



TECHNICAL REPORT (HEA Outcome Analysis)

COUNTRY :

Nigeria

Date of the analysis: 16th – 19th October, 2017

Period covered by the analysis : September 2017 – August 2018

EXECUTIF SUMMARY

The consumption year covered by the current analysis is **September 2017 – August 2018** for seven livelihood zones, detailed below.

(North West Millet & Sesame LZ (MAS), North West Cotton, Groundnuts & mixed Cereals LZ (CGC), Hadejia Valley Mixed Economy LZ (HVM)), North West Sorghum, Cowpeas and Groundnuts LZ (SCG), North West Millet, Cowpeas and Groundnuts LZ (MCG), North Central Maize, Sorghum and Cotton LZ (MSC) and North East Millet, Cowpeas and Sesame LZ (MCS).

Official data monitoring on crop production and prices were used for the definition of the current year problem as given by Agricultural Development Programme across the states. Assumptions for changes in production and prices were made on the Problem Specification (PS) in consensus amongst the workshop participants, based on their field experience where official data does not represent the ideal situation.

The Outcome Analysis (OA) was conducted in Kano by the HEA Working Group from 16th – 19th October, 2017 for the seven livelihood zones mentioned above. There were participants from Government institutions and NGOs under the technical lead of Save the Children. **The analysis aims to understand the changes in households' access to food and income from September 2017 to August 2018, providing information prior to lean period (June –August) of the consumption year.**

The analysis shows that the very poor households in MAS livelihood zone would likely face survival deficits of 20%, the very poor in MAS, CGC and MCS livelihood zone would likely face a livelihood protection deficit of 11%, 16% & 2% respectively, while the poor households in MAS and CGC livelihood zone would likely face a livelihood protection deficit of 8% and 7% respectively.

Households facing survival deficit would need urgent intervention/support in order to save lives during the deficit period, while households facing livelihood protection deficit would need support to protect their existing livelihood assets, this will also prevent the use negative coping strategies.

Other wealth groups across the LZs are not expected to face any deficit. Households not facing deficits would be able to access food and income to live above the survival and livelihood protection thresholds for the projected period.

Summary of Outcome Analysis Results: Wealth Groups/Livelihood Zones Facing Deficits

	MAS	CGC	HVM	SCG	MCG	MSC	MCS
Very Poor	SD= 20% LPD = 11%	LPD= 16%	No deficits	No deficits	No deficits	No deficits	LPD= 2%
Poor	LPD= 8%	LPD= 7%	No deficits	No deficits	No deficits	No deficits	No deficits
Middle	No deficits	No deficits	No deficits	No deficits	No deficits	No deficits	No deficits
Better Off	No deficits	No deficits	No deficits	No deficits	No deficits	No deficits	No deficits

I. LIVELIHOOD ZONES DESCRIPTION

The seven livelihood zones are primarily agricultural based and a variety of rain-fed crops suited to drylands areas including millet, sorghum, maize, rice, cowpeas, groundnuts, sesame, cotton as well as soybeans are grown. Rain-fed agriculture is carried out during the single rainy season which runs from April/May to October. The peak months of rainfall are June to August. In the dry season, food crops and market vegetables are grown on low lying river flood plains (or *fadama*) either through irrigation or flood retreated agriculture. The main period of harvest is from September to November. The dry-season harvest is March. In all the zones, livestock production supplements agriculture.

The Northwest region accommodates two wide belts of dominant staple cereals, millet and sorghum. The other common associated cash crops that further distinguish the local economy are cowpeas, which are grown in surplus; groundnuts; cotton; and sesame. The North West **Millet, Cowpeas and Groundnuts LZ (MCG)** and the North West **Sorghum, Cowpeas and Groundnuts LZ (SCG)** are a mix of food and cash crops, with associated husbandry of sheep, goats, and cattle. These areas are at the heart of the groundnut cultivation for which northern Nigeria is particularly known. The longstanding cash crops of the North West **Cotton, Groundnuts, and Mixed Cereals LZ (CGC)** are groundnuts, cotton and soya beans. All are Rain-fed.

In the **Hadejia Valley Mixed Economy LZ (HVM)** a variety of crops is grown in drylands as well as the irrigated areas. Rainy season cultivation of drylands centers on maize, millet, rice, sorghum, and cowpeas, while irrigation or residual moisture in the dry season allow extended cultivation of food crops such as rice, maize and valuable market vegetables like peppers, onions and tomatoes on low lying river flood plains (i.e., *fadama*). Fishing which happens throughout the year in the Hadejia Valley is a significant source of cash income.

The far northern zone of North West **Millet & Sesame LZ (MAS)**, in the Sahel savanna ecological belt, generally features good conditions for millet and sorghum, as in the Sudan savanna belt. In this relatively dry ecosystem, yields tend to be lower than further south. Cowpeas are important, and sesame is a successful cash crop, although many farmers cultivate groundnuts more. Unlike other livelihood zone, there is very little *fadama* land here, and vegetables are not common cash earners.

The Nigerian side of the Lake Chad within which the North East **Millet, Cowpeas and Sesame LZ (MCS)** is located is a semiarid zone but particularly well suited to millet and cowpeas production, the cropping season involves irrigation and rain fed agriculture. Although livestock production is an important secondary activity in this zone, small ruminants are relatively more important here than cattle.

