



Emergency Food and Nutrition Security Assessment

Emergency Food and Nutrition Security Assessment in Maiduguri Urban Area - Borno State, Nigeria

June 2016

Data collected in May 2016



**World Food
Programme**

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Technical Supervision

WFP Nigeria

WFP VAM Regional Office-Dakar

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ACKNOWLEDGMENTS

This assessment has been carried out by WFP in collaboration with FEWS NET, the State Emergency Management Agency (SEMA) and the National Emergency Management Agency (NEMA) at a time of high security constraints in both the city of Maiduguri and in the Lake Chad region.

The assessment teams deployed in the field had to cope with daily stressors of kidnapping, injuries and harmful attacks by Boko Haram. For this reason, the logistics of the survey were adjusted to ensure the safety of the staff. However, insecurity, terror and fear are what the interviewed persons, mothers, children, elders, fathers and leaders must cope with on a daily basis and for an undetermined period of time. In particular, I empathise with the displaced households living in uncertainty for their future and appreciate the host community's generosity in welcoming families fleeing terror. I deeply thank each of these persons for the time they took to tell us about their lives, to share their difficulties, fears and hopes. On behalf of WFP, I commit that we will do everything in our power to alleviate their sufferance.

Likewise, I would like to thank the enumerators and all the field workers for carrying out their duties with professionalism, commitment and empathy towards those who are currently among the most vulnerable people in the whole world.

A profound thanks goes to our FEWS NET, Norwegian Refugee Council and International Rescue Committee colleagues, who are our partners in many of the studies and analyses on food security worldwide. Their expertise on food security and markets is highly valuable in our common battle to eradicate hunger.

Last but not least, I would like to express sincere appreciation for the collaboration with the Nigerian counterparts, both the NEMA and the SEMA. May this be the beginning of a fruitful partnership in the years to come.

Mutinta Chimuka,
WFP Nigeria Emergency Coordinator

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ACRONYMS AND ABBREVIATIONS

BSF	Blanket Supplementary Feeding
CARI	Consolidated Approach for Reporting Indicators of Food Security
CBT	Cash-Based Transfer
CFSVA	Comprehensive Food Security and Vulnerability Analysis
CSI	Coping Strategies Index
DTM	Displacement Tracking Matrix
EFSA	Emergency Food Security Assessment
FAO	Food and Agriculture Organization
FCS	Food Consumption Score
FEWS NET	Famine Early Warning System Network
GAM	Global Acute Malnutrition
IDP	Internally Displaced Person
IOM	International Organization for Migration
IPC	Integrated Food Security Phase Classification
LBW	Low Birth Weight
LGA	Local Government Area
MUAC	Mid-Upper Arm Circumference
mVAM	mobile Vulnerability Analysis and Mapping
NEMA	National Emergency Management Agency
NGN	Nigerian Naira
NGO	Non-Governmental Organisation
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
ODK	Open Data Kit
PLW	Pregnant and Lactating Women
SEMA	State Emergency Management Agency
SMEB	Survival Minimum Expenditure Basket
SPSS	Statistical Package for Social Science
UN	United Nations
UNDP	United Nations Development Programme
UNDSS	United Nations Department of Safety and Security
UNFPA	United Nations Fund for Population Activities- United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
VAM	Vulnerability, Analysis and Mapping
WFP	World Food Programme
WHO	World Health Organization

EXECUTIVE SUMMARY

How many people are food-insecure?

More than the half of the assessed population in the Maiduguri outer wards (52 percent) is food insecure, of which 5 percent are severely food insecure. The remaining 43 percent are only marginally food secure, therefore their situation could deteriorate if exposed to further shocks or go without food assistance.

Who are the food insecure people?

Food insecurity affects the IDPs' households more than the local ones: about 66 percent of the IDPs are food insecure in comparison to 41 percent of the host population.

Moreover, households depending on remittances, solidarity, unskilled wage labour, hunting and also on agriculture are the most prone to food insecurity.

Where do the food-insecure people live?

Among the seven assessed wards, food insecurity is higher in the wards of Auno and Bale Galtimari (in both wards, 60 percent of the assessed households are food insecure) as well as in Ngubala Bamma (56 percent).

Why are they food insecure?

The Boko Haram induced conflict has exacerbated the already poor food security situation of both the host and the IDP communities. High food prices, market disruption, the lack of employment opportunities, coupled with a situation of chronic poverty have reduced households' purchasing power and eroded livelihoods at the detriment of the access to food.

How can we support the households?

Food is the main concern of the assessed households. Since food prices are increasing, it is expected that households will increasingly face food security problems in the months following the survey as they approach the lean season (July-September), a period when food stocks and family savings both decrease.

In line with the joint mission conducted in April 2016, the assessment recommends a multi-sector response coordinated with other relevant actors, both humanitarian and governmental, in order to respond to immediate food security and nutritional needs, and to support the households' recovery for both IDPs and the host community. Free food distributions, Cash-Based Transfers (CBT) and blanket supplementary feeding for children aged 6 to 23 months are the most recommended modalities of assistance.

1. CONTEXT, JUSTIFICATION AND OBJECTIVES OF THE ASSESSMENT

Violence perpetrated by the extremist group Boko Haram has affected Northeast Nigeria for the last six years, resulting in widespread displacement and a growing humanitarian emergency. The crisis is adding to chronic under-development, food insecurity as well as general poverty, illiteracy and unemployment.

The Nigerian security forces have recently recaptured main towns and many villages in most of the 27 Local Government Areas (LGAs) in Borno, one of the 36 states of Nigeria, whose capital is Maiduguri. Maiduguri is the principal trading hub for northeastern Nigeria, a commercial centre whose economy is centered on regional trade, with a small share of manufacturing.

The city is currently home to around 2.5 million people (OCHA), of which the International Organization for Migrations (IOM) Displacement Tracking Matrix system identifies 1.4 million as being Internally Displaced Persons (IDPs), living in Greater Maiduguri. Some 30 different locations host IDP settlements in Greater Maiduguri; however, only the 8 percent of the IDPs currently live in camps, the remaining live among host communities. Maiduguri residents depend largely on the numerous markets around the city to satisfy their food and non-food needs.

WFP field monitors found that within LGAs where the non-state armed actor is still active or where military operations are ongoing, populations continue to seek refuge in Maiduguri, either in unofficial settlements or in government controlled camps. Only a limited number of IDPs have so far returned to their place of origin.

The Joint United Nations (UN) Multi-Sector Assessment¹ conducted in April 2016 in Borno LGA, as well as Maiduguri and its surroundings, found that over 550,000 people in Borno State were severely food insecure and in need of immediate food assistance, including 180,000 in Maiduguri's outskirts, 120,000 camp residents and approximately 250,000 IDPs in newly re-opened areas. In particular, host communities and IDPs in eight wards of Maiduguri's outskirts and in 12 LGAs located in the north and east of Borno were facing emergency (Phase 4) conditions. The most affected were children, women and the elderly. Nutritional measurements such as Mid-Upper Arm Circumference (MUAC) conducted on children in Greater Maiduguri suggest that a worrying number of children are suffering from acute malnutrition. The United Nations Children's Fund (UNICEF) found that in five out of ten camps surveyed, Global Acute Malnutrition (GAM) rates were at or above 10 percent, which corresponds to an alert threshold. GAM levels were especially worrying in the Mogocolis camp (up to 23 percent).

The main drivers of these unprecedented food insecurity and malnutrition conditions include conflict, displacements, reduced food access and loss of livelihoods. The lack of livelihood opportunities and high food commodity prices are sharply constraining the purchasing power of the most vulnerable. Staple food prices in northern Borno have increased by 50 to 100 percent, and market functionality is limited because of insecurity and insurgency-driven trade restrictions. Exchange rate depreciation, higher transportation costs as well as limited food production in the Greater Maiduguri agricultural settlements are all contributing factors to increased food prices. Consequently, many poor households are relying on a protein-poor diet and often a single meal a day. In particular camp-based populations lack access to income-earning opportunities. They are also often living on a single meal per day. The combination of low quantity and quality of food, lack of clean water, inadequate health facilities and shelter is affecting their overall health and wellbeing.

In addition, it is highly likely that the number of people requiring food assistance will continue to rise through September 2016, during the lean season and rainy season. There is serious concern for children

¹ In response to a request by the Government of Nigeria, WFP initiated rapid joint assessments together with UNICEF, IOM, UNHCR, UNFPA, UNDSS and OCHA in Borno State in April 2016. The assessment focus was on IDPs and host communities in Bama, Damboa, Dikwa and Monguno LGAs, as well as in Maiduguri and surrounds (Jere and Konduga LGAs).

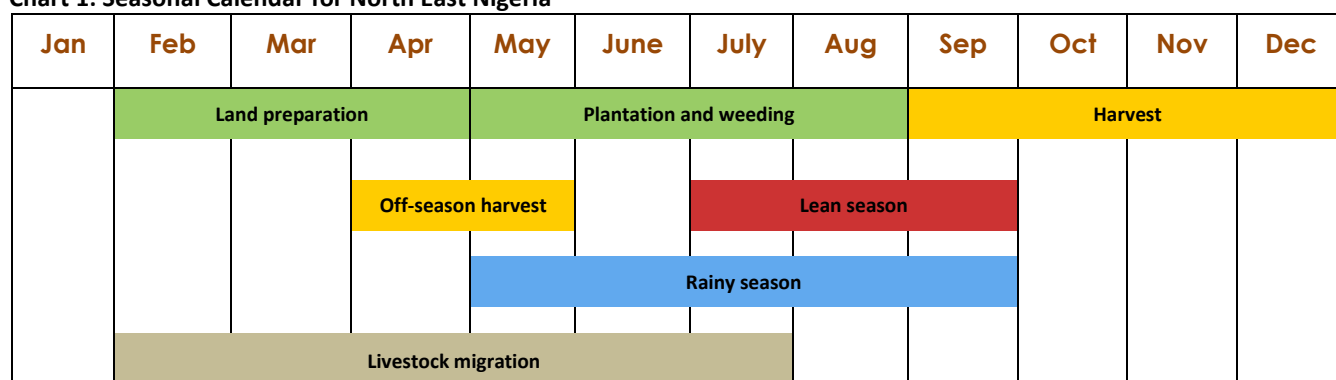
and elderly living in camps that are likely to become flooded during the upcoming rainy season, given their particularly weak nutritional status.

Relevant UN agencies, such as WFP, the Food and Agriculture Organization (FAO), the World Health Organization (WHO), the Office of the UN High Commissioner for Refugees (UNHCR)² and the IOM have publically declared **internal Level 3 emergencies** for the crisis in Northeastern Nigeria. This is the global humanitarian system's classification for the response to the most severe, large-scale humanitarian crises.

With limited access to humanitarian support and essential public services, the observed conditions drastically increase the likelihood that vulnerable populations will resort to negative coping strategies, including forced child labour, begging and negative food strategies. In order to further assess the situation and refine recommendations, this emergency food security assessment (EFSA) was conducted in May 2016 for the eight wards of Maiduguri that were found to have emergency conditions in April 2016.

The assessment took place during the off-season harvest and plantating phase in the rural areas. This is also the time when food prices normally increase due to the imminent onset of the lean season.

Chart 1: Seasonal Calendar for North East Nigeria



Source: FEWS NET

Objectives

The main objectives of this EFSA are:

1. To assess and provide up-to-date figures on the food security and nutrition situation of IDPs and host populations in the eight most vulnerable outer wards of Maiduguri;
2. To provide recommendations for the targeting of joint household food security support programme (through Cash Based Transfer) and of nutrition assistance (through Blanket Supplementary Feeding Programme) in the most needy outer wards.

² UNICEF has declared the L3 emergency on 23rd August 2016.

2. METHODOLOGY

The information in this report combines primary quantitative data collected at household level and secondary data, in particular various WFP assessments and monitoring tools that feed the analysis of the markets' situation in Maiduguri and the Lake Chad region.

