KEY TAKEAWAYS

- *The findings from the FMS showed concerning food consumption deficits and limited diversity of diets in the inaccessible areas surveyed. More than one in every two households (61 percent) struggled to have sufficient food intake and 77 percent experienced crisis or higher levels (CH Phase 3 and above) of food deprivation and hunger, further evidenced in the pervasive use of food-based coping strategies;*

- *More than two in every three households relied on either crisis (17 percent) or emergency (50.3 percent) coping strategies to meet their food needs, which heightens economic vulnerability due to the negative impact on future productivity of the most affected households;*

- *The levels of acute malnutrition among new arrivals from the inaccessible areas is Critical (Phase 4 IPC Acute Malnutrition Classification) with the overall Global Acute Malnutrition (GAM) rates 22.0% and Severe Acute Malnutrition (SAM) at 9.0%. The high levels of acute malnutrition indicate an extremely stressed population including food insecurity, poor water and sanitation access, and poor health conditions as the key underlying causes of acute malnutrition;*

- *Detailed analysis among arrival population with good quality and adequate sample size showed Critical (Phase 4) GAM rates in Magumeri and Kukawa LGAs. According to the FMS over a half of the children are stunted (58.3%) and underweight (42.253.4%). The high stunting and underweight is a clear indication of a population that is chronically stressed with poor nutrition and repeated infection;*

- *Overall, both crude and under five mortality rates were above the emergency threshold of 1 death/10,000 population/day and 2 deaths/10,000 population/day respectively with values of 2.24 deaths/10,000 persons/day for CMR and 2.41 deaths /10,000 under-fives/day. Analysis of the data for the 4 LGAs (Kukawa, Madagali, Magumeri, and Gwoza) with the highest number of people reveals that both CMR and U5MR are highest in Gwoza 4.66 deaths/10,000 persons/day and 9.27 deaths/10,000 under-fives/day;*

- *The elevated levels of consumption gaps, malnutrition, mortality and pervasive usage of emergency coping strategies, is largely underscored by limited availability of food stocks, restricted access to functional markets and water, health and sanitation services, which might heighten morbidity risk and impact households' ability to engage in labour for food or resource gathering.*

INTRODUCTION

The insurgency in the North East States of Borno, Adamawa and Yobe continues to render some areas totally or partially inaccessible to humanitarian response agencies/partners. The protracted nature of this conflict has made the

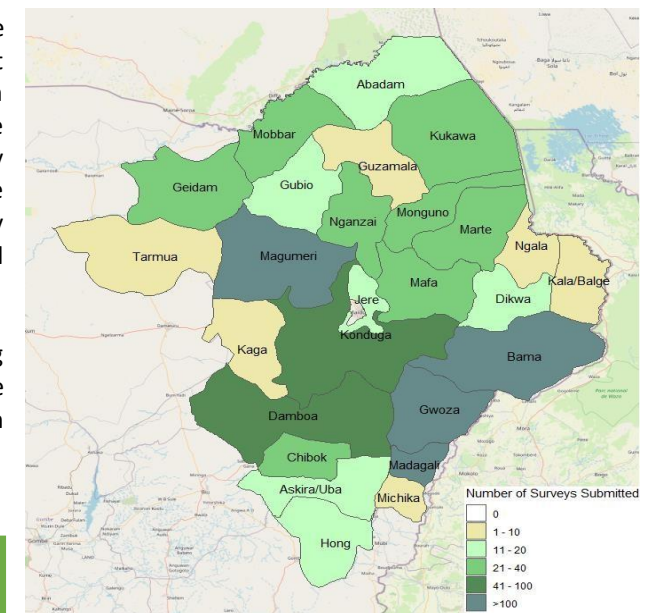### Famine Monitoring System (FMS) for Inaccessible Areas

The Famine Monitoring System (FMS) is an approach put in place by the Food Security Sector and Nutrition Sector (both having their operational bases in the North East) under the leadership of the Nigerian Government, for tracking the trend of acute food and nutrition security situation in such areas that had been analyzed to be in the emergency (phase 4) so as to be able to develop and issue alerts in case famine emerges. The FMS uses a methodology that combines both food and nutrition security monitoring strategies to assess the situation and then raise necessary alert, as the case may be. The FMS is basically conceptualized to support the Cadre Harmonisé analysis of the inaccessible areas in the BAY States.