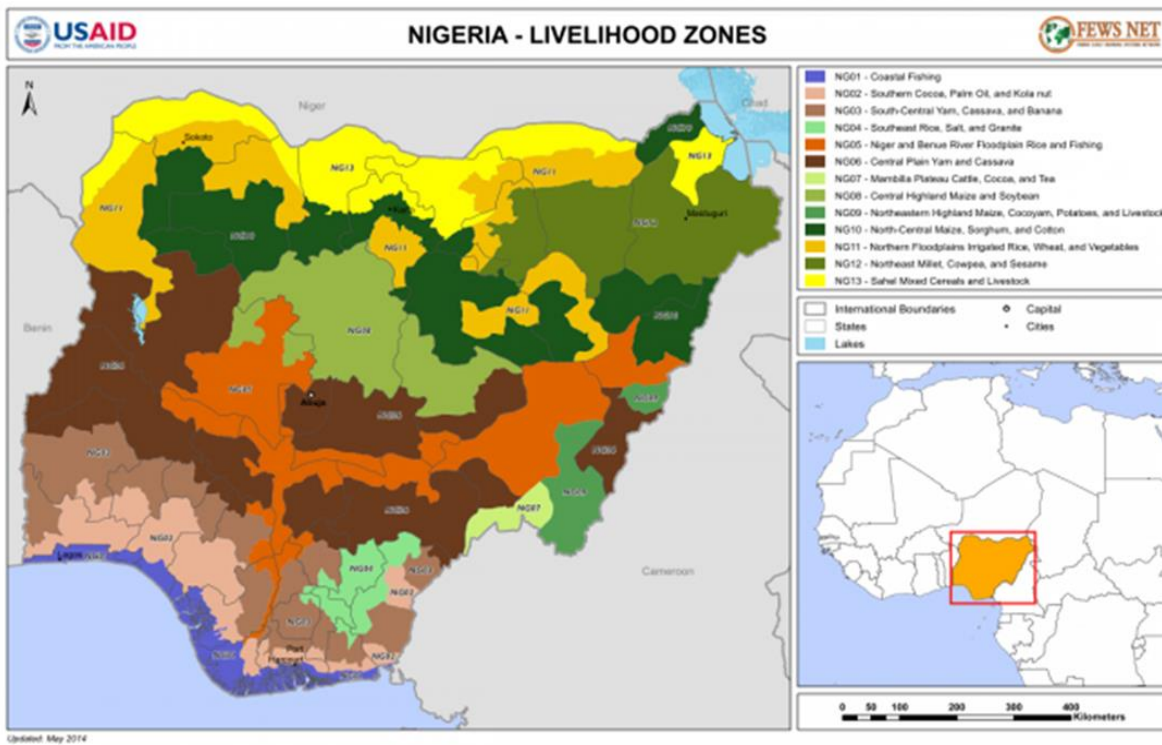
The North Central **Maize, sorghum and Cotton LZ (MSC)**, generally provides a good condition for maize, sorghum and cotton. Rice and cowpeas can be considered as cash crops in this zone, but dry season rice and vegetables are mainly grown for cash.

The reference year is not the same for all the livelihood baselines as outlined in the table below:

Livelihood Baseline	Reference Year
Millet & Sesame LZ (MAS)	Sept 2009 – August 2010
Cotton, Groundnuts & mixed Cereals LZ (CGC)	Sept 2011 – August 2012
Hadejia Valley Mixed Economy LZ (HVM)	Sept 2010 – August 2011
Sorghum, Cowpeas and Groundnuts LZ (SCG)	Sept 2012 – August 2013
Millet, Cowpeas and Groundnuts LZ (MCG)	Sept 2012 – August 2013

Millet, Cowpeas and Sesame LZ (MCS)	Sept 2012 – august 2013
Maize, Sorghum and Cotton LZ (MSC)	Sept 2012 – August 2013

¹ Refer to seasonal calendars in baseline reports for further details on seasonality.



New Livelihood Zone Map

II SCENARIO DEVELOPMENT/ PROBLEM SPECIFICATION

A problem specification is the translation of a shock or other change into economic consequences at household level. It allows one to mathematically link the change (positive or negative) to each relevant livelihood strategy. The process of developing problem specifications is one of critically examining the effects of each type of change on each source of food, income and expenditure. There can be quite a large number of these sources, not all of which are equally important, and it is therefore useful to identify the key sources for each wealth group and each livelihood zone. A key source (or 'key parameter') is defined as one that contributes significantly to total food or cash income¹, such that a reduction in access to that one source may have a significant effect on total access.

The scenario developed uses official government monitoring data on crop production and prices for the definition of the current year problem specification. Where official data was not available, assumptions were made based on a consensus

¹ A key parameter is here defined as a source of food or income that contributes at least 10% of one wealth group's total food or income or at least 5% for each of two wealth groups' total food or income.

amongst the workshop participants due to their field experience. As part of the scenario in the livelihood zones, it has been assumed that the 2017 rainy season will be normal and that agricultural labor opportunities for land preparation, planting and weeding will be stable for the remaining months of this year. The scenario developed is based on problem specification of key parameter data collected in the seven zones. All coping strategies are excluded from the scenario. Each element of the scenario analyzed can be monitored and revised as additional information becomes available. In addition, other scenarios can be analyzed if decision makers would like to understand vulnerability to different types of shock. For more details on the key parameters and their changes since the reference years, see the key parameter problem specification table at the bottom of the report.

III- PROJECTED FOOD SECURITY PROSPECTS

Crop	CGC	HVM	MAS	MCG	SCG	MSC	MCS
Maize	115	122		122	119	133	133
Millet	139	123	145	123	142	108	108
Rice	120	200		200	120	129	129
Rice 2 nd Sea		100					
Sorghum	128	130	112	135	130	140	140
Wheat		157					
Cowpeas	118	128	110	128	117	94	94
Cotton	37						
Soya beans	130					122	
Groundnuts	132			165	146	122	122
Sesame			118				
Pepper		111		111	142	122	
Onion		114			134	111	111
Tomato		111				117	

Increase
 Not Important

3.1- Period covered by the analysis

The period covered by the analysis is **September 2017 – August 2018** consumption year.