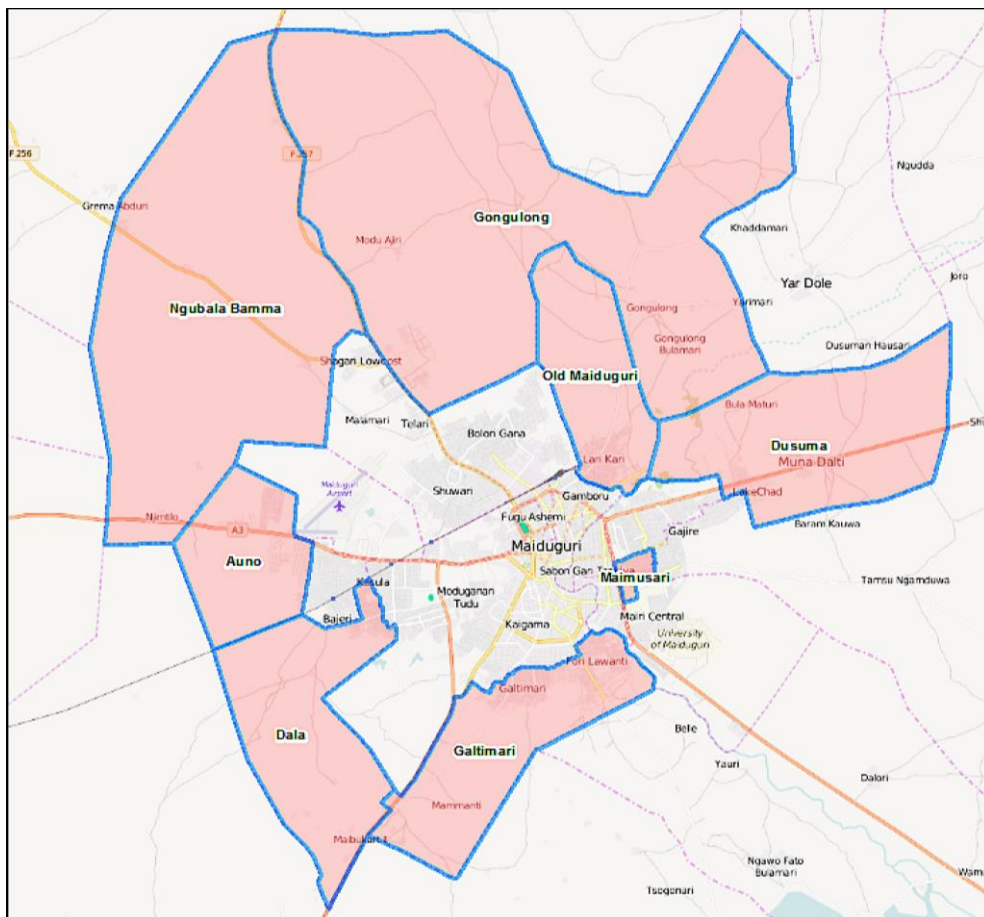
2.1 Area targeting

The assessment took place in Maiduguri and the outer edges of that city, delineated by a trench that surrounds it. . Eight priority wards were identified, namely: Gongulong, Dala, Galtimari, Auno, Dusuma, Maimusari, Ngubala Bamma and Old Maiduguri.

These outer wards are rural or urban.

In each of these wards, internally displaced households live either among the host community or in the IDP camps. The mission interviewed those living among the host population.

Map 1 – Area targeted



Geographical division

State: The highest administrative boundary below the national level. Nigeria has 36 administrative divisions.

LGA: States are further divided into Local Government Areas (LGAs). Borno state has 27 LGAs. Each LGA is subdivided into wards.

Ward: There are 311 wards in Borno state, 15 in Maiduguri* and seven in Jere**.

* Bolori I, Bolori II, Bulabulin, Fezzan, Gamboru, Gwange I, Gwange II, Gwange III, Hausari, Lamisula, Limanti, Mafoni, Maisandari, Shehuri North and Shehuri South.

** Dala, Galtimari, Gomari, Gongulong, Maimusari, Mairi and Old Maiduguri.

2.2 Sampling methodology

Sampling frame

A stratified purposive³ sampling method was applied. Stratification, or stratified sampling, involves dividing the population of interest into sub-groups (i.e. strata) that share something in common based on criteria related to the assessment objectives. Stratification is used when separate food security estimates are desired at a predefined, minimum level of precision for each of the sub-groups. In order to achieve the EFSA's proposed objectives, two main criteria defined the households' selection:

- a) Local population and
- b) IDP population.

Within these two sub-groups the teams of enumerators selected the households both randomly and following the information of the neighbourhood chiefs in order to identify the IDP households not living in the camps. Therefore the information collected through this sampling frame cannot be extrapolated to the entire Maiduguri population.

Sample size

The sample size required for estimating the low MUAC prevalence in children has defined the dimension of the households' sample. In this respect, an estimated prevalence of 15 percent of low MUAC in children aged 6 to 59 months and 10 percent in women 15 to 49 years old were considered. A prevalence of 50 percent of low FCS and 50 percent of reduced CSI at household level were also initially considered. However, these indicators would have provided a lower households sampling, thus minor precision, therefore the prevalence of low MUAC in children was preferred. The number of children with low MUAC was then converted into the number of households to interview, taking into account a degree of precision of ± 4 percent and an average household size of eight members. Considering a household non-response rate of 5 percent, calculation led to a final **449 households per strata** to interview.

The formula to calculate the required sample size, by strata, for a multiple outcome survey is:

$$\text{Sample size} = \alpha^2 \times [p \times (1-p)] / d^2 \times DEFF^4$$

Given the lack of reliable information on the homogeneity of the surveyed population and the planned number of individuals, a design effect of 2 was recommended.

α = 1,96 for a 95% confidence interval
 p = assumed current value
 d = required precision
DEFF= Design effect to account for cluster sampling

³ The purposive sampling bases the households' selection on the judgement of the researcher. This allows focusing on particular characteristics of the population of interest.

⁴ Formula recommended in the CSFVA guidelines, WFP, 2009.

Table 1: Sample size required per strata

Target group and indicators	Assumed prevalence	Precision required	Design effect assumed	Individual non-response	Sample size requirement
Individuals					
Low MUAC in children 6-59 months	15%	± 4%	2	10%	681
Low MUAC in women 15-49 years	10%	± 4%	2	10%	481
Households					
Proportion of poor and borderline FCS	50%	± 10%	2	-	214
Proportion using severe coping strategies	50%	± 10%	2	-	214

Table 2: Precision obtained using a sample size of 449 households, by strata, as per planning

Target group and indicators	Sampling units per strata	Assumed prevalence	Precision obtained in each strata	Precision in all strata
Individuals				
Low MUAC in children 6-59 months	645	15%	± 4 %	± 3.3 %
Low MUAC in women 15-49 years	455	10%	± 4 %	± 2.8 %
Households				
Proportion of poor and borderline FCS	449	50%	± 6.5 %	± 4.6 %
Proportion using severe coping strategies	449	50%	± 6.5 %	± 4.6 %

However, given security limitations and time constraints, out of the planned 898, **809 households** were interviewed (**373 IDPs and 436 from the host population**).

2.3 Key indicators

Main tools and indicators used for the development of questionnaires included:

- Food Consumption Score
- Households coping strategies
- Poverty indicators (e.g. level of household income, household expenditures and indebtedness)
- Access to water and sanitation facilities indicators (e.g. type of sanitation and water facilities used)
- Children and women anthropometry (MUAC).

To describe the food security situation, the Consolidated Approach for Reporting Indicators of Food Security (CARI) is used in this EFSA.

2.4 Training of the enumerators

Before the beginning of the survey, all the field team members participated in a three day training session on how to ask the questions, dialogue with the households, use the mobile devices, record the answers, and measure the MUAC.

2.5 Data collection

Overall, 20 enumerators and three FEWS NET supervisors carried out the primary data collection from 16 to 26 May 2016. Enumerators were staff working for NEMA, SEMA, WFP, FEWS NET, and the NGOs International Rescue Committee (IRC) and Norwegian Refugee Council (NRC), with knowledge of food security and nutrition.

2.6 Data collection tools

Questionnaire: Primary data was collected through face-to face interviews using a household questionnaire that focused on general socio-economic and demographic household characteristics, food security indicators, education, housing and sanitation features, agricultural production, income/livelihood sources, expenditures, credit and indebtedness, shocks, desired assistance and mother and child nutrition.

Mothers, or self-declared caregivers, responded to the questions on the children's food consumption.

Smartphones: Enumerators collected the quantitative primary data through smartphones, using an open source data collection platform (Open Data Kit -ODK) set up by WFP.

MUAC tapes: Enumerators used yellow + red MUAC tapes to measure children and MUAC tapes without colour code for women.

2.7 Data entry, analysis and validation

WFP ensured the data download from the smartphones to the computers. It was in charge of the data cleaning and analysis as well. The data analysis was carried out using Statistical Package for Social Science (SPSS) and Excel software.

Both FEWS NET and WFP validated the results.

2.8 Limitations

1) **Sample coverage:** Due to the insecurity and the limited time available, the teams carried out the assessment in seven of the eight identified wards. The mission could not cover Gongulong ward.

2) **Representativeness:** Given the limited amount of time, the security constraints and the lack of reliability of population data, households were selected through a purposive sampling (non-probability), which does not make the data representative of the assessed wards. It does allow however to make generalizations of the food security situation in these wards.

3) **Comparability:** The lack of previous studies in the urban area of Maiduguri does not allow a comparison of the indicators over time.

3. RESULTS

3.1 Food Consumption

Household food consumption is measured through the Food Consumption Score, an indicator that measures the dietary diversity, energy, macro and micro content value of the food consumed by the household during the seven days prior the interview.

FCS cut-off points

0-21: poor consumption
22-35: borderline consumption
>35: acceptable consumption

In the assessed area, the food consumption is only at an acceptable level for less than the half of the population, i.e. 44 percent.

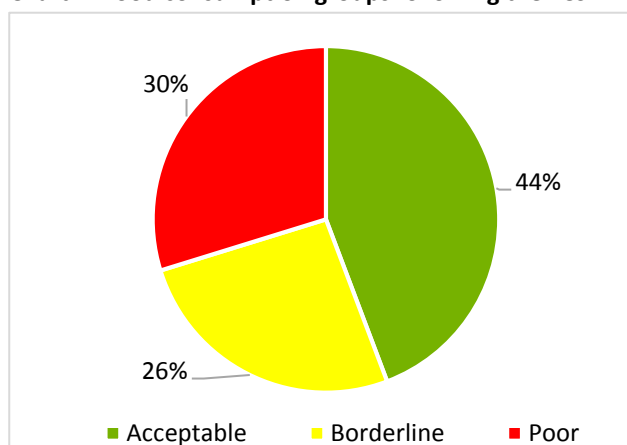
Overall, 30 percent of the assessed population has a **poor food consumption**, meaning that households' diet is inadequate to be food secure. These households' meals are mainly composed of cereals and some vegetables. Their consumption of dairy products, animal proteins-rich food and pulses is very limited or non-existent. Only 5 percent of households with poor food consumption eat meat (beef, goat, chicken, pork) or fish, and this happens only one to three days per week. Eggs are only consumed, on average, once a week by only the 3 percent of these households. Moreover, only 3 percent of them consume eggs once or twice a week. Only three of the assessed households declared to have consumed hem iron rich foods during the week prior the survey.

Borderline food consumption characterises the remaining 26 percent of the population. Households with a borderline consumption seldom consume meat, (which is a rare privilege for only 6 percent of the interviewed households), fish (8 percent), dairy products (7 percent) and eggs (3 percent). Households belonging to this food group never consume hem iron rich foods.

Almost one third of the assessed population (30 percent) has poor food consumption.

Those households with an **acceptable food consumption** are characterised by better food consumption patterns. They have a more frequent consumption of animal protein rich food, in particular fish (22 percent), meat (6 percent), eggs (9 percent) and dairy products (15 percent). However, the consumption of hem iron rich food is also very rare for these households too (it concerns less than 1 percent of the assessed households).

Chart 2: Food consumption groups following the FCS



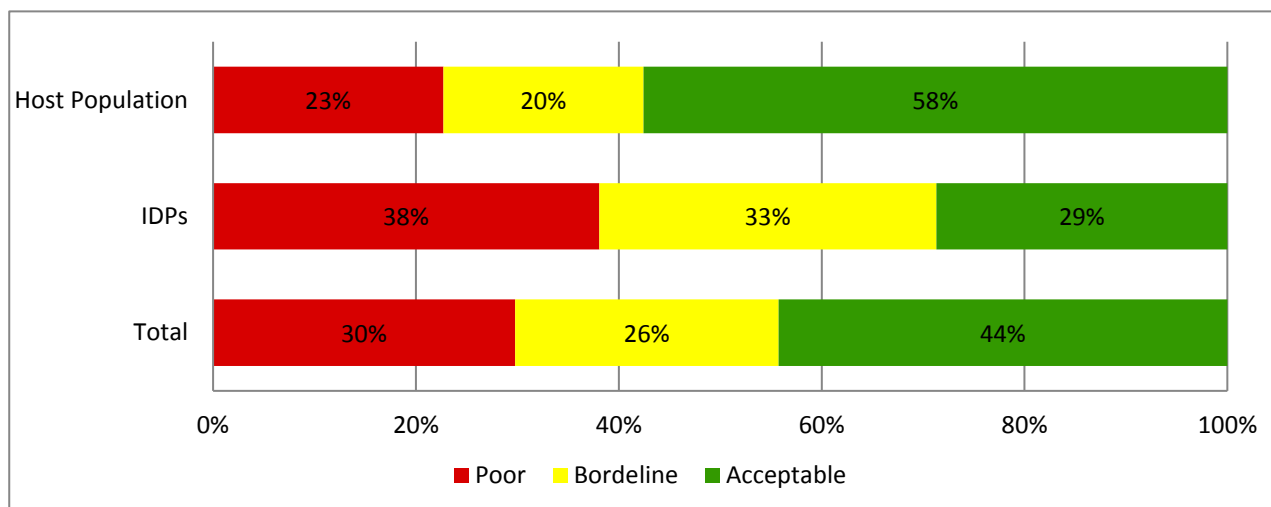
Disparities among the wards exist: in Dusuman up to 39 percent of the households are characterised by poor food consumption as against 18 percent of households in Maimusari.

The findings of this assessment suggest that households' food consumption is poor or borderline due to the difficulties the households face in accessing food and despite the coping strategies they have put in place.

Food consumption differs remarkably amidst the host population and the IDPs. The latter are exposed to inadequate (poor and borderline) food consumption twice as much than the host population. Only 29 percent of the IDPs have an acceptable food

consumption compared to 58 percent of the host population. This is likely due to the fewer resources and the higher needs the IDPs have in comparison to local residents.