The general objective of FMS is to provide a comprehensive information about the food security and nutritional situation of the population in inaccessible areas of Northeast BAY States. The FMS also informs the Cadre Harmonisé analyses and classification in different phases of food security and malnutrition of the inaccessible areas. The specific objectives of the FMS entails data collection through monthly monitoring in support of better classification of inaccessible areas between rounds of CH analysis with focus on:

- understanding the risk of a population to face severe, acute catastrophic or famine-like conditions;
- understanding the degree of livelihood change, including capacity to engage in traditional and emergency livelihoods, etc;
- understanding food consumption outcomes through the use of proxy information on Household Hunger Scale (HHS) and Food Consumption Score (FCS);
- understanding availability of health and nutrition services, including household and individual access to services by collecting information on functionality of nutrition/health services;
- understanding how households cope (including the severity of coping measures) during periods of hunger, thirst, morbidity or malnutrition in such areas of interest;
- understanding the malnutrition situation in such areas of interest through the collection of information on GAM prevalence (for children 6-59 months) in reception centres and other new arrival terminals; and
- understanding changes in crude and U5 mortality rates and indicative causes in such areas of interest.

Primary data was jointly collected by partners in many accessible towns of Borno, Adamawa and Yobe States where there are new arrivals coming from the inaccessible areas with the support of the DTM from SEMA and IOM. Well-structured questionnaire was deployed by trained enumerators in collecting the information in the form of key informant interview and focused group discussions (FGD). The data collection focused more on six elements- causal factors of emergency needs, food consumption outcomes, livelihood change and coping strategies, access to life-saving services and assistance, detection of malnutrition through nutrition screenings (WHZ and MUAC), and mortality indicators as recommended by the CH analysis framework. Consideration was also given to journey duration and patterns for the new arrivals interviewed. A combination of purposive and convenient sampling techniques was employed in selecting the recent new arrivals (within the last 30 days) who were the primary target. Total sample of respondents covered for this month of October was **650 *households*** (from 26 LGAs) who were interviewed with comprehensive nutrition screening conducted for ***about 611*** children (6 to 59 months old) at the reception centres. The period of data collection for this edition of the bulletin lasted from 1st to 31st October, 2021.

humanitarian crisis in the North East much more complicated, and, rendering parts of Borno, Adamawa and Yobe State inaccessible. To address information gaps facing the humanitarian response in Northeast Nigeria and inform humanitarian actors on the demographics of the population in inaccessible areas, and identify their needs, access to services and movement intentions, there have been joint efforts by various stakeholders' proffer solutions.

Several cycles of the Cadre Harmonisé (CH) analysis unveiled the problem situation of populations in some inaccessible areas. From the results of March 2021 CH analysis in which 746,846 and 881,261 persons for the (March – May) and (June – August 2022) periods, respectively, were classified in phase 3 – 4 of acute food and nutrition insecurity across the inaccessible areas of the BAY states. The preliminary results from the just concluded October, 2021 CH round further reveal presence of close to a quarter million people in CH Emergency phase in October to December 2021, with high risk of further deterioration to nearly half a million in Emergency and, over 13,000 in Catastrophe-like conditions at the peak of the lean season next year. Majority of people in Emergency and those projected to experience Catastrophe-like conditions are from the inaccessible areas. Moreover, the findings suggest a famine-like food consumption pattern among minority of the inaccessible population (≤10 percent), which was reflective in severe food consumption deficits, extremely limited diversity of diets and pervasive use of food-based ration control with wild food foraging remaining a major food source in these areas. However, higher-level indicators (acute malnutrition and mortality) were insufficient to confirm famine conditions in these areas. Therefore, it became necessary to undertake close monitoring of the food and nutrition security situation of the vulnerable population in these areas for emergency preparedness against possible further deterioration into famine, especially during the lean season (June-August, 2022). Thus, the Inaccessible Areas Task Force, working in liaison with the various partners, planned a real time monitoring system, including monthly data collection, for tracking the evolution of emergency needs during CH projection periods.

The result is an evidence-based approach improving the capacity for analysis of emergency needs through identifying areas to scale up data collection prior to CH workshops and using real time analysis for flagging areas with increased risk of severe outcomes during the CH projection period. Thus, the Famine Monitoring System attempts to provide data needed to support analysis for the risk of catastrophic or famine-like conditions in hard-to-reach locations, either increasing the amount of data provided to the CH analysis process or improving the frequency of reliable data to support real time analysis of proxy outcomes when unexpected events develop outside the CH analysis cycle.

Map 1: Inaccessible Areas Covered from June to August 2021

RESULTS

Outcomes – Food Security

Food Consumption (FCS, rCSI and HHS)
The food consumption for the FMS is measured in three dimensions in line with the provision of the CH version 2.0 – food consumption score (FCS), reduced coping strategy index (rCSI) and household hunger scale (HHS).