The Outcome Analysis started off with a training (refresher) session on key parameter data collection methodology as well as a review on the data collection tool. The training was followed by 4 days field exercise on key parameter data collection across the seven livelihood zones, information were gotten from Agricultural Development Programme (data on crop production and market prices). Other key parameter data were collected by the enumerators at the field.

3.2 Projected Outcomes by Livelihood Zone and by District

The results of the OA are presented in this section. These illustrates how scenario development and problem specification are expected to impact total income for households in different wealth groups in the seven livelihoods zones. The graph shows the result of the scenario development/problem specifications for very poor and poor households for one district within each livelihood zone.

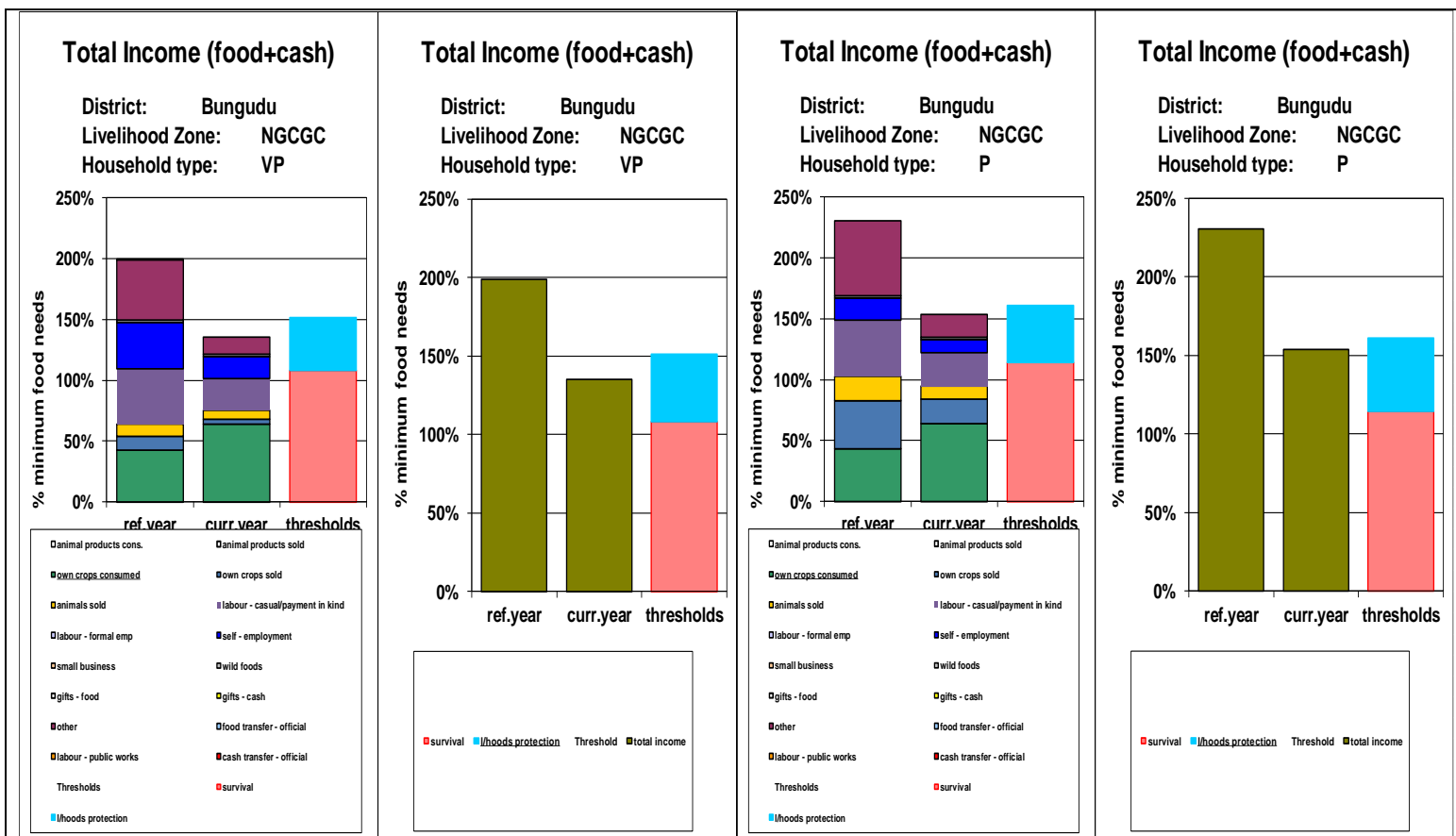
I- NG08: North West Cotton, Groundnuts and Mixed Cereals Livelihood Zone

The results for the OA shows that the very poor and poor household would likely face livelihood protect deficit of 16% and 7% respectively, while the remaining groups are not expected to face any deficit within this livelihood zone. This means that the very poor and poor households would require livelihood support; an intervention to protect their existing livelihoods assets to prevent further depletion.

There has been a general increase in crop production, except for cotton which reduced significantly by 63% when compared with the reference year. Farmers' interest in other crops due to poor market for cotton in this zone largely contributed to the reduction in cotton production. The decrease in livestock remains due to cattle rustling as well as theft of small ruminants in this zone. Wage rates on casual and agricultural labor has increased, but with increase as well in the cost of firewood and other commodities including staple food and livestock when compared to the reference year. The impact is more on the very poor and poor households, who depend largely on food purchase.

The OA result shows a significant increase in the consumption of own crops by the very poor and poor households when compared with the reference year (22% for the very poor and 21% for the poor), but with decrease in casual labour (19% for the very poor and 18% for the poor) and self-employment (20% for the very poor and 7% for the poor). This has greatly affected their purchasing power and hence contributing to the deficits on Livelihood threshold.

In the graph below Bungudu LGA was used but represents other LGAs (Bungudu, Gusau, Maru and Tsafe) in the Cotton, Groundnuts and Mixed Cereals Livelihood zone.