Chart 3: Food consumption groups per population type



It is worth noting that in March 2016 the FCS was poor for “only” 10 percent of the households interviewed in the Borno, Yobe and Adamawa states during WFP’s mVAM monitoring surveys. Borderline food consumption characterised another 22 percent of the population.

3.2 Economic vulnerability

Households' economic vulnerability is measured through the share of their monthly food expenditures from the total. The higher the share of food expenses, the more vulnerable a household is.

In the seven assessed wards of Maiduguri, up to 64 percent of households spend more on food than other essential non-food items every month. In particular, for one fourth of the households, food represents more than 75 percent of their expenses, leaving aside only a tiny amount for other important expenditures, such as health or education. For another 17 percent of the assessed households, food expenditures vary between 65 and 75 percent. For another 22 percent of households, expenses range between 50 and 65 percent. This confirms food access issues exist for the majority of the assessed population.

Chart 4: Households' monthly food expenditures share

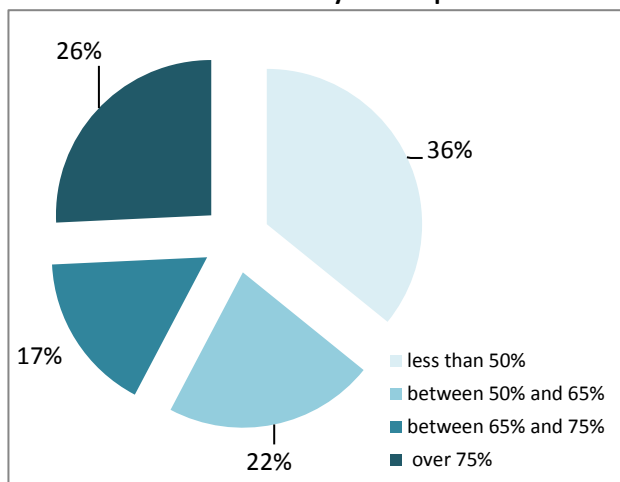
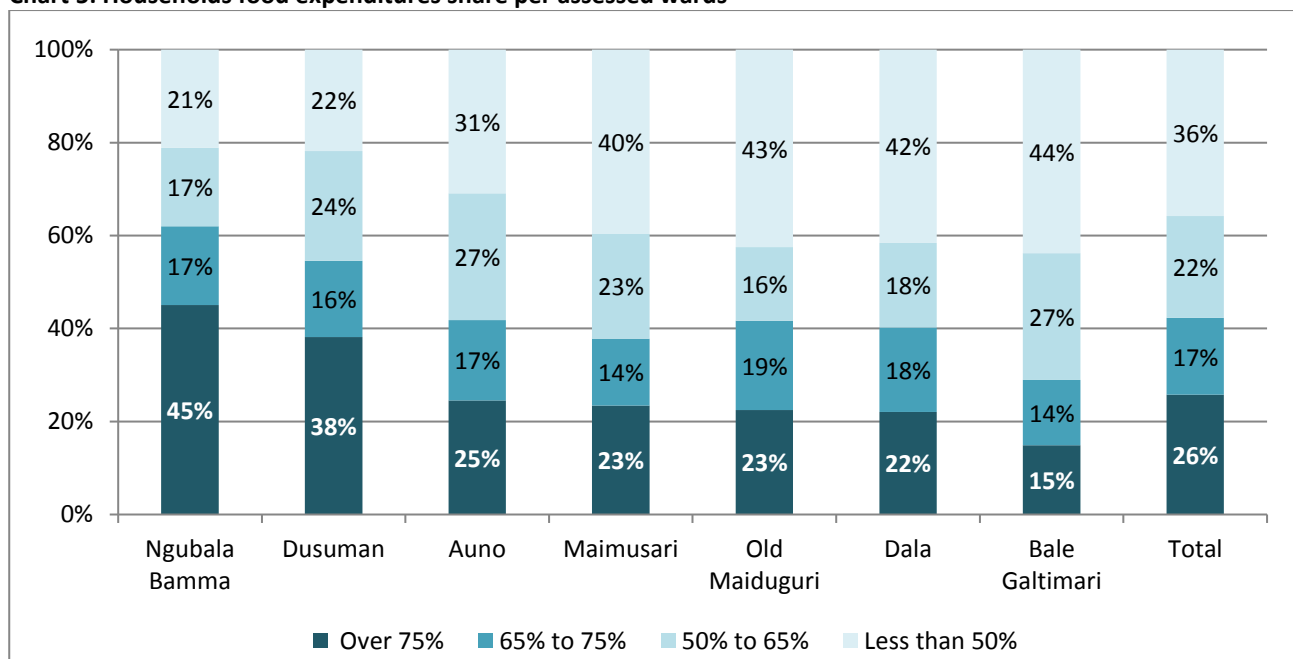


Chart 5: Households food expenditures share per assessed wards



Differences exist amidst wards, with Ngubala Bamma showing the highest proportion of monthly food expenditures: these represent more than 75 percent of the total expenditures for about 45 percent of the households.

The high proportion of food expenditures is due to the households' high dependency on markets (at least in the 80 percent of the cases, all types of food come from the markets), the decrease in their purchasing power (due to low incomes and increasing food prices), and the poor harvest. In fact a below average production was recorded in the Northeast and many of the worst affected areas in Borno, Yobe, and Adamawa have had no production for three consecutive years (FEWS NET - September 9, 2016).

3.3 Coping strategies

When shocks push households beyond the usual difficulties faced in normal times, households and individuals employ coping strategies. Some of these may damage lives and livelihoods, thereby reducing resilience and increasing vulnerability (EFSA handbook, WFP 2009).

These strategies are typically related to alimentary behaviours (food strategies) or to the livelihood sphere (livelihood strategies).

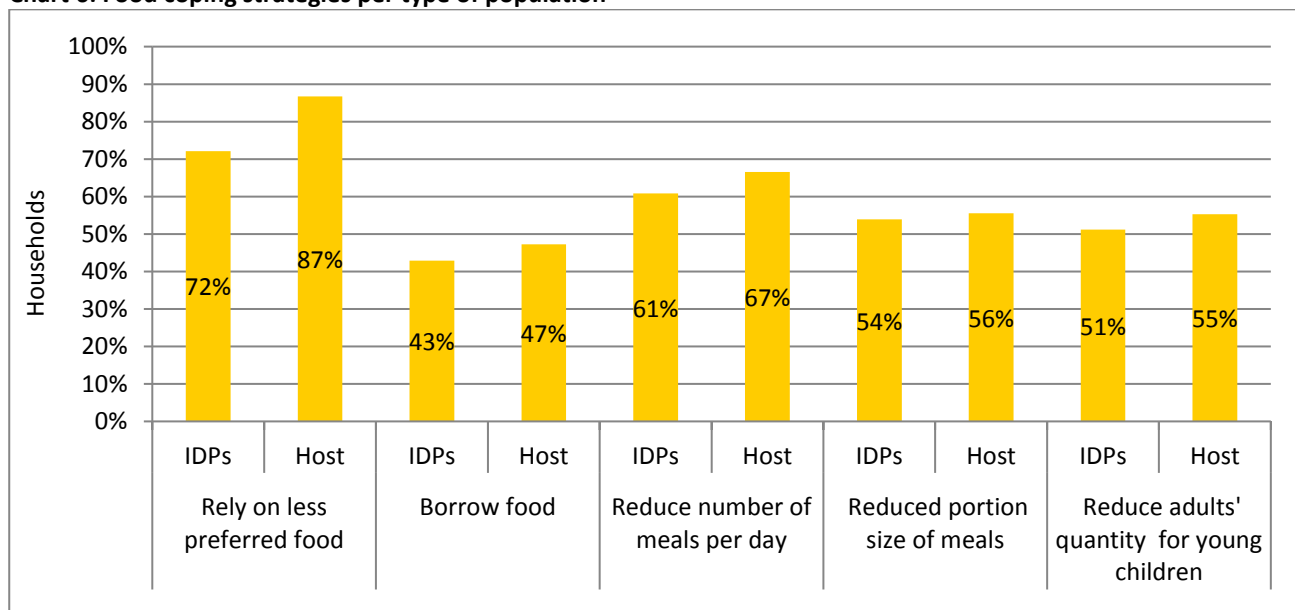
3.3.1 Food strategies

The reduced-Coping Strategies Index (rCSI) measures the habit of five detrimental alimentary behaviours that households have during the seven days prior the survey: the consumption of less preferred and less expensive food, the borrowing of food, the reduction of portion size, the restriction of adults' consumption in favour of children and reduction in the numbers of meals per day⁵. A high rCSI means that households are using more severe coping strategies more frequently to deal with lack or scarcity of food or insufficient money to buy food.

An approximately 42 percent of the interviewed households admitted that in the 30 days prior the survey, there had been times when there was no food of any kind in the house. In order to cope with scarcity of food, the majority of the assessed population resorted to coping strategies. More than 80 percent of the total assessed population relied on eating less preferred food because it is less expensive at least one day per week to cope with the lack of means and food; in particular 20 percent employed this strategy daily.

Food is the main concern of the assessed households

Chart 6: Food coping strategies per type of population

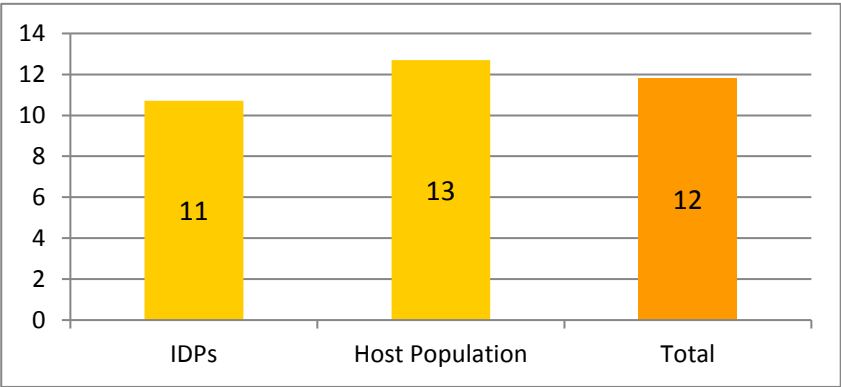


The average rCSI provides indications of the frequency of using coping strategies. Although a comparison with other surveys is not possible, it is interesting to note that the average rCSI in Borno state in March 2016 was 13 (WFP, May 2016), which is in line with the results of this EFSA.

⁵ For more details on the CSI:

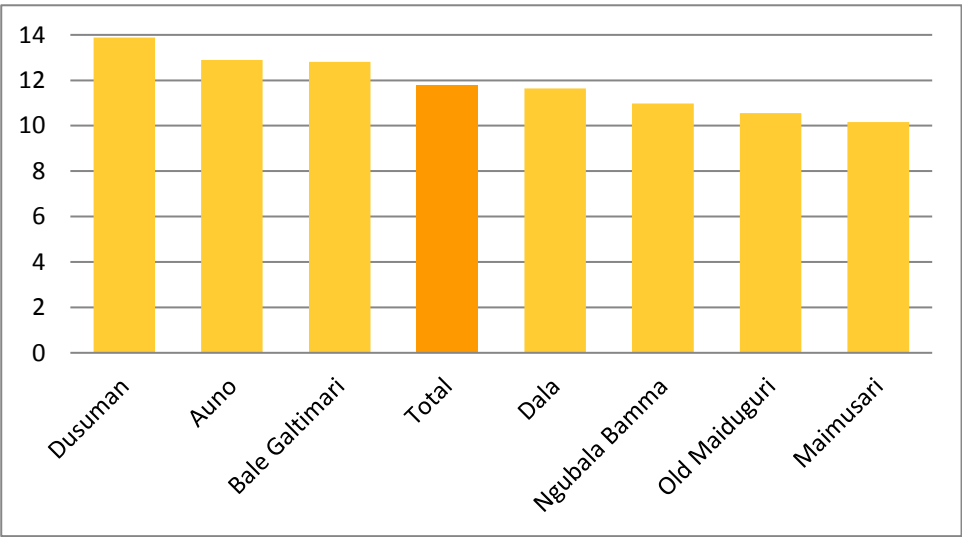
http://documents.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp211058.pdf?_ga=1.70068179.2144366633.1459255840 and on rCSI : <https://resources.vam.wfp.org/node/6>

Chart 7: Average rCSI per type of population



Households living in the wards of Dusuman, Auno and Bale Galtimari have resorted to food strategies more often than those living in the other outer wards of Maiduguri.

Chart 8: Average rCSI per assessed ward



3.3.2 Livelihood strategies

The livelihood-based strategies depict the status of the households' livelihood stress and insecurity and also describe the capacity to produce in the future. They reflect the long-term coping capacity of households. The Livelihood Coping Strategies indicator⁶ measures the livelihood stress and asset depletion during the 30 days prior to survey. Respondents are classified into four categories, following the severity of the behaviours adopted vis-à-vis the family assets. Households adopt stress, crisis or emergency coping strategies, or no strategies at all.