Food Consumption Score (FCS): The findings from the FMS showed concerning food consumption deficits and limited diversity of diets in the inaccessible areas surveyed. More than one in every two households (61 percent) did not have sufficient food intake (poor + borderline food consumption) in the last 30 days spent in their inaccessible places of origin, with 34 percent of such households reporting severe food consumption deficit. This infers that the FCS stands at emergency level (CH Phase 4), the most severe classification in the FCS categorization. While the global findings were consistent in some of the areas at indicative levels, Madagali LGA, which has a relatively higher level of confidence interval given its sample, showed quite concerning findings as 91 percent of the surveyed households did not have adequate diets (poor + borderline food consumption) in their places of origin. 60 percent of such households had poor food consumption – particularly reflecting severe consumption deficits in these areas. Regarding the diversity of diets consumed, the average daily consumption of cereals was reported at about five out of every seven days whereas all other food groups (pulses, vegetables, proteins, dairy, sugar, and fats) were consumed for two days or less in every typical seven-day period. The extremely limited diversity of diets in these inaccessible areas is indicative of significant macro and micronutrients deficiency, which has an implication for the health, wellbeing and economic productivity of the people trapped in these areas.

Chart 1 Average Number of Consumption Days for Groups
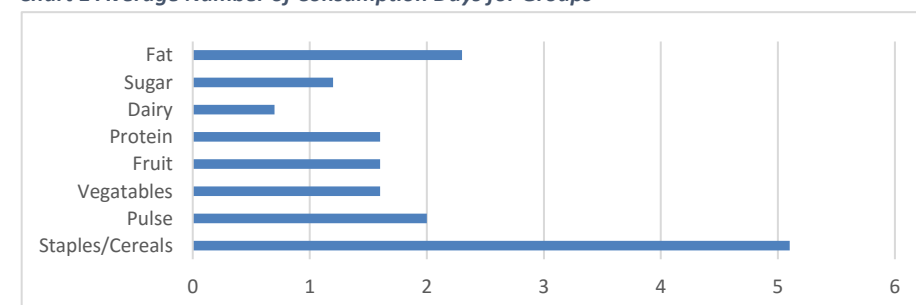
Reduced Coping Strategy Index (rCSI): Moreover, there was pronounced usage of food based coping strategies to bridge food gaps within the surveyed households. 36 percent of households reported reduced coping strategy index (rCSI) scores equal or greater than 19, which is the most severe categorization according to the CH guidelines (CH Phase 3). For the rCSI, households in inaccessible areas adopted multiple alimentary based coping strategies such as reliance on less preferred or less expensive food, reduction in the number of meals or portion size for an average of three days out of a typical seven-day period. The frequency of adoption of these strategies was relatively higher in Gubio where households typically adopt such strategies for an average of six out of seven days for all food based coping strategies except for the category: "reduce number of meals eaten in day" (5 days) which suggests limited access to this coping measure and invariably widespread vulnerability in this location. The pervasive use of food based coping strategies such as reduction in the number of meals and portion size has implication on nutrition, if protracted and unabated.

Household Hunger Scale (HHS): Findings from the HHS, which is a perception-based measure of food deprivation and experience of hunger in the surveyed households, showed that the majority of households (78 percent) experienced crisis or higher levels (CH Phase 3 and above) of food deprivation and hunger according to the CH analysis guidelines. Specifically, 2.2 percent and 1.8 percent of households reported emergency and catastrophe/famine levels of HHS respectively. Based on the metrics presented, HHS for inaccessible areas of BAY States was classified as CH Phase 3 (crisis), albeit an area such as Gubio (30.4 percent) was classified in CH Phase 5 (catastrophe/famine) because more than 20 percent of the surveyed households fell within the catastrophe/famine category. This suggests worrisome HHS trends and significant food deprivation and widespread hunger especially in the highlighted LGA in the catastrophe/famine CH phase classification.

Evolution of Livelihoods

Livelihood Coping Strategies Livelihood-based coping strategies depicts the status of households' livelihood stress and the consequential longer-term impact on future coping capability and productivity. Livelihood coping strategies are classified into the following three severity categories 'stress', 'crisis' and 'emergency', with emergency being the most severe category and is classified in CH Phase 4 (Emergency) based on the CH guideline.

Overall, the livelihood coping indicator was classified in CH Phase 4 as 67 percent of the surveyed households used either crisis (17 percent) or emergency (50.3 percent) coping strategies to meet their food needs during the last 30 days spent in their inaccessible areas of origin. In terms of individual strategies specifically for emergency, 49 percent sent family members to beg, whereas in the crisis category, 52 percent of households spent their savings and 18 percent withdrew their children from school. While reliance on these severe livelihood coping strategies (crisis and/or emergency) might alleviate the brunt of food insecurity in the short-term, their pervasive usage is particularly worrisome on the longer-term given their negative impact on future productivity of the affected households.