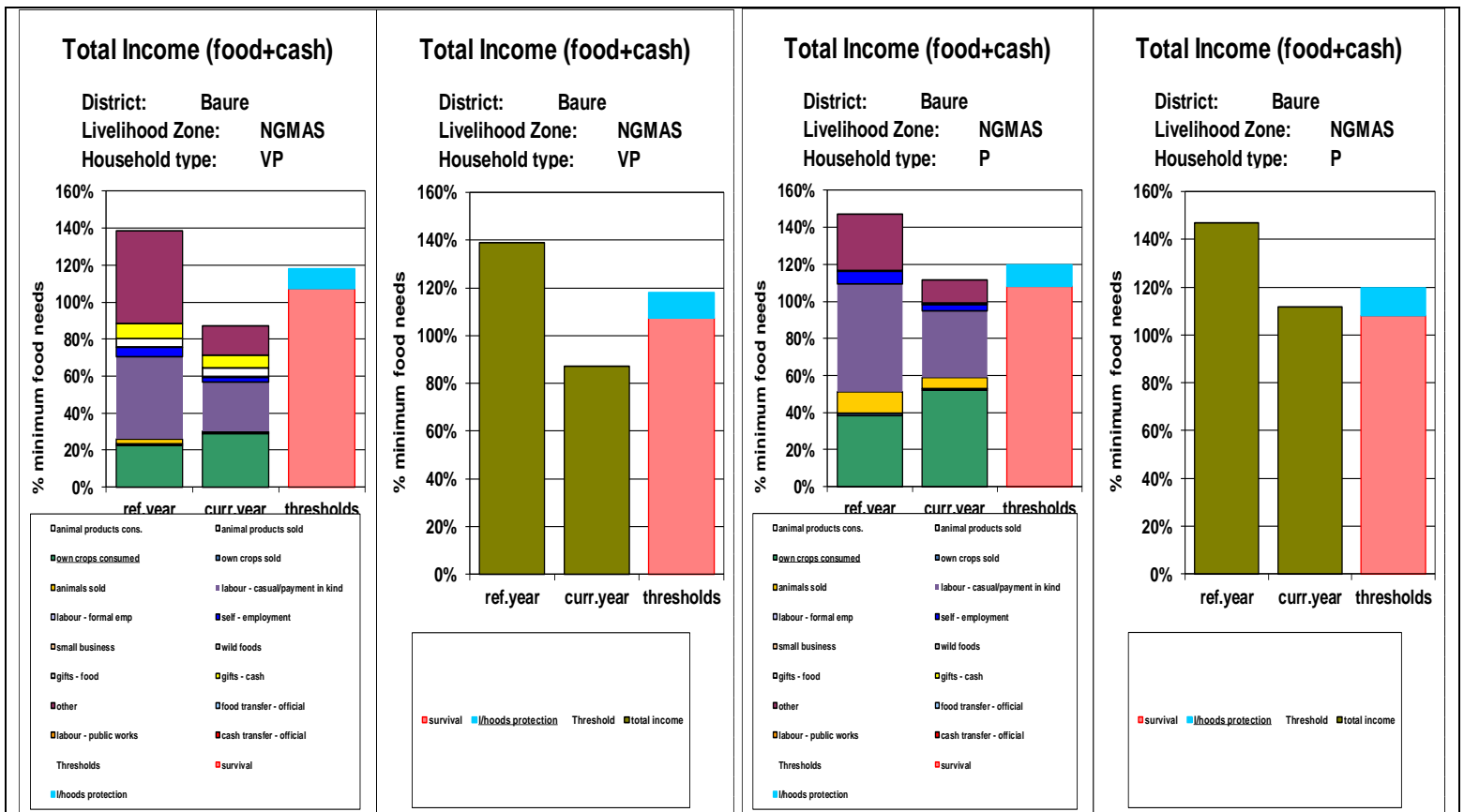


2- NG04: North West Millet & Sesame Livelihood Zone

The result for the OA shows that the very poor households would face a survival deficit of 20% and livelihood protection deficit of 11% while the poor household would face a livelihood protection deficit of 8%. Households on survival deficit would require emergency food aid or cash to save lives while households on livelihood protection deficits would require support (cash) to protect their existing livelihoods assets such as feeds/drugs for livestock, fertilizer, etc. Other wealth groups do not have deficit, hence would be able to maintain their normal livelihood without assistance.

The Millet & Sesame Livelihood zone recorded a general increase in production for crops like millet, sorghum, Cowpea, and sesame. Though there is an increase in own crop consumed by both the very poor and the poor household due to increased crop production, access to income generating activities such as casual labour and self-employment has reduced significantly when compared with the reference year. Access to Casual labour reduced by 17% and 22% for the very poor and poor households respectively while Self-employment reduced by 3% for both the very poor and poor household, contributing to great extent, the deficits on both survival and livelihood protection.

In the graph below Baure LGA was used but represents other LGAs (Baure, Dutsi, Daura, Mashi, Zango and Sandamu) in the Millet and Sesame Livelihood zone.