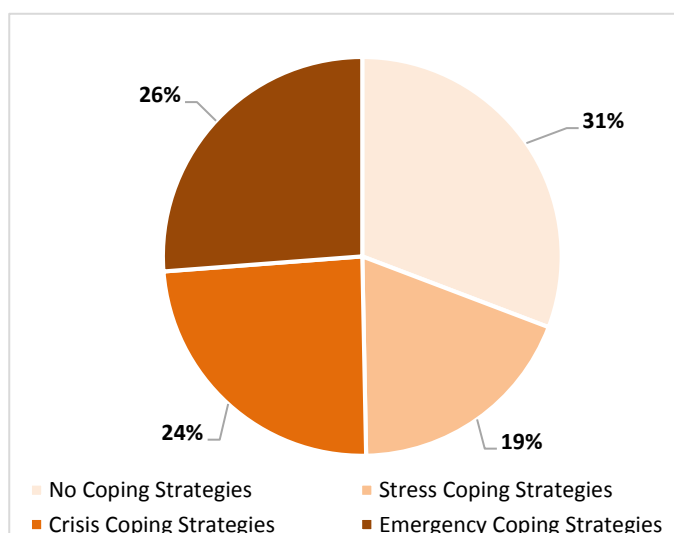
In the assessed area, the use of livelihood coping strategies is very frequent, as almost 70 percent of the households relied on them due to the difficulties of supplying food needs with their own stock or through market purchase. In particular, households adopting the **emergency coping strategies** are the most common (26 percent), and this is particularly worrisome, since these strategies are the most difficult to reverse as they affect the household's future productivity.

Stress strategies such as borrowing money or spending savings, indicate a reduced ability to deal with future shocks due to a current reduction in resources or increase in debts.

Crisis strategies, such as selling productive assets, directly reduce future productivity, including human capital formation.

Emergency strategies, such as selling own land, affect future productivity and are more difficult to reverse or more dramatic in nature.

Chart 9: Types of livelihood coping strategies used by the households



Twenty-four percent of the households resorted to **crisis-coping strategies**, such as selling the productive assets or sending children to work, jeopardising their future capacity to work and produce.

The remaining 19 percent of households employed **stress-coping strategies**, which increase their burden of debts and the household's economic vulnerability. For example, two thirds of the assessed households (65 percent) had resorted to credit or debts in the three months prior the survey. Almost 90

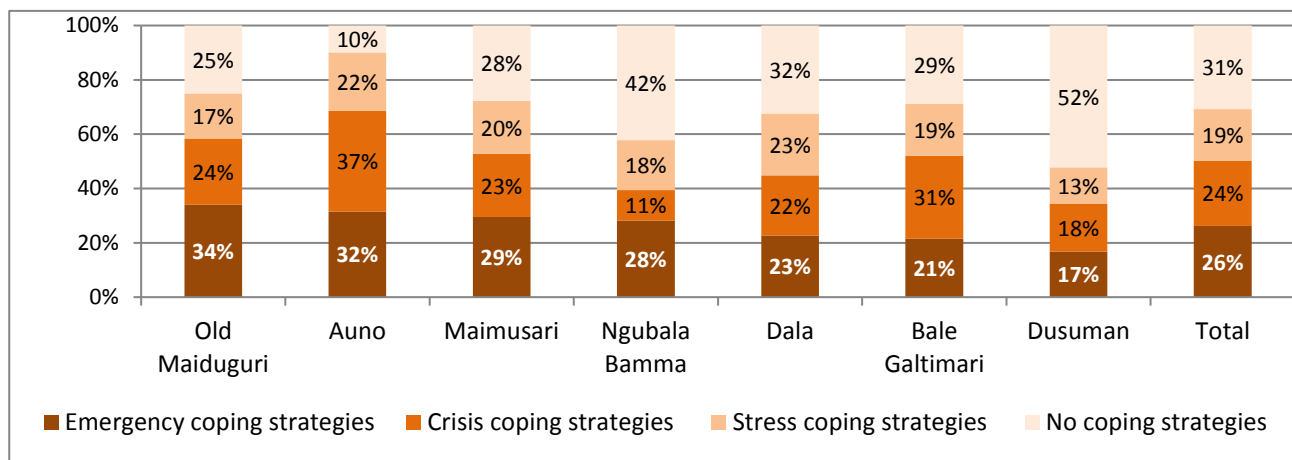
percent of these households had used credit to buy food. A smaller proportion of households (6 percent) used credit mainly to pay health charges. Food is no doubt the main concern of the assessed households.

Almost 70 percent of the assessed households resort to livelihood-coping strategies to cover food and basic needs.

⁶ For more information regarding the Livelihood Coping strategies indicator refer to the CARI technical guidance note: [https://resources.vam.wfp.org/sites/default/files/CARI%20Guidance 2nd%20ed.pdf](https://resources.vam.wfp.org/sites/default/files/CARI%20Guidance%202nd%20ed.pdf)

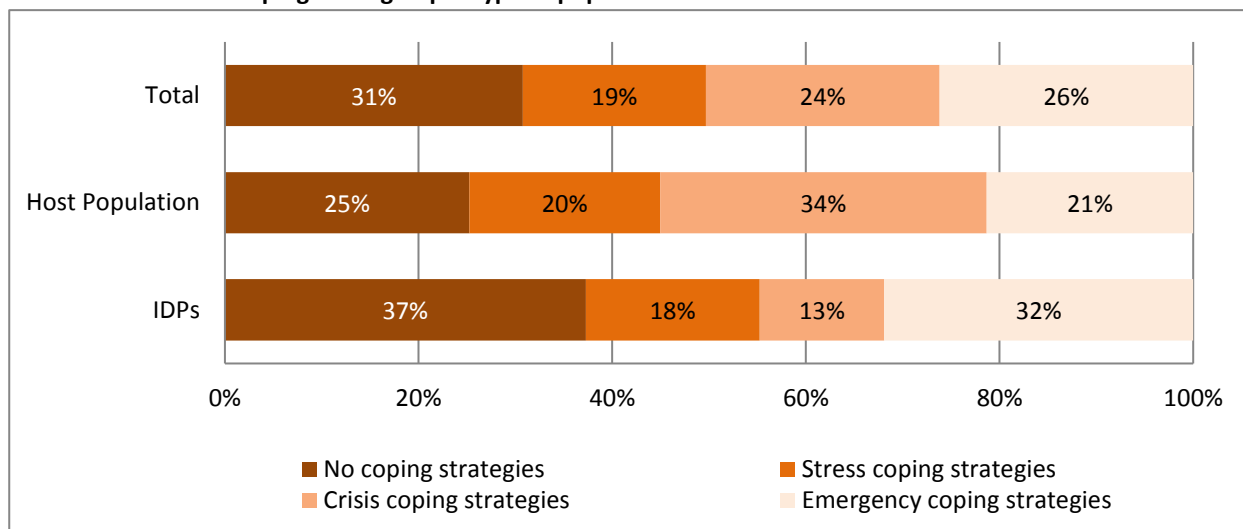
The Auno ward shows the highest proportion of households employing livelihood-coping strategies (90 percent). The Old Maiduguri ward has the highest concentration of households resorting to emergency strategies (34 percent).

Chart 10: Types of livelihood coping strategies per assessed ward



The findings show that the host population seems to rely more on the livelihood-coping strategies to access food than the IDPs (75 percent of the host population compared to 63 percent of the IDPs). Nevertheless, the IDPs rely largely on the emergency strategies (32 percent), the ones that jeopardise the future ability to recover most. Among the host population, the crisis-coping strategies, such as begging in markets by women and children, are the most common (34 percent).

Chart 11: Livelihood coping strategies per type of population



3.4 Household Food Security Status

The status of household food security is estimated through the Consolidate Approach to Reporting Indicators of Food Security (CARI)⁷. This WFP methodology outlines the food security prevalence in a population (Food Security Index) based on an algorithm which combines, at the household level, the results for each of the reported food security indicators, i.e.: the food consumption score, the livelihood coping strategy and the share of food expenditures.

Among the assessed households, only 4 percent has adequate food consumption without engaging in atypical coping strategy. More than the half of the assessed population in Maiduguri (52 percent) are food insecure, 5 percent of which in a severe way. The remaining 43 percent are only marginally food secure, therefore their situation could easily deteriorate further if exposed to further shocks or without external assistance.

More than the half of the assessed population is food insecure.

Chart 12: CARI console

Domain		Indicator	Food Secure	Marginally Food Secure	Food Insecurity	
					Moderately Food Insecure	Severely Food Insecure
Current Status	Food Consumption	Food Consumption Group	44%		26%	30%
Coping Capacity	Economic Vulnerability	Food Expenditure Share	36%	22%	17%	26%
	Asset Depletion	Livelihood Coping Strategy Categories	31%	19%	24%	26%
Food Security Index			4%	43%	47%	5%
					52%	

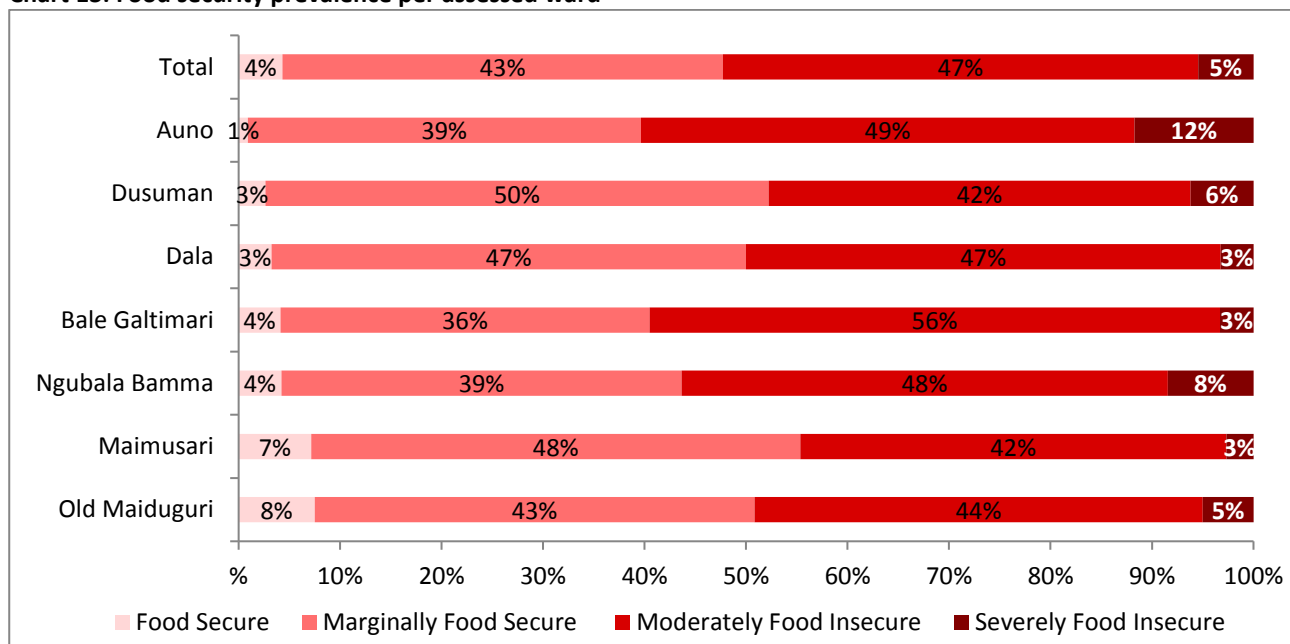
The most affected wards, where the food insecurity concentration is higher, are Auno and Bale Galtimari (in both wards 60 percent of the households are food insecure) and Ngubala Bamma (56 percent).

Table 3: Food security prevalence per assessed ward

Ward	Food Secure	Marginally Food Secure	Moderately Food Insecure	Severely Food Insecure
Old Maiduguri	8%	43%	44%	5%
Maimusari	7%	48%	42%	3%
Ngubala Bamma	4%	39%	48%	8%
Bale Galtimari	4%	36%	56%	3%
Dala	3%	47%	47%	3%
Dusuman	3%	50%	42%	6%
Auno	1%	39%	49%	12%
Total	4%	43%	47%	5%

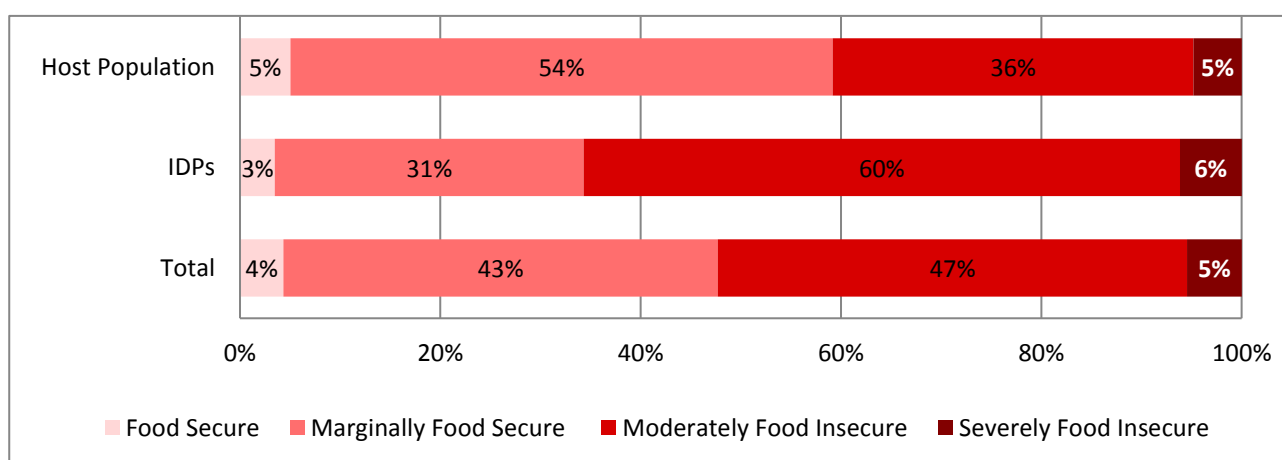
⁷ For more information on the CARI consult the guidelines at:
https://resources.vam.wfp.org/sites/default/files/CARI%20Guidance_2nd%20ed.pdf

Chart 13: Food security prevalence per assessed ward



Food insecurity affects the IDPs' households more than the local ones: about 66 percent of the IDPs are food insecure in comparison to 41 percent of the host population. This is due to the difficulties the IDPs face in accessing food, meeting basic needs and resulting from the livelihoods that have been disrupted by moving from the surrounding areas to the Borno capital.

