
- Scale up of existing OTP and IPF in priority 2 and 3 counties should continue according to the national protocol.
- Liberia will need to decide which simplified approach they would like to adapt as shown below.

	Floridir PluAC	Caregivers are treined and equipped to serven their own children using a MUAC tape.
Contitional protocol	CHW-lad treatment	CHWs edmit and treat westing (without medical complications) at community (exist)
	Reduced Reguency of follow-up visits.	Reduction of value for wested children admitted into treatment from weekly, to bi-weekly or monthly
	MUAE/Dedema	Use of MUAC and/or elema as the only criteria for admissions and α , α
	Expanded admissions criteria	Incollecting the MUAC cut off to admit for collection <125mm
	Use of a striple treatment product	All children alimical for tractioest receive RLM*
	Reduced desirge	DO 35 OF RULL product makes consistent and consistent

Preventive nutrition services -Infant and Young Child Feeding (IYCF) and caring practices, Micronutrient Supplementation and Blanket supplementary food programme (BSFP)

- With the premise that prevention is always a must; when prevention fails the early detection and treatment of acute malnutrition is a must, key family practices and treatment of common illnesses follow-up visits at health facilities should be intensified. Intensify IYCF practices at health facility and households. Prevention of malnutrition will be integrated in all services in all the counties for example in food assistance/distributions. Other possible platforms to distribute IYCF materials and promote IYCF messages include through community volunteer screening or door to door activities such as food distribution, immunization, and others. Partners who are able and willing to integrate IYCF into these other types of activities should contact MOH/nutrition division and UNICEF for the required materials, supplies and guidance.
- Continuation of micronutrient powder for fortification of complementary food for essential growth, development, and prevention of illness in young children. Consideration of switching from IFA to multiple micronutrient supplements for pregnant and lactating women and the adolescent for prevention of micronutrient deficiencies should be considered starting with the priority 1 counties.
- Enhance treatment and management of diarrhea with oral rehydration salts (ORS) and zinc tablets at community levels.
- Increase health education on water, sanitation, and hygiene (WASH) at county level.

Food and livelihood assistance to reduce the risk of negative coping mechanisms, morbidity, and mortality

• Scale up food assistance in the most food insecure counties (Grand Cape Mount, Maryland, Sinoe, Bomi, and Grand Kru) to directly increase access to nutritious food, with particular attention to the nutritional vulnerability, and therefore prioritize households with children under -five years, of women, people with disabilities, women-headed households, adolescent girls, elderly persons, and other marginalized groups. A guidance for partners and agencies will be developed to ensure the provision of an adequate and nutritious diet.

Cash-based transfers

• To further support coordinated multi-sectoral responses, cash-based transfers (CBT) will be prioritized where feasible. explore complementary modalities — in kind, cash, and mixed — to optimize the response. Coordinated CBT will be considered in place of in-kind assistance, where appropriate and feasible, tapping into the expanded technical support available through the Cash Working Group (CWG) that should be established. Cash-based transfers will be provided to the depending on access to functioning markets.

Recommendation 3:

Life-saving assistance of 2.2 million affected people in targeted locations to meet basic food needs and improve their food security situation

- Meet most vulnerable households with poor dietary intake immediate food needs for 2 months, with general food distribution to allow them to overcome the negative effects of the high food and fuel prices.
- Target urban poor and peri-urban families especially in and around Monrovia through cash and voucher system, considering the effects of the high food and fuel prices.

Recommendation 4:

Livelihood opportunities, food security and nutritional status of 2.2 million affected people in targeted locations are secured and improved through direct provision of assistance and support for sustainable and resilient agriculture.

- Invest in sustainable income generation by increasing access to livelihood opportunities such as Food for Asset activities and village savings and loan program.
- Reinforce school feeding programs, both as a means of enabling families and communities to get their children in school, and as a means of encouraging farmers to produce more food for sale, "home grown food" a local food-based feeding program.
- The food security and nutrition sectors to work together with education to ensure schools children and their families
 who are exposed to greater risks of food insecurity and malnutrition continue to receive essential support through
 gender-responsive school nutrition programmes (including home-grown school meal programme, nutrition services
 and nutrition education).
- Provide seeds, agricultural tools, and training to farming households to facilitate their production and productivity
- Intensify home gardens to increase access to fresh foods, improve dietary diversity, and increase vegetables intake by
 scaling up agricultural extension support. Provide guidance on appropriate packages of seeds and simple
 production/space-saving techniques combined with dietary messages. Support for rainwater harvesting/ drip
 irrigation, complementary backyard poultry. Provision of tools, seeds, and training for growing nutrient-dense
 varieties of vegetables and fruits at home.
- Backyard poultry raising, small ruminants, feed, and technical assistance to construct pens/fences to improve access
 to animal-sourced foods (meat and eggs) among the most vulnerable. Financial support may be required for pigs,
 goats, ducks and to purchase inputs such as veterinary medicines, vaccinations, and feed.