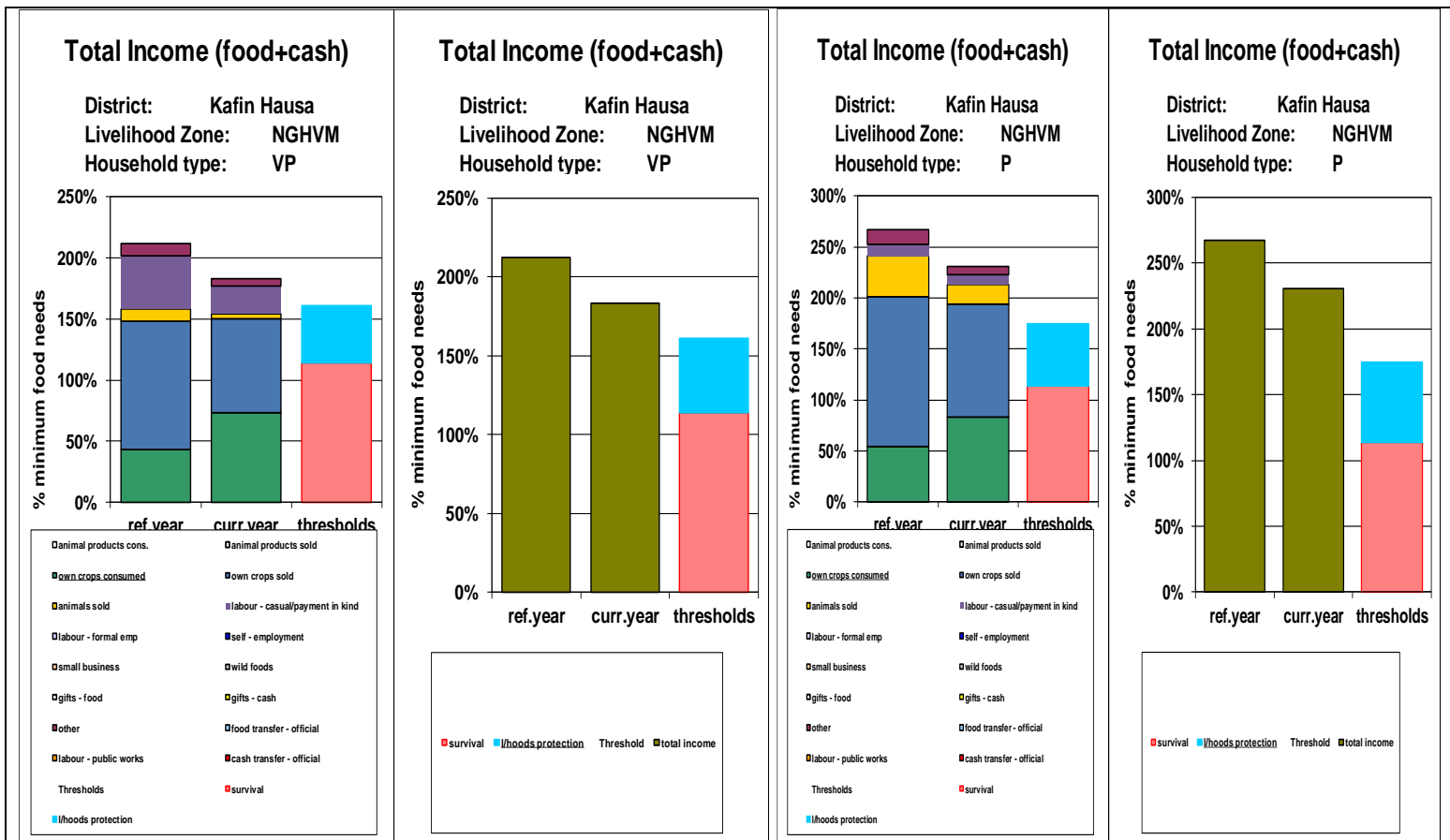


3- NGII : Hadejia Valley Mixed Economy Livelihood Zone

The results for the scenario analysis show that there will be neither survival nor livelihood protection deficits for any wealth group in this livelihood zone, this implies that no urgent support will be needed as households within this zone would be able to access both food and cash income need to survive as well as maintain livelihood assets.

Crops such as Maize, Millet, Rice, Sorghum, Wheat, Cowpeas, Pepper, and Onion recorded an increase in production within this LZ thereby increasing own crops consumed by 30% for both the very poor and poor households. The analysis indicates that the very poor as well as other wealth groups can meet their basic staple food and livelihood needs. Hence no survival nor livelihood support would be required.

In the graph below Kafin Hausa LGA was used but represents other LGAs (Kafin Hausa, Auyo, Guri, Kiri Kassama, Malam Madori and Kaugama) in the Hadejia Valley Mixed Economy Livelihood zone.