Chart 2 Livelihood Coping Strategies
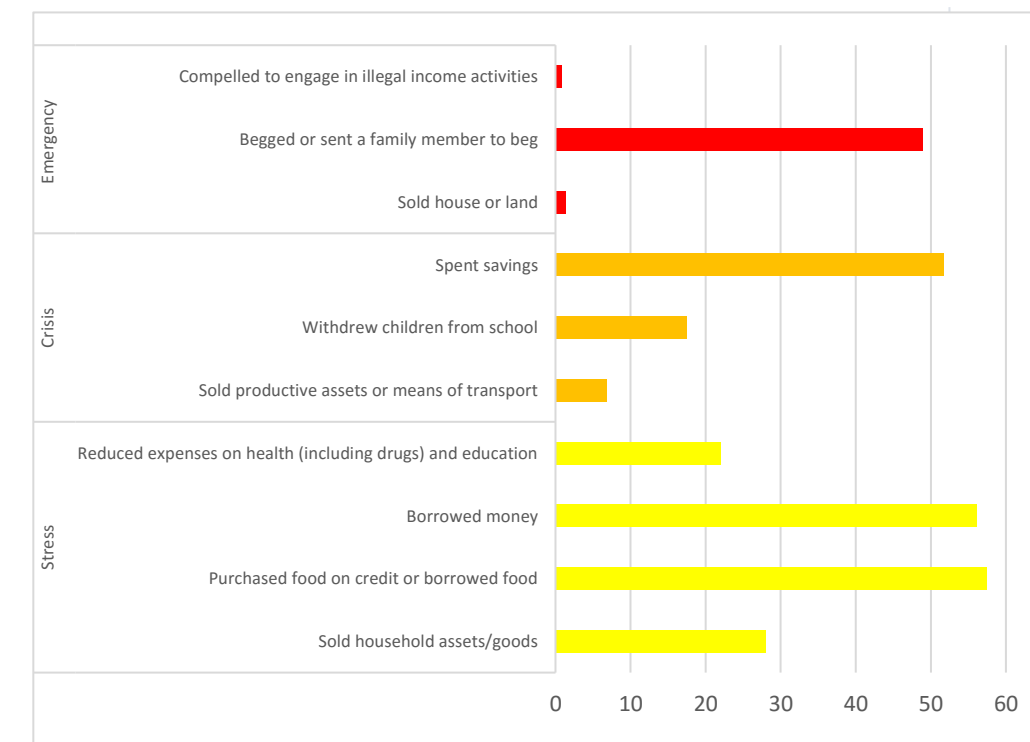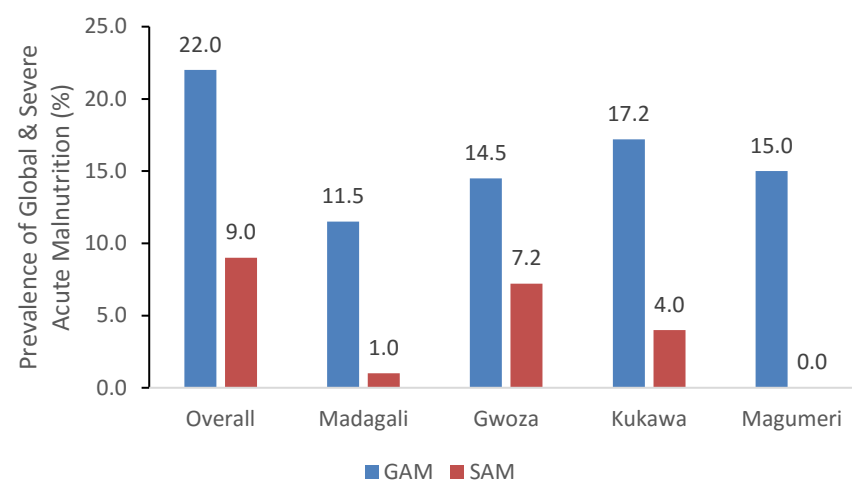
Outcomes – Nutrition

Malnutrition

Global Acute Malnutrition (GAM) is determined by taking the weight, height and MUAC measurement for children 6- 59 months. Acute malnutrition is most responsive to changes in diet and disease and the most dangerous form of malnutrition in terms of mortality risk.

Global Acute Malnutrition (GAM): According to the FMS findings, the levels of acute malnutrition among new arrivals from inaccessible areas for the month of October is **Critical** (Phase 4 IPC Acute Malnutrition Classification), with no significant change compared to previous reporting period. The overall Global Acute Malnutrition (GAM) rates were 22.0% and Severe Acute Malnutrition (SAM) at 9.0%. The high levels of acute malnutrition indicate an extremely stressed population including food insecurity, poor water and sanitation access, and poor health conditions as the key underlying causes of acute malnutrition.

Detailed analysis among arrival population with good quality and adequate sample size showed Critical (Phase 4) GAM rates in Magumeri and Kukawa LGAs.