Chart 14: Food security prevalence per type of population



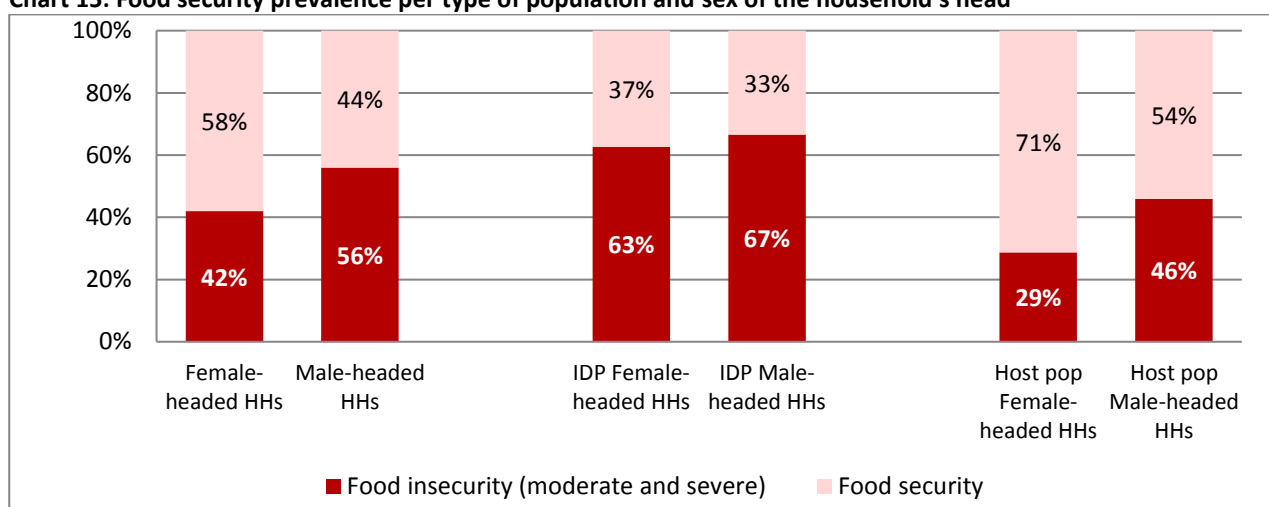
Since food prices show an upward trend, it is expected that households will increasingly face food security problems in the weeks following the survey as they approach the lean season, a period when food stocks and family savings both decrease.

3.5 Characteristics and profiles of food-insecure households

Livelihood: Most food insecure households are those relying mainly on remittances, solidarity, unskilled wage labour, hunting and also on agriculture (cash crop, staple crop or gardening). Agriculture is the main source of income only for 15 percent of the assessed households. Both the host population (73 percent of the cases) and the IDPs (42 percent) have to rent land in order to cultivate it.

Sex of household: Female-headed households seem to be more food secure than the male-headed ones. If 42 percent of the female-headed households are food insecure (moderate and severe), amongst the male-headed households the proportion of food insecurity is 56 percent. Food insecurity affects 63 percent of the IDPs female-headed households compared to 67 percent of the male-headed households. Among the female-headed households of the host population, 29 percent are food insecure compared to 46 percent of the male-headed households.

Chart 15: Food security prevalence per type of population and sex of the household's head



Secondary data, such as the mVAM, suggests that in February and March, female-headed households were more likely to be food insecure than male-headed households. The main reason for this discrepancy was that female-headed households were characterised by poorer food consumption. However, this EFSA shows that there are more female-headed households with an acceptable consumption rather than households headed by men (53 percent compared to 41 percent respectively). Similarly female-headed households in the assessed area less frequently have a poor food consumption compared to male-headed households (24 percent compared to 32 percent).

Environment: Findings suggest that there is not a remarkable difference between the food security situation of households living in urban and rural areas. However, Auno and Bale Galtimari wards show higher concentration of food-insecure households (in both wards 60 percent of the households are food insecure).

Access to land: Likewise, access to land does not seem to be a determining factor for food security in this context, probably because the majority of the assessed households do not rely on agriculture as main source of income. The host population seems to have access only to small parcels of land just outside the wards. Among households depending on agriculture as their main source of income, 30 percent do not have access to farming land to grow any type of food crop.

3.6 Status of Markets

Given its geographical position, Maiduguri is a central hub for trade not only for Northeast Nigeria, but also for the neighbouring countries. Maiduguri is the largest market of Borno State and attracts food commodity traders from all over the country (WFP, June 2016).

Despite the market supply being relatively stable in Maiduguri, the Boko Haram conflict has heavily disrupted trade, limited market activities, indirectly impacted food price commodities and affected the agricultural production. Before the crisis, all the maize in Maiduguri market was sourced from local farmers within Borno state. Following the insurgency, maize production was adversely affected (Norwegian Refugee Council, 2016). Traders of the region, in particular women, face insecurity, lack of capital and difficulties in accessing credit (WFP, June 2016). Borders with neighbouring countries are regularly closed following armed attacks, affecting households' access to food. Significant portions of Borno are inaccessible due to military operations and presence of insurgents, which restricts people's movement, local trade as well as humanitarian activity. Discussions with transporters confirm that insecurity, harassment, numerous checkpoints as well as poor road infrastructures are major constraints that contribute to increasing the cost of goods (WFP, June 2016).

The situation in Maiduguri is particularly worrisome as households depend highly on markets to cover their food (and non-food) needs. Markets are the main source of cereals for 85 percent of the assessed households. Secondary data confirms that the conflict has left a significant portion of the population without access to adequate food, water and health services, contributing to higher levels of food insecurity.

Households' purchasing power

Households' purchasing power has dramatically dropped, as a result of the increase in prices for staple commodities, including millet, maize, pulses and groundnut by 151 percent, 142 percent, 16 percent and 4 percent respectively between March and August 2016. Although the increases are typical as the annual lean season approaches, this goes far beyond the physiological seasonal variations.

Inflation throughout the country has accelerated to more than 15 percent in May, which is the highest rate in over six years, according to the National Bureau of Statistics.

The increase in food prices is attributed not only to a reduced agricultural production in Northeast Nigeria, but also to the increased cost of fuel that affects transportation charges. Finally, price escalation is also a consequence of the increasing demand for food by the additional hundreds of thousand displaced persons in Maiduguri.

Market disruption, occasional border closure, high food and fuel prices, consistent inflation, Naira's depreciation against the US dollar are heavily affecting households' purchasing power and therefore food access.

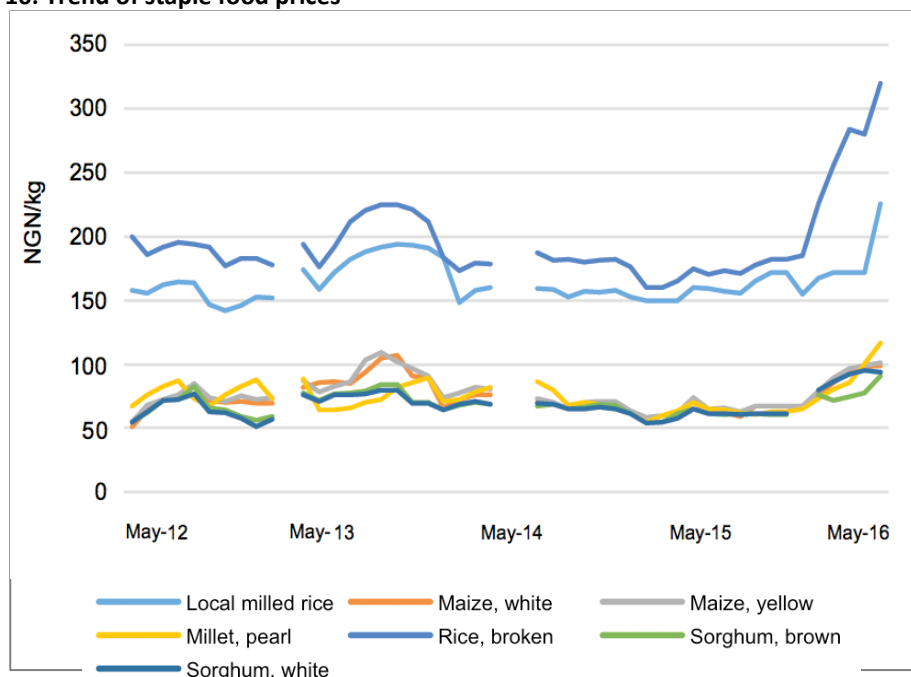
Moreover, findings from WFP's regular monitoring market system and from the mVAM⁸, the monthly food security monitoring system set up by the WFP through a mobile survey (SMS), indicate that the continuous depreciation of the Nigerian Naira against the US dollar⁹ (later in June 2016 decided by the Government) had the effect of increasing the price of imported food items, particularly rice and vegetable oil¹⁰. This has contributed to restricting access to food among the most vulnerable households.

⁸ For more information about the mVAM in Nigeria visit http://vam.wfp.org/sites/mvam_monitoring/nigeria.html

⁹ Data relate to the 10 markets assessed in Maiduguri and Jere LGAs (source: WFP Nigeria, August 2016)

¹⁰ Between April and July 2016 there has been a 20 percent increase in the unofficial exchange rate of the dollar against the Naira (source: mVAM bulletin 1, May 2016 and WFP Nigeria, August 2016).

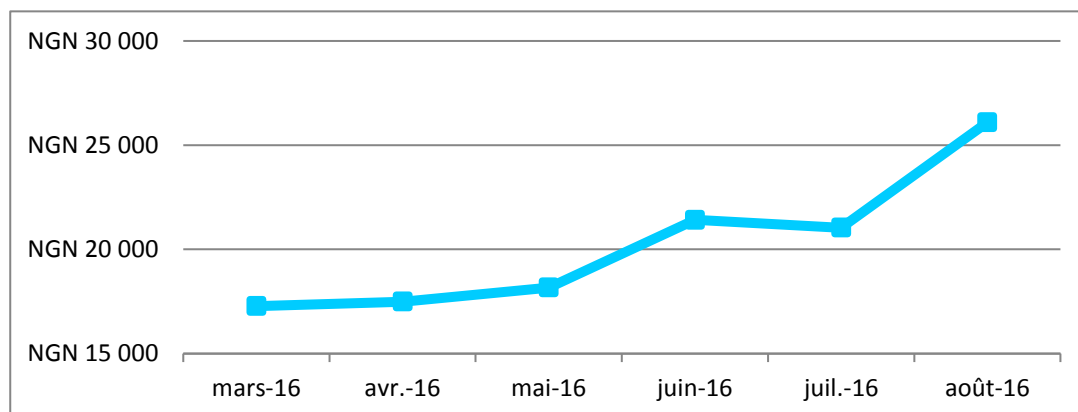
Chart 16: Trend of staple food prices



Cost of the basic food basket

Analysis of the Survival Minimum Expenditure Basket (SMEB)¹¹ confirms that there has been an increase of 51 percent on the cost of the basic household food basket, which went from 17,227 Nigerian Naira (NGN) in March 2016 to 26,092 NGN in August 2016. The expenditure to cover 2,100 Kcal/person has gradually increased from 1,909 NGN in March 2016 to 3011.5 NGN in August 2016, dramatically reducing the households' capacity to cover the minimum food needs.

Chart 17: Trend of the cost of the food basket (SMEB)



Findings suggest that staple food prices are expected to continue to rise and peak during the lean season until September, further jeopardising food access, and therefore the food security situation.

The cost of the household basic food basket increased by 51 percent between March and August.

¹¹ The SMEB is composed of millet, maize, cow peas/red beans, palm oil, onions and groundnuts.

3.7 Status of Nutrition

3.7.1 Children nutritional situation

In the assessed area, anthropometric screening revealed that 8.3 percent of children aged 6 to 59 months have below normal MUAC (9.5 percent of IDPs, and 7.5 percent of host population), which is considered a medium prevalence of low MUAC. Although the overall rate remains below 10 percent, the prevalence of low MUAC (moderately and severely low) in children 6 to 23 month old is 16 percent, which is well above the emergency threshold. The situation is particularly worrisome for the infants, since the percentage of children aged between 6 and 23 months with a severely low MUAC is 4 percent in the host community and 3 percent in the IDP community. This indicates the urgent need for access to therapeutic treatment and preventive measures.

Young children from the host communities show a higher prevalence of low MUAC compared to their displaced peers (a prevalence of 17.9 percent against 14.3 percent), suggesting that the IDPs households with children may have a sort of support network when compared with those in the host communities¹².