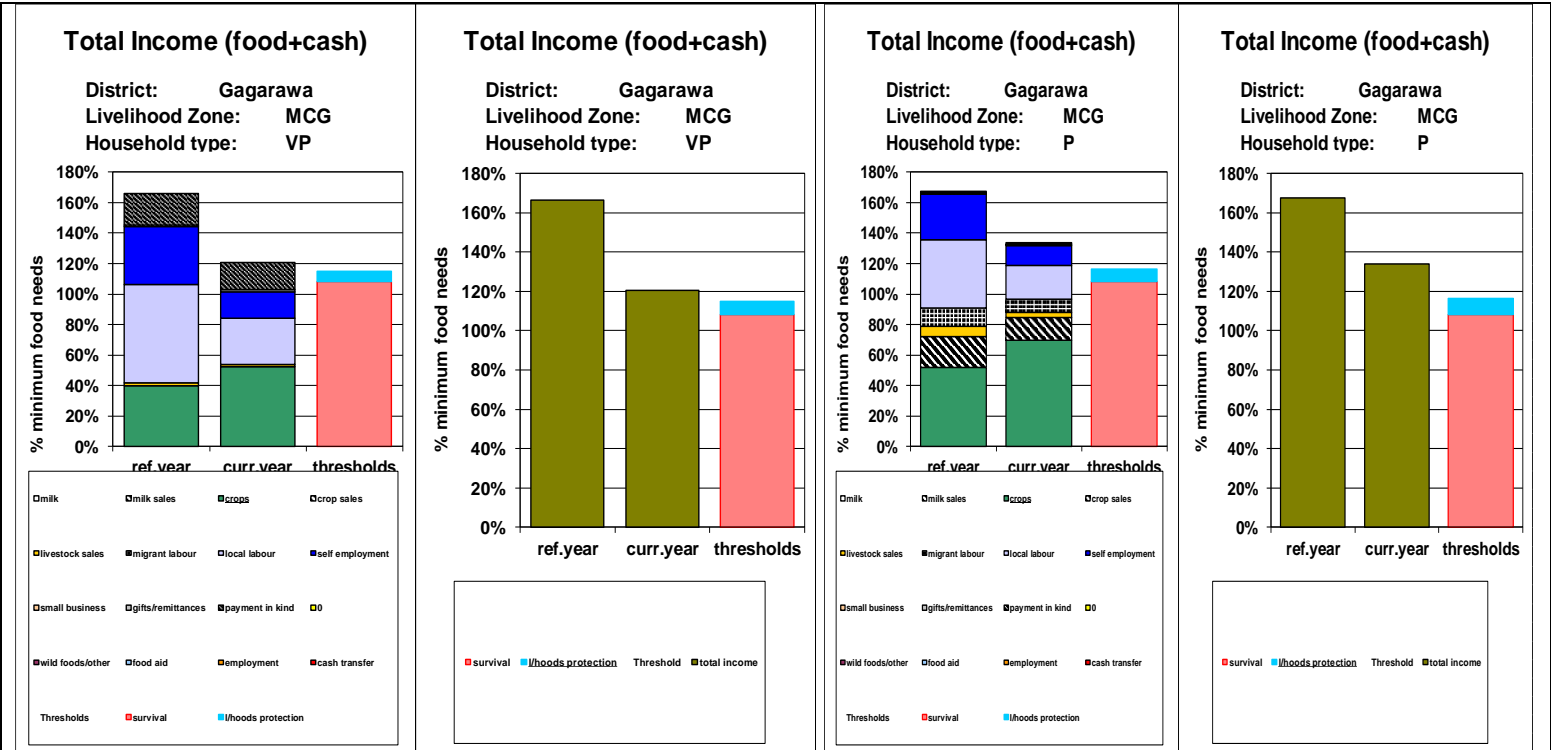
4- NG03: NW Millet, Cowpeas and Groundnuts Livelihood Zone

The results for the outcome analysis (OA) shows that there will be neither survival nor livelihood protection deficits for any wealth group within this Livelihood Zone.

There is an increase in crop production in the current year with respect to the reference year, which has increase access to food from own crops as households especially the very poor and poor consume more portion of foods they grow than in the reference year (40% to 52% for the very poor and 52% to 70% for the poor). Though income from both livestock sales reduced, household will still be able to sustain both their survival and livelihood needs

The result as compared to the reference year shows an overall increase in total food income from own crop, though there is a decrease in access to local labour, this has been balanced with increased crop production making more food available from own crop.

In the graph below Gagarawa LGA was used but represents other LGAs (Gagarawa, Buji, Jahun, Birnin Kudu, Kiyawa, Dutse, Miga and Taura) in the Millet, Cowpeas and Groundnuts Livelihood zone.