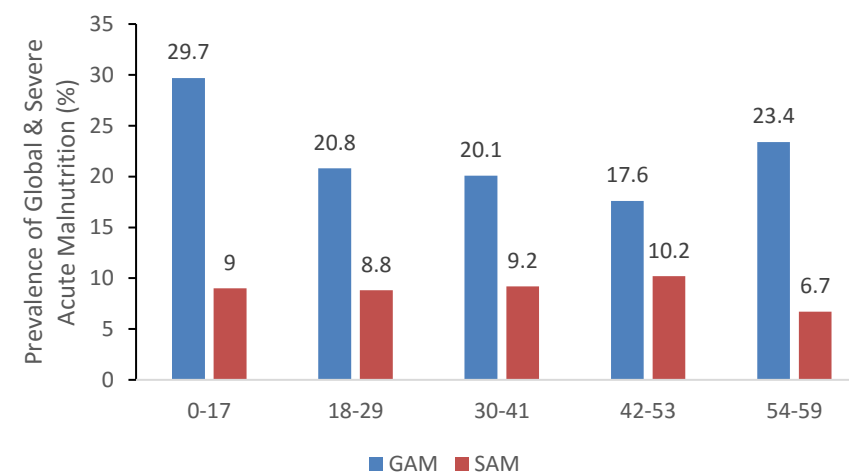*Chart 3: Global Acute Malnutrition (GAM%) Rates per Location*

Chart 4: GAM Prevalence of Acute Malnutrition by Age

The children ages 6- 17 months were 1.5 times more likely to be acutely malnourished than older children (30 – 59 months). The younger children are more vulnerable to shocks but also an indication of poor infant and young child feeding practices especially continued breastfeeding up to two years and poor complementary feeding.

The very poor nutritional status of the inaccessible population continues to be very poor even during the harvest season, a clear indication that the population is not accessing adequate food both at the origin and arrival locations or the other underlying causes of malnutrition are persistent and don't change with seasonality.

Chronic Malnutrition

Chronic malnutrition (stunting) is determined by comparing the height and age of the children measured. Stunting is a measure of chronic malnutrition that occurs because of inadequate nutrition over a longer period. **Underweight** refers to the proportion of children with low weight-for-age

Stunting and Underweight: According to the FMS over a half of the children are stunted (58.3%) and underweight (53.4%). The high stunting and underweight rates is a clear indication of a population that is chronically stressed with poor nutrition and repeated infection. Stunted children fall sick more often, miss opportunities to learn, perform less well in school and grow up to be economically disadvantaged, and more likely to suffer from chronic diseases. *Other nutrition sector data sources (such as the ETT screening) show that new arrivals from inaccessible areas are 5 times more likely to be acutely malnourished compared to those from accessible locations. This indicates the FMS data is highly probable and confirms the extremely poor nutritional status of the inaccessible population.*

The data on acute and chronic malnutrition must be interpreted with caution due to the overall sample size (low arrival numbers) and data quality challenges.

Mortality

Crude Mortality Rates (CMR) and **Under five Mortality Rates (U5MR)** are measures of all-cause mortality occurring during the period. Deaths both from conflict as well as natural causes contribute to all-cause mortality.

Overall, both crude and under five mortality rates were above the emergency threshold of 1 death/10,000 population/day and 2 deaths/10,000 population/day respectively with values of 2.24 deaths/10,000 persons/day for CMR and 2.41 deaths /10,000 under-fives/day.

Analysis of the data for the 4 LGAs with the highest number of people reveals that both CMR and U5MR are highest in Gwoza 4.66 deaths/10,000 persons/day and 9.27 deaths/10,000 under-fives/day.

Interpretation based on these thresholds should be done with caution considering that the adapted methods used to gather information from inaccessible areas may over-estimate mortality rates.

Note:
Data on malnutrition and mortality must be interpreted with caution, due to the overall small sample size (low arrival numbers) and data quality challenges. Only data that met the quality threshold (LGA sample size, standard deviation and confidence interval of collected data) was included in the analysis.

Contributing Factors

Hazards and Vulnerabilities

Protracted insurgency and associated insecurity continue, to drive humanitarian crisis in Northeast Nigeria states of Borno, Adamawa, and Yobe, significantly disrupting livelihoods and increasing household vulnerability to food and nutrition insecurity. As a result, population displacement remains high, livelihoods asset are severely eroded, major supply chains remain disrupted, and delivery of public services continue to collapse. Humanitarian access to some of the affected communities remains elusive. Although harvesting has begun in some places, staple food prices have remained atypically high amidst compromised purchasing power. Due to the violence and socioeconomic hardship, several households continue to flee their homes to seek safety and support in internally displaced camps and host communities.