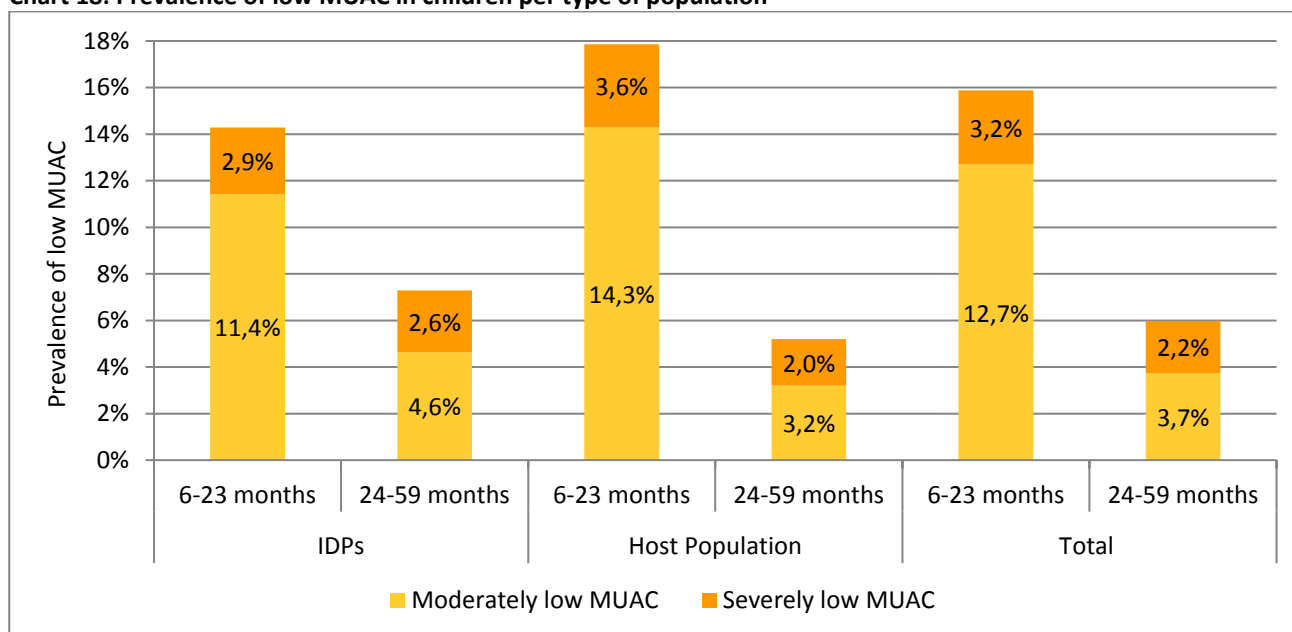
Children MUAC cut-off points

Normal: MUAC ≥ 12.5 cm

Moderately low: 11.5 cm ≤ MUAC < 12.5 cm

Severely low: MUAC < 11.5 cm

Chart 18: Prevalence of low MUAC in children per type of population



Prevalence of low MUAC is further compounded by several aggravating factors such as water and sanitation concerns, inadequate access to or lack of health and nutrition services addressing acute malnutrition and chronic food insecurity. The coverage of infant and young children feeding programmes in Maiduguri being limited also aggravates the situation. Moreover, seasonality further worsens the situation: the assessment was carried out just before the lean season, when those whose livelihood depends on agriculture generally face bigger challenges in covering food and health care needs. This suggests a further deterioration of the nutritional situation in the following months.

¹² Assessed IDPs children and women live among the host community and not in the refugee camps where they receive a nutritional support.

If the cases of moderately low MUAC are not addressed in the short period, the health and nutritional situation of these children could deteriorate further and they could become severely malnourished.

Table 4: Low MUAC in assessed children

Type of population	Age	Moderately low MUAC 11.5 cm<MUAC<12.5 cm	Severely low MUAC MUAC< 11.5 cm
IDPs	6-23 months	11,4%	2,9%
	24-59 months	4,6%	2,6%
	All (6-59 months)	6,8%	2,7%
Host population	6-23 months	14,3%	3,6%
	24-59 months	3,2%	2,0%
	All (6-59 months)	5,2%	2,3%
Total (IDPs + Host)	6-23 months	12,7%	3,2%
	24-59 months	3,7%	2,2%
	All (6-59 months)	5,9%	2,5%

3.7.2 Maternal nutritional situation

The assessment also focused on the nutritional status of all women aged 15 to 49 years. The prevalence of low MUAC in women significantly varies between the host and the IDP community.

Severely low MUAC In internally displaced households, 9.5 percent of women are malnourished (MUAC below 21 cm) and this rate goes up to 15.9 percent among those who were pregnant or lactating at the time of the interview. Within the host community, malnutrition affects 2.1 percent of the women and 2.5 percent of the pregnant and lactating women (PLW).

Moderately low MUAC Moreover, 13.5 percent of all the women in the IDP community have a moderately low MUAC (21 cm< MUAC< 23 cm). Among them 15 percent are pregnant and lactating. In the host community 6.9 percent of the women have a moderately low MUAC and 6.3 percent of them are pregnant or lactating.

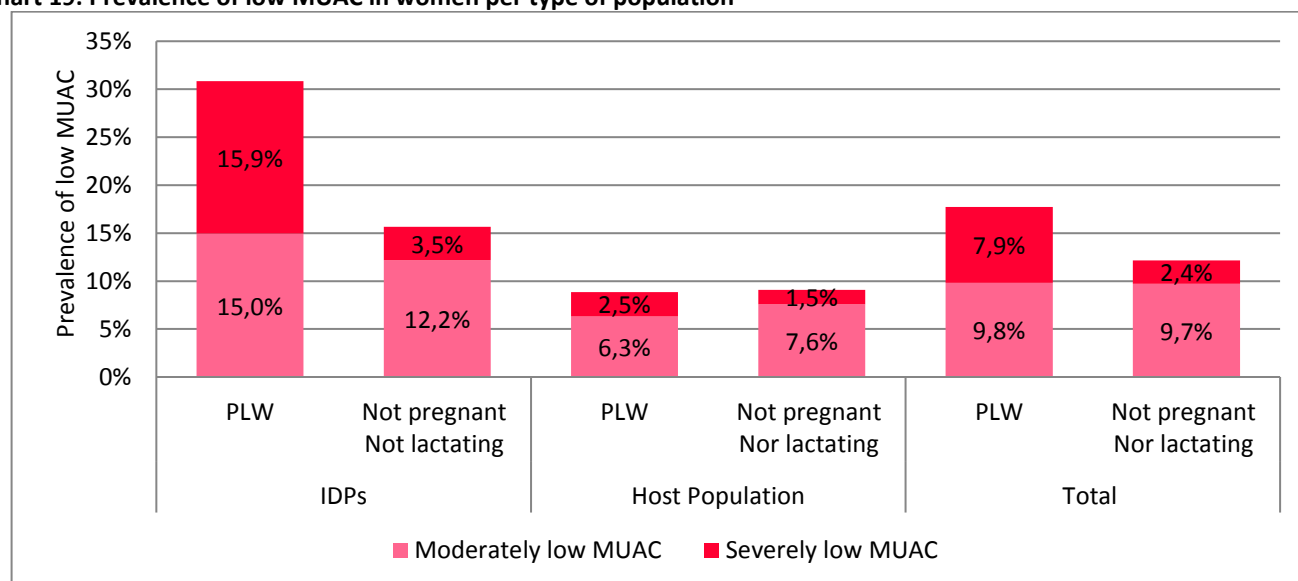
Women MUAC cut-off points

Normal: MUAC ≥ 23 cm

Moderately low: 21 cm < MUAC < 23 cm

Severely low: MUAC ≤ 21 cm

Chart 19: Prevalence of low MUAC in women per type of population



Evidence shows that women with a low MUAC are at risk of poor birth outcomes such as delivering Low Birth Weight (LBW) infants, which is a strong predictor of stunted growth among children, fetal stress as well as other irreparable damages and even infant mortality. If undernutrition is addressed during the first 1,000 days from conception up to two years children's lives can be saved and they can grow healthily and to their fullest potential. Therefore findings of this assessment suggest the need to urgently address maternal malnutrition, particularly amidst the IDPs pregnant and lactating mothers, to prevent children pathologies associated with poor birth outcomes.

Displaced pregnant and lactating mothers are a very vulnerable group.

Table 5: Low MUAC in assessed women

Type of population	Status	Moderately low MUAC 21 cm<MUAC<23 cm	Severely low MUAC Cut off at 21 cm
IDPs	PLW	15.0 %	15.9%
	Not PLW	12.2%	3.5%
	All	13.5%	9.5%
Host population	PLW	6.3%	2.5%
	Not PLW	7.6%	1.5%
	All	6.9%	2.1%
Total (IDPs + Host)	PLW	9.8%	7.9%
	Not PLW	9.7%	2.4%
	All	9.8%	5.3%

4. CAUSES OF FOOD INSECURITY

Among the IDPs, the greatest majority of the households (98 percent) left their place of origin because of the Boko Haram-induced conflict. About 30 percent of the interviewed IDPs still have family members living in their places of origin. Nevertheless, very few households (8 percent) have tried to return home during the three months prior to the survey, given the lack of food, shelter, basic services, protection and security.

Displaced and host population have faced shocks in three months prior the survey. More than 60 percent of the assessed households were faced with difficulties, the most frequent being the high food prices (46 percent of households), conflict-related insecurity (25 percent), loss of employment or reduced incomes (8 percent). Although the high food prices affect the host and the displaced population in very similar way (45 and 47 percent respectively), insecurity is the major shock for 37 percent of the IDPs compared to “only” 15 percent of the host population, whereas the loss of employment is more frequently mentioned among the host population (11 percent) as opposed to the displaced population (4 percent).

Prices of millet flour and maize, which are key staple commodities for IDPs -since they are affordable in comparison to rice- have continued to increase since April 2016. This is attributed to the reduced agricultural production in Northeast Nigeria due to the armed conflict, as well as to the increased price of fuel that affects transportation costs. Imported rice is also less affordable, given that the appreciation of the dollar against the Naira had the effect of increasing the price of imported goods.

The loss of livelihood, lack of employment coupled with widespread insecurity and the drop of the purchasing power are the main causes of food insecurity in the assessed areas of Maiduguri.

The increase in staple food prices, combined with the lack of employment opportunities and inflation, has reduced the purchasing power of most vulnerable households, both host and IDPs, to the detriment of their food access and hence of their food security.

The deterioration of livelihoods is leading to risky coping strategies among displaced and host communities alike. Households have put in place coping mechanisms to face food shortages to the detriment of their consumption and future ability to resume their livelihoods. This is creating a dangerous, vicious circle of livelihood deterioration, eroding coping strategies, food insecurity and malnutrition.

5. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The humanitarian crisis in Maiduguri continues as a result of the prolonged conflict and on-going violence in Northern Nigeria and in the Lake Chad region. Consequently, the population of Maiduguri has more than doubled in the last ten years (source: OCHA) with more than 710,000 people having been forced to flee their homes to seek safety in the Borno capital. This massive displacement has led to a restriction, or even to the loss, of livelihoods and it has increased pressure on the already limited resources such as the productive land, employment and food in the market as well as trade opportunities. Markets remain heavily disrupted in Northeast Nigeria (as well as in the whole Lake Chad region) due to the effects of the insecurity, movement restrictions, checkpoints, the increased cost of fuel and high demand of food. Prices of cereals have increased in Maiduguri and in the region. Moreover, with fields lying fallow, the harvest is reduced and food insecurity is exacerbated. Households face serious challenges to food access.

In the assessed area, food insecurity affects 52 percent of the households, 5 percent of which are at severe level. In particular, 30 percent of the households are characterised by poor food consumption and 26 percent have borderline food consumption. Almost 70 percent of the households have resorted to coping strategies to supply their food and other basic needs. Food expenses represent more than 65 percent of the total monthly expenses for 43 percent of the households, which is considered a precarious situation. However, at the time of the data collection only 8 percent of the assessed population had received food assistance, in particular 12 percent of IDPs and 5 percent of the host community.

Malnutrition rates are also rising. The situation of both children and women has deteriorated. A low MUAC prevalence affects those 6 to 23 months old more than children aged 24 to 59 months (a prevalence of 15.9 percent against 5.9 percent respectively). Young children from the host community show a higher prevalence of low MUAC than their displaced peers (17.9 percent against 14.3 percent). This suggests an increase of the GAM rates in the assessed area. If the cases of moderate malnutrition/moderately low MUAC are not addressed in the short term, they can develop into more severe forms, becoming a burden for the households, the communities and the health system.

Anthropometric screening of pregnant and lactating women revealed that 17.7 percent have low MUAC, especially those internally displaced (30.9 percent compared to 8.8 percent of women belonging to the host community). In particular, 15 percent of the IDP pregnant and lactating women have a severely low MUAC (i.e. <21 cm), suggesting the importance of addressing nutritional needs in the immediate to prevent poor birth outcomes and child mortality and thus improve the “1,000 days” window of babies.

Recommendations

The mission recommends a multi-sector response coordinated with other relevant actors, both humanitarian and governmental, in order to respond to immediate food security and nutritional needs, and to support the households' recovery for both IDPs and the host community.