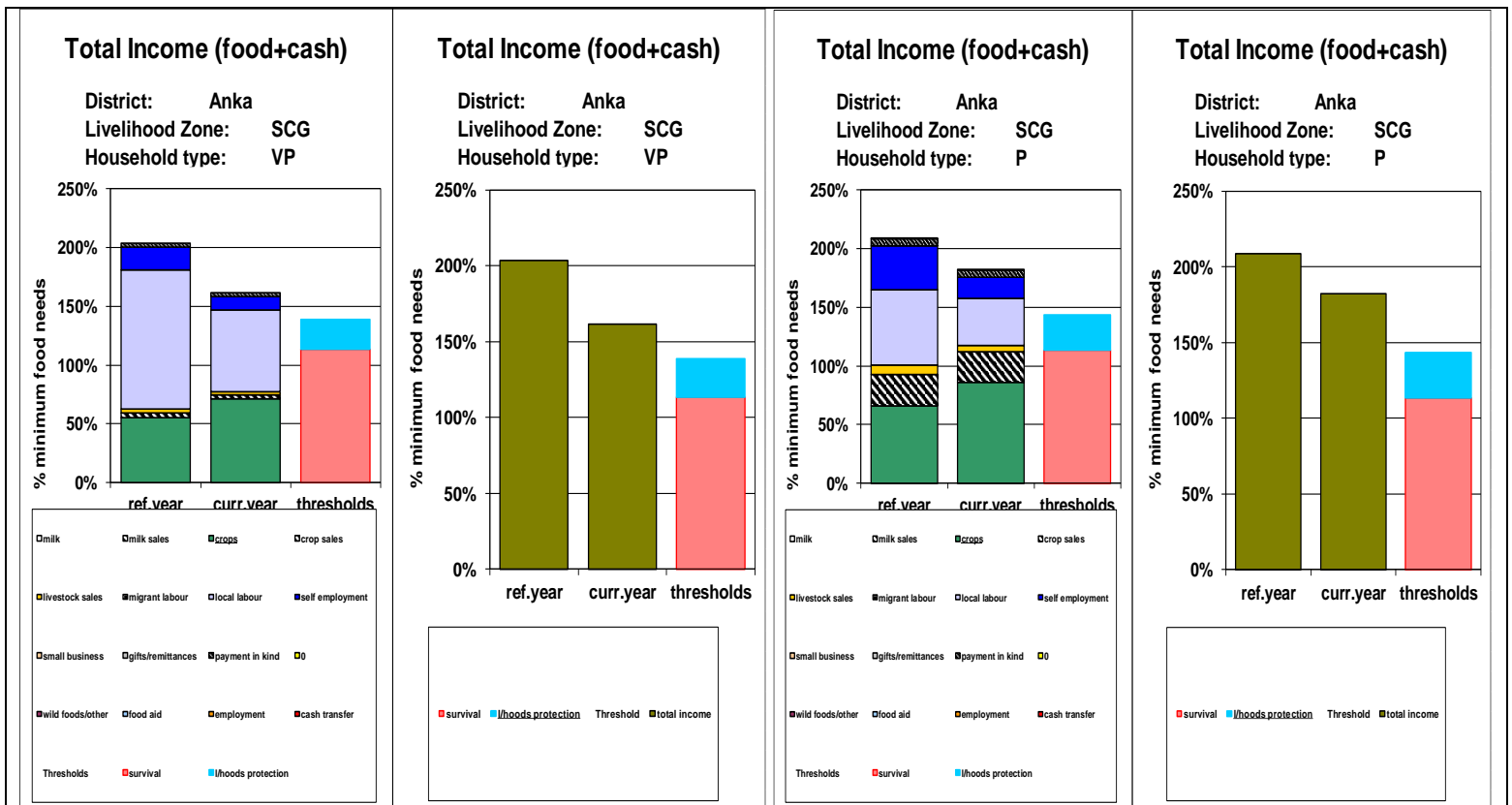


5-NG06: NW Sorghum, Cowpeas and Groundnuts Livelihood Zone

The results for the outcome analysis shows that there will be neither survival nor livelihood protection deficits for any wealth group in this livelihood zone, this implies that no urgent support will be needed as households within this zone would be able to access both food and cash income need to survive as well as maintain livelihood assets.

Although access to local labour decreased (by 49% for the very poor and 24% for the poor) with respect to the reference year, increase in crop production slightly compensated for the shortages as households increased food consumption from own crops (16% for the very poor and 20% for the poor).

In the graph below Anka LGA was used but represents other LGAs (Anka, Bukkuyum and Gumi) in the Sorghum, Cowpeas and Groundnuts Livelihood zone.

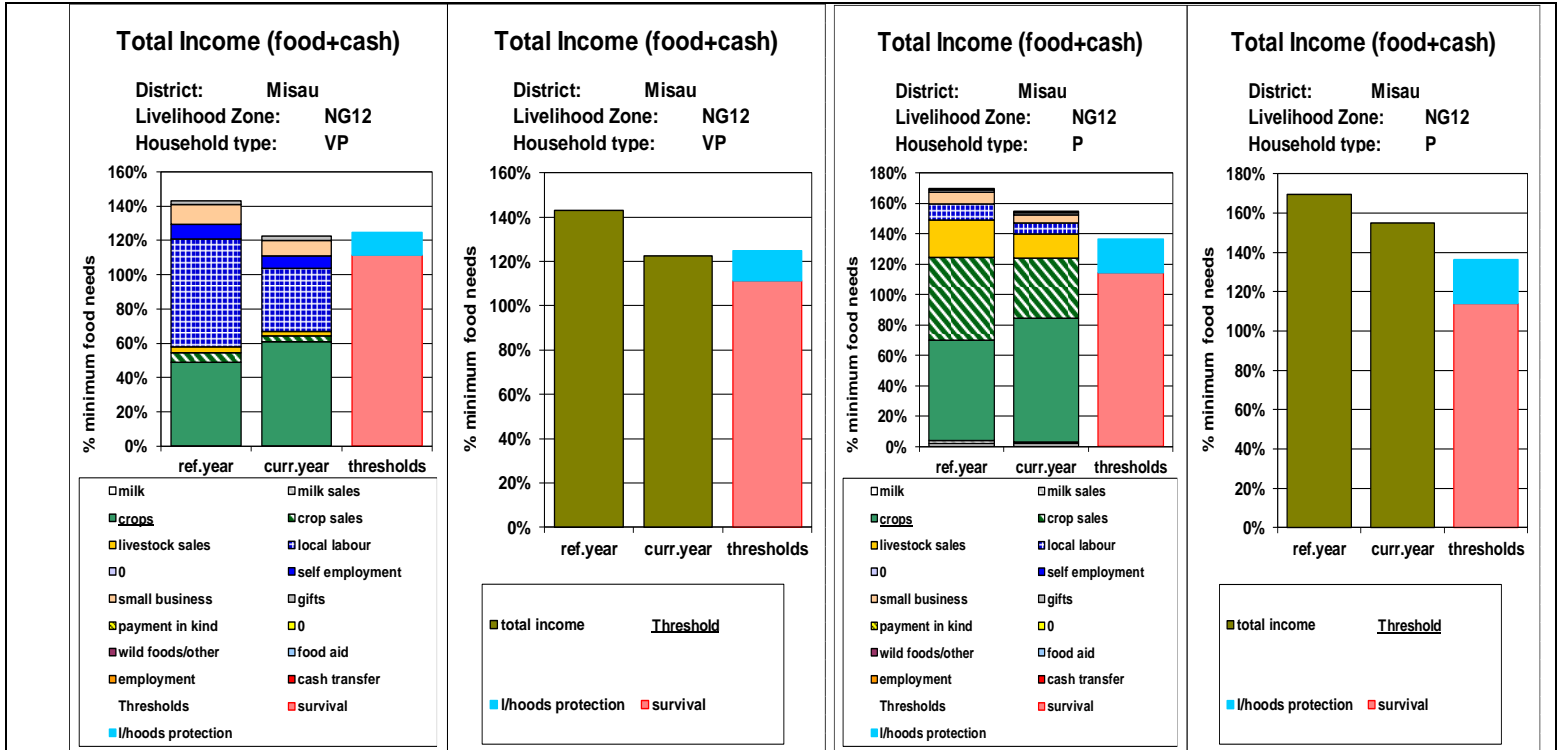


6-NG12: NE Millet, Cowpeas and Sesame Livelihood Zone

The analysis indicates that the very poor households would likely face a livelihood deficits of 2%, which implies that the very poor households will require support to protect their existing livelihoods assets to prevent further depletion.