Unlike in the previous months (June-September), nearly half (45 percent) of respondents in October confirmed that some previously internally displaced persons (IDPs) have been returning to their communities of origin in the previous 3 or more months while 55 percent have not witnessed any returning IDPs. Although this is an improvement from 19 (and 81) percent in September, respectively, the underlying drivers of displacement are still unresolved, as most people (55 percent) still feel unsafe/insecure returning to their native communities. In October, conflict in localities of origin five to six months before arrival in IDPs settlements was still the most

significant shock (87 percent) compared with 80 percent in September. The conflict was more pronounced (100 percent) in Hong and Madagali (in Adamawa) and Askira/Uba, Chibok, Damboa, and Nganzai in Borno, and less pronounced (50 percent) in Jere and Mafa LGAs. This is followed by the sickness of the household member as reported by 53 percent of the new arrivals in October compared to 49 percent for in September; high food prices reported by 50 percent of households in October compared with 31 percent in September, which indicates that food prices have continued to surge. — *see chart 6.*

In October, a majority (56 percent) of the interviewed persons confirmed having access to farmland compared to 70 percent (September). Of which 90 percent in October engaged in farming before they fled, compared to 88 percent in September. On an average, only about 28 percent of households had stocks left in October while 72 percent had no stock before departure from their localities of origin. This confirms that significant food scarcity in the communities of origin is still prevalent despite high farmland access (56 percent) and engagement in farming (90 percent). About 83 percent of people indicated that the available food stocks in October would last for less than 3 months compared with 64 percent in Sept, despite the start of harvesting in some localities. A total of 46 percent of the newly arrived IDPs (October) opined that some (24 percent) or most (22 percent) of the households left behind cultivated during this year's wet season, with the majority planting beans/cowpea (55 percent), groundnuts (49 percent), maize (47 percent), assorted vegetables (43 percent), millet (39 percent) and sorghum (35 percent) in October.

Food Availability

Among the assessed households, about 72 percent in most of the inaccessible LGAs reported not having stock of foods from last season's harvest. In places where sufficient samples existed, Bama (81 percent), Magumeri (91 percent), and Damboa, Hong, Askira Uba, Jere Mobbar, Nganzai, and Geidam each (100 percent) have the highest proportion of households that fell within this category. For about a third of all surveyed households that had food stock left, the majority (83 percent) indicated that it would have lasted for less than 3 months, thus suggesting severe food deficit in inaccessible areas, particularly during the lean season period. Overall, land access was relatively high with about 56 percent of households reporting such access. However, (56 percent) of households with land access only have access to a small portion of the farmland of about 1 hectare or less. 43.9 percent of households reported access to about 0.5 to 1 hectare of land being available for cultivation while another 25.1 percent of households only had access to less than 0.5 hectares of land. Noteworthy to highlight that only 5 percent of households have access to more than 2 hectares of land in these previously agrarian-dominated areas. Despite these challenges highlighted, farming continues to remain the mainstay for food availability in households with arable land access as about 90.3 percent of such households were engaged in farming during the month that preceded their departure from places of origin.

Food Access

Markets were either completely non-functional or functioning at sub-optimal levels in some of the inaccessible areas as confirmed by 81 percent of the surveyed newly arrived households. Areas with a high preponderance of households reporting non-functionality of the market are Hong, Madagali, Askira Uba, Chibok, Damboa, and Dikwa (100 percent), Bama 90 (percent) Magumeri and Konduga (86 percent) reported a complete lack of functioning market or sub-optimal functional markets in their places of origin. Although, 91 percent of the households from inaccessible areas said they had access to the market in the last three months, however, insecurity (13 percent), financial constraints and lack of money (2 percent), and market closure (1.8 percent), remained the main impediments for market access. Households from inaccessible areas acknowledged a significant increase (68.9 percent) and small to moderate increase (5.7 percent) and small to moderate decrease (13 percent) in prices of food commodities, which would potentially further weaken the already frail purchasing power of the inaccessible populace and consequently, deepen vulnerability. This is particularly pertinent to note as markets were reported as the main source for cereals for 16 percent of the interviewed households, among which Marte reported 75 percent dependence on the market. Other notable sources for cereals recorded in the FMS were own harvest (30.5 percent), labour exchange for food (17.7 percent). Moreover, wild food foraging (22.8 percent) and begging (4.2 percent) account for cereal sources in almost one in every five households in inaccessible areas, which is quite worrisome given their characteristics as extreme coping measures. The prevalence of gathering was most pronounced in Madagali (72.3 percent), Gwoza (38.6 percent), and Bama (18.2 percent).