Targeting: Assistance should target most vulnerable households, despite their displacement status. In particular, targeting criteria should include all poor households at risk of food insecurity and highly dependent on markets:

- Households with no access to land for farming and owning no livestock;
- Poor households lacking cereal food reserves;

- Households engaging in precarious work of collecting natural resources and occasional labour;
- Household lacking productive assets/without income.

Moreover, poor households that respond to the following criteria should also be targeted:

- Households headed by a single mother and without capacity to work;
- Households headed by a minor;
- Households with specific needs (specific to the context);
- Households with a child in SAM treatment.

Women and children's nutritional needs should be addressed through a range of interventions such as health programmes, community-based programmes, livelihood approaches and selective feeding programmes. Children who are between 6 and 23 months should benefit of Blanket Supplementary Feeding (BSF) programme. It is also recommended that maternal malnutrition be addressed in order to assist during the first 1,000 days of the baby's life.

Assistance modalities: Households' needs should be addressed mainly through free food distributions. Cash Based Transfer modalities should be very carefully planned since inflation rates and prices of commodities must be stable in the short and medium term in order for the programme to be beneficial. There are risks of an inflationary effect on the market should the demand double due to a cash and voucher programme, as only 25 percent of traders are able to respond in less than a week (WFP, June 2016). Insecurity in the region could also jeopardise the success of the programme.

Protection: Support the return of IDPs to their villages of origin in safe conditions once concerns over lack of food and shelter, living conditions, basic services, protection and security in the areas of return are resolved.

Food and nutrition security monitoring: A continue real-time monitoring of the situation (food prices, food security indicators, nutritional screenings, etc.) and a response impact on beneficiaries is highly recommended. Further food security and nutritional assessment before the programme starts is also highly recommended.

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Household questionnaire

33

1.12.	Do household members/relatives/friends still remain in the place of origin?	0= No 1= Yes	_			
1.13	Have you tried to return to your place of origin in the past three months?	0= No 1= Yes	_			
2 – EDUCATION						
2.1	What is the educational status of your household head? (SELECT ONLY ONE)	1= No education 2= Pre-primary 3= Primary 4= Secondary 5= Vocational training 6= University 7= Graduate 8= Doctorate 9= Religious (Islamic, Christian)	_			
2.2	How many members of your household are currently attending school (2016) ?					
	a) 6-12	b) 12-18	c) +18			
Male	_	_	_			
Female	_	_	_			
2.3	Are any member of your household currently not attending school?	0= No If no skip to Section 3 1= Yes	_			
2.4	If some members of your household are not currently attending school, what are the THREE MAIN reasons? CIRCLE 3 main reasons THAT APPLY or 999 if no reason is provided	1	School closed	8	disability	_
		2	School opened but no teachers	9	chronic illness	
		3	Unable to pay fees/uniform	10	Insecurity	
		4	School is too far away	11	Caregiving / Stay home to work for family	
		5	No transportation	12	Pregnancy/ Breastfeeding	
		6	Family does not see the need	13	Other: _____	
		7	No school in the community			
3 – FOOD CONSUMPTION AND FOOD SOURCES						
3.1	How many meals did the adults (18+) in this household eat yesterday ?	_		Number of meals		
3.2	How many meals did the adolescents (5-17) in the household eat yesterday ?	_		Number of meals		
3.3	How many meals did the children (0-4) in the household eat yesterday ?	_		Number of meals		
3.4 How many days over the last 7 days, did members of your household eat the following food items, prepared and/or consumed at home, and what was their source ? <i>(Use codes below, write 0 if not consumed in last 7 days)</i> <i>Note for enumerator: Determine whether consumption of fish, milk was only in small quantities.</i>						
	Food items/groups	3.4 - Number of days eaten in past 7 days <i>If 0 days, do not specify the main source.</i>	3.5 - How was this food acquired? <i>Write the main source of food for the past 7 days</i>			
1.	Cereals, grains, roots and tubers: Rice, pasta, bread, sorghum, millet, maize, fonio, potato, yam, cassava, white sweet potato	_	_			
2.	Legumes / nuts : beans, cowpeas, peanuts, lentils, nut, soy, pigeon pea and / or other nuts (_	_			
3.	Milk and other dairy products: fresh milk / sour, yogurt, cheese, other dairy products (Exclude margarine / butter or small amounts of milk for tea / coffee)	_	_			
4.	Meat, fish and eggs: goat, beef, chicken, pork, blood, fish, including canned tuna and/ or other seafood, eggs (meat and fish consumed in large quantities and not as a condiment)	_	_			
If 0 → skip to question 5						
4.1	Flesh meat: beef, pork, lamb, goat, rabbit, chicken, duck, other birds, insects	_	_			
4.2	Organ meat: liver, kidney, heart and / or other organ meats	_	_			
4.3	Fish/shellfish: fish, including canned tuna, cat fish and / or other seafood (fish in large quantities and not as a condiment)	_	_			
4.4	Eggs	_	_			
5	Vegetables and leaves: baobab leaf, onion, tomatoes, carrots, peppers, green beans, lettuce, etc.	_	_			
If 0 → skip to question 6						
5.1	Orange vegetables (vegetables rich in Vitamin A): carrot, red pepper, pumpkin, orange sweet potatoes,	_	_			
5.2	Green leafy vegetables: baobab leaf (Kuka), soro (yakuwa), spinach (alepo), water leaf, cassava leaf, moringa (zogale) and/or other dark green leaves	_	_			
6	Fruits: banana, apple, lemon, mango, papaya (popo), apricot, peach, etc.	_	_			
If 0 → skip to question 7						

6.1	Orange fruits (Fruits rich in Vitamin A): mango, papaya, apricot, peach	__	__
7	Oil / fat / /f/butter: vegetable oil, palm oil, groundnut oil, margarine, other fats / oil	__	__
8	Sugar, or sweet: sugar, honey, jam, cakes, candy, cookies, pastries, cakes and other sweet (sugary drinks)	__	__
9	Condiments / Spices: tea, coffee / cocoa, salt, garlic, spices, yeast / baking powder, maggi, tomato / sauce, meat or fish as a condiment, condiments including small amount of milk / tea coffee.	__	__
Food acquisition codes 1 = Own production (crops, animal) 2 = Fishing / Hunting 3 = Gathering 4 = Loan		5 = Market (purchase with cash) 6 = Market (purchase on credit) 7 = Beg for food 8 = Exchange labour or items for food	9 = Gift (food) from family relatives or friends 10 = Food aid from civil society, NGOs, government, WFP etc.
4 – HOUSEHOLD COPING STRATEGIES			
4.1 – During the <u>last 7 days</u> , were there days (and, if so, how many) when your household had to employ one of the following strategies (to cope with a lack of food or money to buy it)? <i>READ OUT STRATEGIES</i>		Frequency (number of days from 0 to 7)	
Relied on less preferred, less expensive food		__	
Borrowed food or relied on help from friends or relatives		__	
Reduced the number of meals eaten per day		__	
Reduced portion size of meals		__	
Reduction in the quantities consumed by adults/mothers for young children		__	
4.2 During the past 30 days, did anyone in your household have to engage in any of the following activities because there was not enough food or money to buy food?		1 = No; I did not face a shortage of food 2 = No, because I already sold those assets or have engaged in this activity within the last 12 months and cannot continue to do it 3 = Yes 4 = N/A	
1.1 Sold household assets/goods (radio, furniture, refrigerator, television, jewellery, clothes etc.)		__	
1.2 Purchased food on credit or borrowed food		__	
1.3 Spent savings		__	
1.4 Borrowed money		__	
1.5 Sold productive assets or means of transport (sewing machine, wheelbarrow, bicycle, car, etc.)		__	
1.6 Reduced expenses on health (including drugs) and education		__	
1.7 Withdrew children from school		__	
1.8 Sold house or land		__	
1.9 Begged		__	
1.10 Engaged in illegal income activities (theft, prostitution)		__	

5 - HOUSING & FACILITIES							
5.1	Where do you mainly obtain your drinking water at the moment? (SELECT ONLY ONE)	1 = public tap/standpipe 2 = Piped water supply into dwelling/yard 3 = Surface water (ponds/canals/lake/dam) 4 = Bottled water/sachet 5 = Protected Well/spring 6 = Unprotected Well 7 = Water truck 8 = Other (specify): _____			__		
5.12	How far away is this water source when walking from your dwelling? Record time in hours and/or minutes to access source (walking distance). Circle "999" if water in compound write "0" if water is very close to the compound	__ hours __ minutes 999 = water is in the compound					
5.2	What is the MAIN source of energy for cooking in your household?	1 = Firewood 2 = Charcoal 3 = Gas 4 = Electricity 5 = Other (specify): _____			__		
5.3	What is the MAIN type of toilet facility your household uses? (SELECT ONLY ONE)	1 = Own flush toilet 2 = Shared flush toilet 3 = Cement pit latrine 4 = Dirt pit latrine 5 = Bush 6 = Other (specify): _____			__		
5.4	Observe and note the type of dwelling	1 = House 2 = Flat/Apartment 3 = Straw Hut 4 = Tent/plastic sheets 5 = Other (specify): _____			__		
5.4.1	Observe and note the quality of the materials of the walls of the building	1 = Mostly in durable material (bricks, cement, stones) 2 = Mostly in non-durable material (wood, mud, corrugated materials, plastic sheets, straws)			__		
5.4.2	Observe and note the quality of the materials of the roof of the building				__		
5.4.3	Do you or your household own or rent this dwelling/building?	__	Rent Lease	Own Don't own but live for free			
5.5	Does your household own any of the following assets? (only if functional) 0 = No 1 = Yes	A	Beds	__	I	Agricultural tools (hoe/spade/cutlass)	__
		B	Sponge mattress	__	J	Seed for planting	__
		C	Table/chair	__	K	Wheel barrow	__
		D	Radio	__	L	Mosquito net	__
		E	Television	__	M	Cash, other savings (jewellery)	__

	WHILE ASKING, ALSO OBSERVE AND RECORD	F	Car, taxi	_	N	Motorcycle	_
		G	Cupboard/dresser	_	O	Bicycle	_
		H	Cell/Mobile phone	_			

6 – AGRICULTURE PRODUCTION							
6.1	Do you have access to farming land where you can grow any type of food /crops?		0= No 1= Yes		_ If no skip to 6.5		
6.2	How do you access this land?	1= Private ownership 2 = Rented/leased land 3 = Communion/group land	4 = Crop-shared 5 = Land allocated to IDPs by host community		_		
6.3	What is the size of this farmland?	_ _ _ _ PLOTS 999 = I don't know					
6.4	Has the land size cultivated changed compared to last year?	1= Increased 2 = Decreased	3 = Remained about the same 9 = Not applicable		_		
6.5	Does your household own any livestock (cattle, small ruminants or poultry)?		0= No 1= Yes		_ If no skip to 6.7		
6.6	If yes, how many of each of the following animals do you own (put 00 if none owned)	1 = Cattle _ _ _ _		2 = Poultry (chicken, duck, guinea fowls) _ _ _ _			
		3 = Sheep _ _ _ _		4 = Pigs _ _ _ _			
		5 = Goats _ _ _ _		6= Other (specify): _ _ _ _			
6.7	Does the household practice any fishing or fish farming?	0= No 1= Yes		_			
6.8	What are the three main constraints your HH has experienced this year in agricultural production, livestock breeding and/or fishing? Provide up to three constraints and rank in order of negative impact on livelihoods – start with the constraint with the largest negative impact.			1. _ _ 2. _ _ 3. _ _			
	Codes for agricultural /farming/livestock constraints: 1 = Insecurity 2= Lack of seeds	3 = Low soil fertility 4 = Pests and diseases 5 = Lack of cash/money 6 = Lack of land	7 = Lack of rain/delayed rainfall 8 = High costs for agricultural inputs 9 = High costs for labour	10 = Lack of access to credit, collateral 11 = Lack of storage facilities 12 = Lack of animal health staff 13 = Lack of access to market			
6.9	Is there an accessible market from which to buy food or sell surplus produce in your neighbourhood?			0= No 1= Yes		_	
6.10	If there is no market, insert the means of transportation and indicate the minutes it takes to get there (round trip, there and back)?			Transportation code: 1 = Walking 2 = Car/Bus/Bicycle 3= Other (specify):		_	
	If walking please indicate how many minutes it takes and how many kilometres is separating the camp from the market.						
	b. Kilometers:			_ _			
	c. Minutes:			_ _ _			

7– INCOME/LIVELIHOOD SOURCES AND DEBTS				
7.1	How many household members are contributing or have contributed to the household's income in the past three months?			_ _
7.2 What are the 2 main income sources (report maximum 2) of the household for the last 3 months? in order of importance, using the activity codes below				
Use proportional piling or divide the pie method to estimate relative contribution from each income source to total household income (both cash and in-kind).				
	Income source (Rank activity)	Code (Use codes on the right)	Using proportional piling method, estimate the relative contribution to total income of each activity (%)	Who is involved in terms of gender? 1. Male(s) 2. Female(s) 3. Both male & female 4. Children
7.2a	Main income activity	_ _	_ _ _	_
7.2b	Second income activity	_ _	_ _ _	_
7.2c	TOTAL	100%		
	1 = Agriculture (cash, crop, gardening) 2 = Livestock 3= Fishing 4= Hunting/gathering 5= Remittance 6= Unskilled wage labour	7 = Skilled labour (construction, electrician, etc.) 8 = Handicrafts/artisanal work 9 = Selling of natural resources (charcoal, grass, firewood, wild food.) 10. Transport/motorcycle business (operating taxi, keke) 11. Daily/common labourer (agriculture) Salaries, wages (employees)	12 = Petty trade, street vending (including stall/booths) 13 = Begging 14 = Gift/Aid/Assistance 15 = Trade/Commerce 16 = Other (specify): 17= No other income activity	
7.3 What was the 2 main income sources (report maximum 2) of the household BEFORE the conflict/displacement? in order of importance, using the activity codes below				
Use proportional piling or divide the pie method to estimate relative contribution from each income source to total household income (both cash and in-kind).				