Opportunity to connect small scale farmers to commercial chicken producers, connect farmers with Community Animal Health Workers (CAHW), and establish linkages with local feed suppliers- ensuring sustainability of the intervention.

- Continue supporting fish production with efforts to connect suppliers with local markets to secure livelihoods.
 Promote nutrition sensitive aquaculture, including rice-fish and polyculture stocking with small indigenous species that are nutrient rich and can be partially harvested for regular consumption. Improve the cold storage of fish and divert fish destined to foreign markets for domestic use while working with processors to adjust quality to consumer preferences in Liberia
- Scale up agricultural input (fertilizer, seeds) distribution for farming households

Recommendation 5:

Strengthening the resilience of communities

Strengthening the resilience of communities is a long-term objective and will continue to require a comprehensive, multi-sectoral and coordinated approach, as well as engagement with development actors. This may include potential synergies with the Liberia -- Social Economic Recovery Response Framework, the Government of Liberia Pro-Poor Agenda for Development and Prosperity (PAPD), the Sustainable Development Plans (MSDP), multi sectoral costed strategy and plan of action for nutrition and the United Nations Sustainable Development Cooperation Framework (UNSDCF).

Agriculture and livelihood support to enable sustainable food production and productivity prioritizing village tracts through vulnerability criteria such as land area under cultivation, access to markets.

- Continue investments in the food crop sector to decrease Liberia's dependency on food imports and enhance the agricultural value chain. Encourage investment in cash crop and crop diversification as alternative livelihood for smallholders who may not cultivate large land for food crop production.
- Introduce cash for work in farms to incentive, attract, and increase agricultural labor for youths
- Direct targeted provision of seeds, fertilizers, feed, stock, or access to low-interest loans, or smart subsidies encouraging linkages between seed producers and farmers.
- Expand ongoing production-based programs to increase rice and cassava production and diversified cropping, particularly focusing on productive safety nets.
- Support urban agriculture production through inputs distribution

Continue to scale up integration of nutrition into primary health care in line with the essential package of health services

- Integrate WASH support in health facilities, in collaboration with the Ministry of Health
- Increase health education on water, sanitation, and hygiene (WASH) at sub-national level
- Scale up infant and young child feeding practices at health facilities and household levels
- Work with small and medium enterprises to produce affordable and nutritious food for infants and young children from 6 to 23 months

The planned national nutrition SBC strategy will enable development of common community engagement plans to be integrated with livelihood, agriculture, and cash transfers interventions, to improve the ability of vulnerable households to obtain adequate food and increase access to and use of a diverse diet as well as health and nutrition services.

- Food security and livelihood delivery platforms will integrate key SBC change for optimal key family practices including maternal, infant, and young child nutrition care and support.
- The SBC will be integrated across all service delivery platforms to empower women, children, and households to demand and improve adoption of positive practices for optimal maternal, infant and young child nutrition.
- Cooking demonstrations and nutrition messages in frontline agriculture service delivery to establish the link between production and consumption to achieve healthy diet across age groups.

Recommendation 6:

Support the government to conduct regular Food Security and Nutrition Surveillance

- Support the government in conducting and publishing the Comprehensive Food Security and Nutrition Survey (CFSNS)
- Support the government in conducting and publishing the annual crop assessment
- Continue monitoring the food security and nutrition situation closely, especially since the COVID-19 has not been eradicated yet and the ongoing Russia and Ukraine crisis.
- Continue to assess the impacts and trends overtime and to provide recommendations to decision-makers to ensure appropriate response strategy and developing exit strategies
- Increase surveillance for under-five childhood diseases and malnutrition at peripheral levels
- Work closely with the Government and the partners of the Food Security and Nutrition Coordination Committee (FSNCC) to include a solid early warning system that would allow a sound preparedness for a rapid emergency response into the National Recovery Plan.

Recommendation 7:

Strengthen institutional capacity in food security and nutrition at national and sub-national levels

- Capacity building support for technical government partners will further strengthen food security, health, nutrition, and education systems, enhancing the quality of longer-term service provision for crisis-affected communities.
- The nutrition sector will leverage multiple systems (health, food, WASH, and social protection) with the potential to deliver interventions for better nutrition outcomes.
- Strengthen local capacities through increased support to individuals and communities to take up their essential role
 in food security, agriculture, and nutrition activities, understand and respond to the different needs of various
 vulnerable groups,
- Capacity building of local partners to engage in nutrition sensitive actions that will increase resilience and reduce the risk of malnutrition.
- Strengthen capacities of service providers at health facility and within communities to treat and manage identified cases
- Strengthen food security and market monitoring systems





