Health and WASH

The assessment of inaccessible areas sourced data and information on water, sanitation, hygiene and health services in the inaccessible areas from where the new arrivals left. About 33.3 percent of the interviewed individuals across the inaccessible LGAs accessed water from unsafe sources (surface water {river, dam, pond, etc}, rainwater, unprotected spring and tanker truck). The highest preponderance of surface water sources was reported for Damboa, Askira/Uba and Hong (100 percent), Chibok (93.9 percent). About 57.6 percent of the interviewed households indicated that it takes more than 30mins to access water, with the highest proportions of such recorded in Hong (100 percent), Marte and Mobbar (75 percent) and Kukawa (72.7 percent). Moreover, access to sanitary facilities still needs serious attention as 32.9 percent use open field/bush, 18.2 percent of the respondent households bury their faecal waste in holes, while the highest proportion (48.2 percent) use ordinary pit latrine. Most (81.4 percent) of the individuals said there are no functional health facilities in the localities from where they left, 50.4 percent said they either pay or get health services at no cost, yet Some households (10.7 percent) said there are clinic buildings but no staff medical supplies to attend to patients. About 52 percent of those interviewed said it took 1 to 3 hours to travel to the nearest health facility.

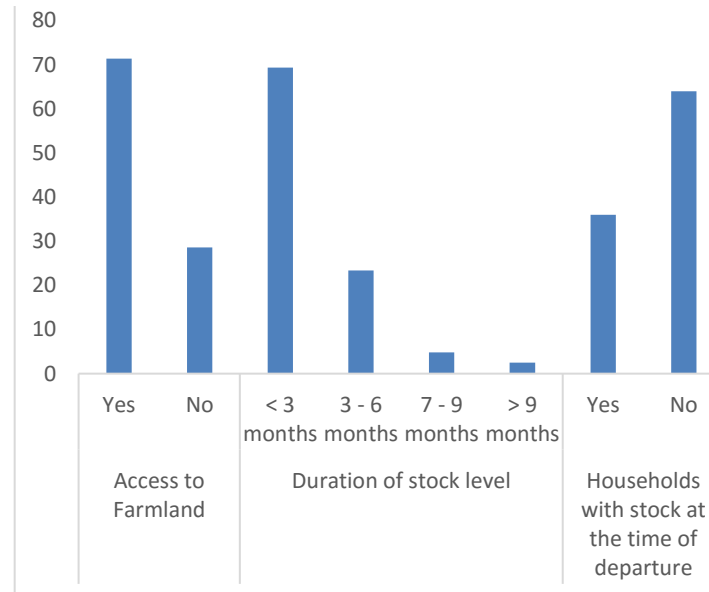Chart 5: Stock Availability and Farming (Percentage of Households)