	Income source (Rank activity)	Code (Use codes on the right)	Using proportional piling method, estimate the relative contribution to total income of each activity (%)	Who is involved in terms of gender? 1. Male(s) 2. Female(s) 3. Both male & female 4. Children
7.3a	Main income activity	_ _	_ _ _	_
7.3b	Second income activity	_ _	_ _ _	_
7.3c	TOTAL		100%	
1 = Agriculture (cash, crop, gardening) 2 = Livestock 3 = Fishing 4 = Hunting/gathering 5 = Remittance 6 = Unskilled wage labour		7 = Skilled labour (construction, electrician, etc.) 8 = Handicrafts/artisanal work 9 = Selling of natural resources (charcoal, grass, firewood, wild food.) 10. Transport/motorcycle business (operating taxi, keke) 11. Daily/common labourer (agriculture) Salaries, wages (employees)		12 = Petty trade, street vending (including stall/booths) 13 = Begging 14 = Gift/Aid/Assistance 15 = Trade/Commerce 16 = = Other (specify): _____ 17= No other income activity

7.4	Have you taken any credit in the last 3 months?		0= No → Skip to Section 8 1= Yes	_
7.5	If "yes" what was the main reason for new debts or credit?	1= To buy food 3= To pay school, education costs 5= To pay fines/tax 7= To buy or rent land/dwelling 9= To buy fuel 99= No loan/debt taken out	2= To cover health expenses 4= To pay other loans 6= To buy agricultural inputs/tools 8= To pay for ceremonies/donations 10= Other (specify) _____	_ _
7.6	How much of the loan do you expect to be able to repay during the next 6 months?	1 No repayment possible 2 Less than ½ possible 3 More than ½ possible 4 Half (50%) possible 5 Full repayment possible 6 Already repaid		_

8- EXPENDITURES			
		8. 1 - Did you purchase any of the following food items during the last 30 days for domestic consumption? If 'no', enter '0' and proceed to next food-item. If 'yes', ask the respondent to estimate the total cash and credit expenditure on the item for the 30 days. <i>(register the expenses according to local currency)</i>	8. 2 -During the last 30 days did your household consume the following foods without purchasing them? If so, estimated the value of non-purchased food items consumed during the last 30 days
		(Naira)	(Naira)
1.	Cereals (maize, rice, sorghum, wheat, bread)	_ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _
2.	Tubers (sweet potatoes, cassava)	_ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _
3.	Pulses (beans, peas, groundnuts)	_ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _
4.	Fruits & vegetables	_ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _
5.	Fish/Meat/Eggs/poultry	_ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _
6.	Oil/fat/groundnut oil/butter	_ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _
7.	Milk/cheese/yogurt	_ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _
8.	Sugar/Salt/Spices	_ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _
9.	Tea/Coffee	_ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _

8.3 - Did you purchase the following items during the last 30 days for domestic consumption? <i>If none, write 0 and go to next item</i>		8.4 - Estimated expenditure during the last 30 days <i>(register the expenses according to the currency in which it was done)</i>	8.5 - In the past 6 months how much money have you spent on each of the following items or service? <i>Use the following table, write 0 if no expenditure.</i>		8.6 - Estimated expenditure during the last six months
		(Naira)			(Naira)
10.	Kolanut/Tobacco	_ _ _ _ _ _ _ _ _	19.	Medical expenses, health care	_ _ _ _ _ _ _ _ _
11.	Soap (powder/ detergents)	_ _ _ _ _ _ _ _ _	20.	Clothing, shoes	_ _ _ _ _ _ _ _ _
12.	Transport	_ _ _ _ _ _ _ _ _	21.	Education, school fees, uniform, etc.	_ _ _ _ _ _ _ _ _
13.	Fuel (firewood/charcoal etc.)	_ _ _ _ _ _ _ _ _	22.	Debt repayment (e.g.	_ _ _ _ _ _ _ _ _
14.	Water	_ _ _ _ _ _ _ _ _	23.	Celebrations / social events	_ _ _ _ _ _ _ _ _
15.	Electricity/Lighting	_ _ _ _ _ _ _ _ _	24.	Agricultural seeds/tools	_ _ _ _ _ _ _ _ _
16.	Communication (phone)	_ _ _ _ _ _ _ _ _	25.	Savings	_ _ _ _ _ _ _ _ _
17.	Rent	_ _ _ _ _ _ _ _ _	26.	Constructions/house repairs	_ _ _ _ _ _ _ _ _
18.	Other (specify): _____	_ _ _ _ _ _ _ _ _	27.	Other long term expenditure (specify): _____	_ _ _ _ _ _ _ _ _

9 – SHOCKS			
9.1 Has your household experienced any difficulties over the last 3 months?	0=No → Skip to Section 10 1=Yes		_
If so, what are the 3 most significant ones by order of importance? Do not read options.	9.11 1 st difficulty	9.12 2 nd difficulty	9.13 3 rd difficulty
	_ _	_ _	_ _
1 = Loss employment/reduced income 2 = Sickness of HH member 3 = Insecurity/conflict 5 = High food prices 6 = High fuel/transportation prices 7 = Debt 8 = Irregular/unsafe drinking water	9 = Temporary relocation/displacement 10 = Heavy rains/floods 11 = Crop failure 12 = Restricted access to markets 14 = Other shock, specify _____ 15 = No other shocks		

10 – HOUSEHOLD HUNGER SCORE		
10.1	In the past four weeks (30 days), was there ever no food to eat of any kind in your house because of lack of resources to get food?	0 = No → Skip to 10.2 1= Yes _
10.1a	How often did this happen in the past four weeks (30 days)?	1= Rarely (once or twice in the past four weeks) 2= Sometimes (three to ten times in the past four weeks) 3= Often (more than ten times in the past four weeks) _
10.2	In the past four weeks (30 days), did you or any household member go to sleep at night hungry because there was not enough food?	0 = No → Skip to 10.3 1= Yes _
10.2a	How often did this happen in the past four weeks (30 days)?	1= Rarely (once or twice in the past four weeks) 2= Sometimes (three to ten times in the past four weeks) 3= Often (more than ten times in the past four weeks) _
10.3	In the past four weeks (30 days), did you or any household member go a whole day and night without eating anything at all because there was not enough food?	0 = No → Skip to Section 11 1= Yes _
10.3a	How often did this happen in the past four weeks (30 days)?	1= Rarely (once or twice in the past four weeks) 2= Sometimes (three to ten times in the past four weeks) 3= Often (more than ten times in the past four weeks) _

11. ASSISTANCE			
11.1	Did any member of household benefit from any FOOD assistance in the past 3 months ? Circle one.	0 = No → Skip to 11.5 1 = Yes	__
11.2	a. What type of FOOD assistance was received? (Top 3 assistance received the last 3 months)		b. Who provides the food assistance? Choose codes on below.
11.3	1. Food for school children (eaten at school or take-home) 2. Food for work / Food for training 4. Free food distributions 5. Cash Based Transfer 6. Other (specify): _____		Codes for assistance provider/source: 1 = Government 2 = UN agency 3 = NGOs 4 = Religious body 5 = Community 6 = Relative(s)/Friend(s) 7 = Other (specify): _____ __ __ __
11.4	Who receives the food assistance?	1 = Male(s) 3 = Both male & female 5. All	2 = Female(s) 4 = Children __
11.5	Did any member of household benefit from any NON-FOOD assistance in the past 3 months ?		0 = No → Skip to 11.8 1 = Yes __
11.6	Who receives the Assistance?	1 = Male(s) 3 = Both male & female 5. All	2 = Female(s) 4 = Children __
11.7	What type of assistance? (Top 3 assistance received the last 3 months)	1=Money allowances / loans 2=Education (fees, books, uniforms) 3=Medical services (hygiene promotion/ immunization, etc.) 4=Treatment of severe acute malnutrition (SAM) 5=Supplementary feeding 6=Hygiene kit 7=Non food items (blanket, mosquito nets, nylon mats etc.) 8=Other (specify): _____	__ __ __
11.8	What are the TOP 3 priority needs for your household?	1. Health/medical 3. Water 5. Non-food items 7. Livelihood support	2. Food 4. Shelter 6. Education 8. Foods appropriate for children __ __ __

12 – NUTRITION		
12.A. MOTHER AND CHILD NUTRITION – ASK THIS MODULE FOR EACH WOMAN BETWEEN 15 AND 49 YEARS OLD AND FOR EACH CHILD < 59 MONTHS IF NO CHILDREN, TERMINATE QUESTIONNAIRE		
12.1	Are you currently pregnant or breastfeeding? ENTER ONLY ONE	1 = Pregnant 3 = Neither 5 = Don't know
12.2	Woman's MUAC (in centimeters)	2 = Breastfeeding 4 = Pregnant and breastfeeding __
Read: Now I would like to ask you some questions about your children (<i>Continue the interview with the main caregiver for the child</i>) Starting with the youngest child, please enter the children's first names and ask the following question for one child at the time:		
12.3	First name of child <59 months	_____
12.4	Are you the mother of [Name]	1 = Yes 3 = No, other close family 5 = No, other specify _____
12.5	Child's age in months (record age in completed months)	2 = No, father 4 = No, caregiver __
12.6	Child sex?	1 = Male 2 = Female __
12.7	Child's MUAC (in centimeters)	__ __ __ cm
12.8	Does the child have bilateral pitting oedema? (Check both feet for oedema) 0 = No 1 = Yes	

	__	
12.9	Is the child presently enrolled in a selective feeding program?	0 = No 1 = Yes, therapeutic feeding program (hospitalized) 2 = Yes, therapeutic feeding program (outpatient) 3 = Yes, supplementary feeding program __
13. MINIMUM ACCEPTABLE DIET – ASK THIS MODULE FOR CHILD < 23 MONTHS IF NO CHILDREN < 23 MONTHS, TERMINATE QUESTIONNAIRE		
13.1	Who is the primary care giver of this child?	1 = Mother 2 = Father 3 = Grand Mother 4 = Sibling 5 = No, other specify _____ __
13.2	Was [child's name] breastfed yesterday during the day or night?	1 = Yes (Note: Include under "yes" any child who is breastfed by women other than the mother, or who are given breast milk from another woman by spoon, cup, bottle, etc.) 2 = No 3 = I don't Know __
13.3	How many times during the day or night did [Child's name] consume any...	(a) ...infant formula? __ times
		(b) ...milk (such as tinned, Powdered, or fresh animal milk)? __ times
		(c) ...yogurt? __ times
		(d) ...thin porridge? __ times
13B. Please describe everything that [child] ate yesterday during the day or night, whether at home or outside the home.		
<i>As the respondent recalls and lists food eaten by the child, circle "yes" in the corresponding food group Do not probe but help the caretaker recall in chronologic order (Rows 12.4 -12.20 below). DK = Don't know.</i>		
13.4	Porridge, bread, rice, noodles, or other foods made from grains	0 = No 1 = Yes 2 = DK __
13.5	Pumpkin, carrots, squash, or sweet potatoes that are yellow or orange Inside	0 = No 1 = Yes 2 = DK __
13.6	White potatoes, white yams, manioc, cassava, or any other foods made from roots	0 = No 1 = Yes 2 = DK __
13.7	Any dark green leafy vegetables	0 = No 1 = Yes 2 = DK __
13.8	Ripe mangoes, ripe papayas, or (insert other local vitamin A-rich foods)	0 = No 1 = Yes 2 = DK __
13.9	Any other fruits or vegetables	0 = No 1 = Yes 2 = DK __
13.10	Liver, kidney, heart, or other organ meats	0 = No 1 = Yes 2 = DK __
13.11	Any meat, such as beef, pork, lamp, goat, chicken, or duck	0 = No 1 = Yes 2 = DK __
13.12	Eggs	0 = No 1 = Yes 2 = DK __
13.13	Fresh or dried fish, shellfish, or seafood	0 = No 1 = Yes 2 = DK __
13.14	Any foods made from beans, peas, lentils, nuts or seeds	0 = No 1 = Yes 2 = DK __
13.15	Cheese, yogurt, or other milk products	0 = No 1 = Yes 2 = DK __
13.16	Foods made with red palm oil, red palm nut, or red palm nut pulp sauce	0 = No 1 = Yes 2 = DK __
13.17	Fortified Solid, Semi-solid, or Soft Foods for Infants/ Children	0 = No 1 = Yes 2 = DK __
13.18	Micronutrient Powders	0 = No 1 = Yes 2 = DK __
13.19	Lipid-based nutrient supplements (LNS)	0 = No 1 = Yes 2 = DK __
13.20	How many times did [child's name] eat solid, semi-solid, or soft foods yesterday during the day or night? 1 = __ times 2 = Don't know	