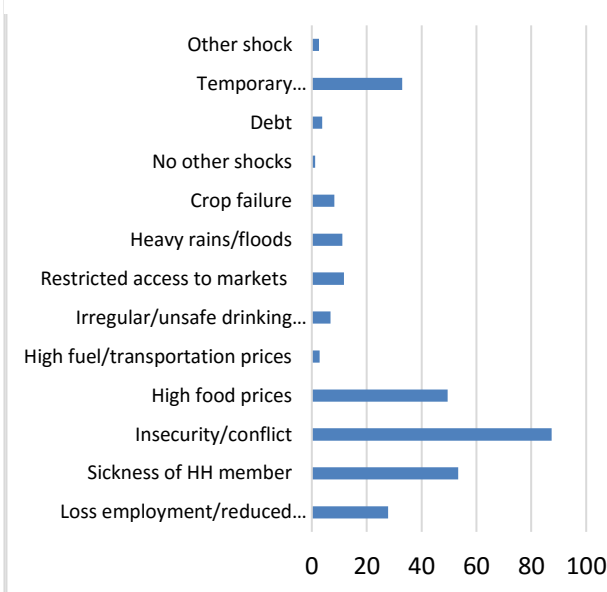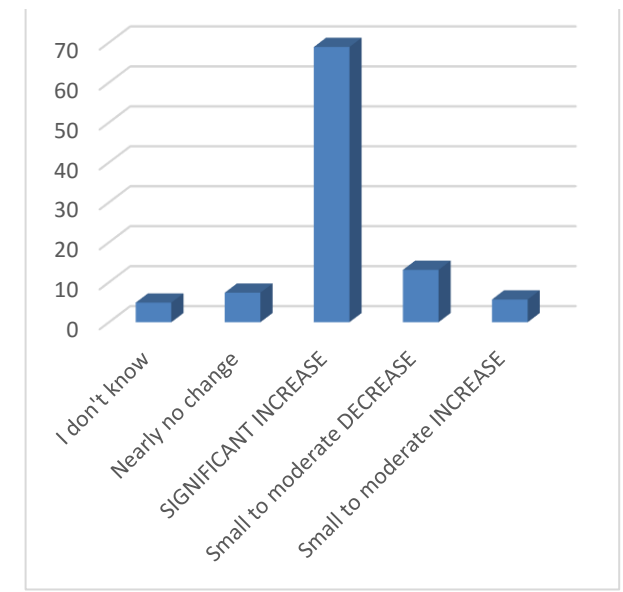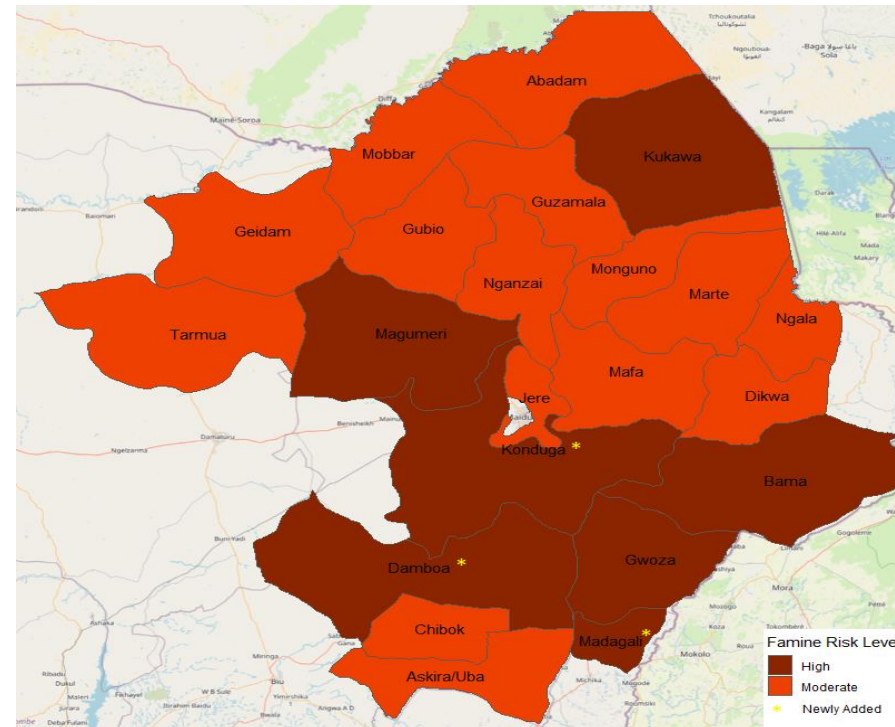Chart 6: Most Significant Shocks 3-4 Months before Arrival

Chart 7: Chart 7: Changes in price

Famine Risk Level – October 2021

Famine Risk Level
- High
- Moderate
- Newly Added

Note: Famine risk level defined based on convergence of: a) severity of food security and nutrition outcomes plus contributing factors; and b) sample size. Mortality was not considered in the convergence due to LGA level low sample sizes and quality issues. For areas adjudged "Moderate Risk", sample size was relatively small in most of them, and so, the reason for the classification. This, however, does not completely eschew the possibility of higher levels of famine risk in such areas. Thus, these results should be interpreted and utilized with some caution.

Note: Please click on the link here for LGA level breakdown of the FMS results (*sample size, food security and nutrition outcomes including contributing factors*): Data Tables for this October bulletin is available for Download Here.

Key Risk Factors to Monitor

1. *High famine risk areas – Bama, Gwoza, Damboa, Konduga, Madagali, Magumeri and Kukawa – should continue to be monitored closely considering elevated levels of food consumption gaps, malnutrition and extensive/unsustainable usage of emergency coping strategies, largely underscored by limited availability of food stocks, restricted access to functional markets and health services;*

2. *Elevated health risk within a highly food insecure, vulnerable, and inaccessible population;*

3. *FMS data indicates high morbidity rates and illnesses affecting all age groups including the productive household members. The impact of morbidity on the household expenditure, food consumption and productivity require in-depth exploration and close monitoring;*

4. *Majority of the households have no access to health facility. This warrants the need to devise alternative ways through which communities could manage illnesses (i.e. 'coping strategies' for limited formal health services);*

5. *The lack of clean water and access to dignified sanitation, coupled with low hygiene awareness will likely result in increased AWD diseases, impacting under 5 children, thereby resulting in malnutrition and other negative outcomes of food and nutrition; and*

6. *The combined effect of these highlighted factors, will heighten morbidity level and, would likely impact households' ability to engage in labor-for-food or resource gathering— thereby deepening the vulnerability of the already fragile households.*

Limitations of the FMS

- Small sample size arising from limited number of arrivals from inaccessible localities;
- Data quality issues due to low understanding of the instrument by field enumerators, specifically on nutrition and mortality;
- Limited coverage in some locations (e.g. Kaga) due to lack of partners' representation/ operations in such areas.