There will be no survival and livelihood protection deficits for other wealth group within this zone as they would be able to access both food/cash to ensure their survival and maintain local livelihoods.

In the graph below Misau LGA was used but represents other LGAs (Misau, Katagum, Gaide, Gamawa, Darazo and Damaban) in the Millet, Cowpeas and Sesame Livelihood zone.

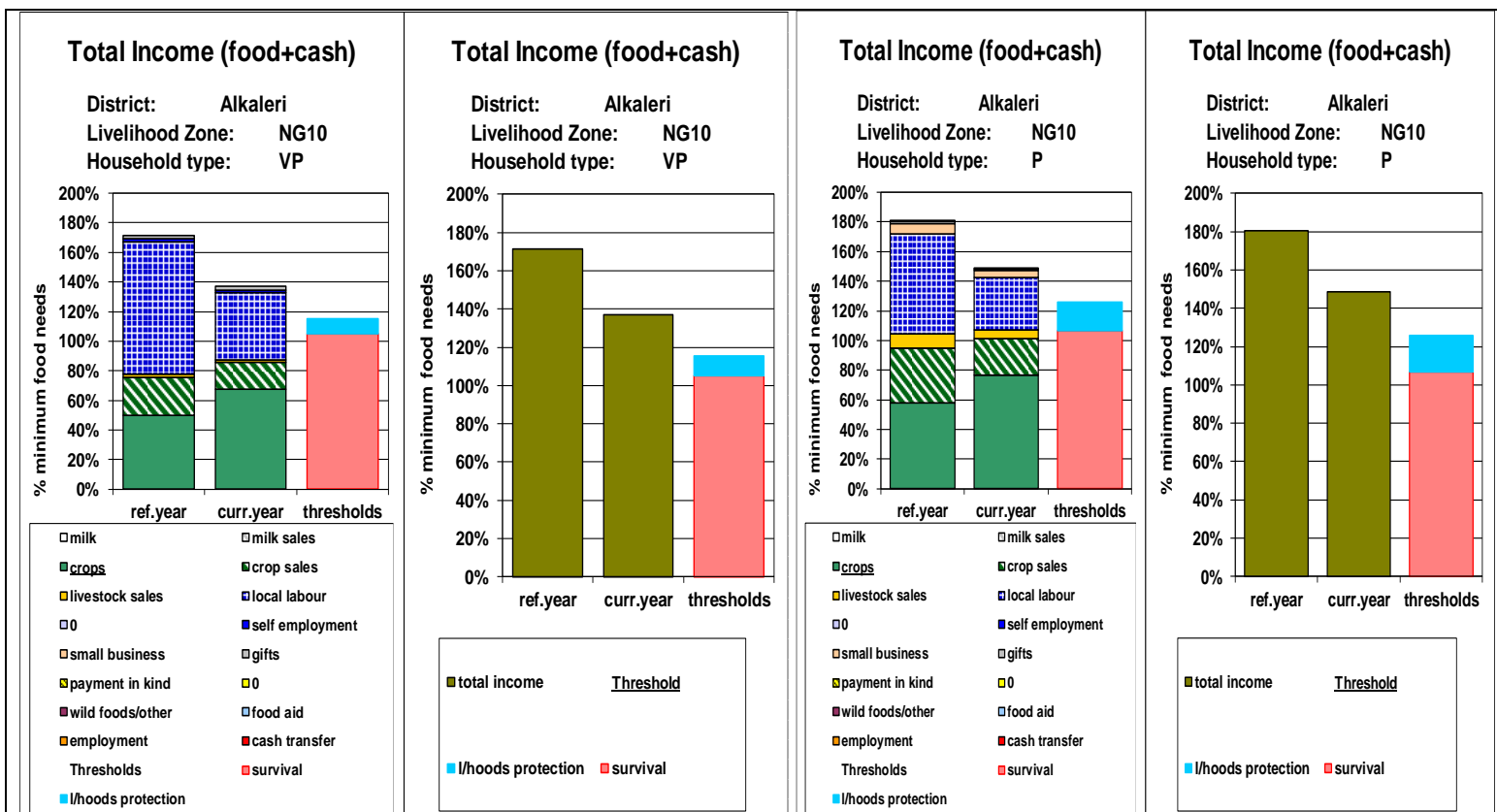


7-NG10: NC Maize, Sorghum and Cotton Livelihood Zone

The Outcome Analysis for North Central Maize, Sorghum and Cotton Livelihood Zone shows no deficit in both survival and livelihood protection threshold, hence no emergency food aid or livelihood support is needed in this zone.

Crop production in MSC LZ increased generally as compared to the reference year. This has also increased own crops consumed across the wealth group (50% to 68% for the very poor and 58% to 77% for the poor), though access to casual labour reduced when compared to the reference year but this has not resulted in any deficit for the wealth groups across the zone.

In the graph below Alkareli LGA was used but represents other LGAs (Alkaleri, Bogoro, Dass, Gamjuwa, Ningi, Toro and Tafawa Balewa) in the Maize, Sorghum and Cotton Livelihood zone.



IV- SUMMARY OF THE RESULTS COMPARED WITH THE TWO THRESHOLDS

The analysis projects that the very poor households in MAS livelihood zone would likely face survival deficits of 20%, the very poor in MAS, CGC and MCS livelihood zone would likely face a livelihood protection deficit of 11%, 16% & 2% respectively, the poor household also in MAS livelihood zone would likely face a livelihood protection deficit of 8%, while the remaining wealth groups across the LZs are not expected to face any deficit. Households not facing deficits would be able to access food and income to live above the survival and livelihood protection thresholds for the projected period.

Households facing survival deficit would need urgent intervention/support in order to save lives during the deficit period, while households facing livelihood protection deficit would also need support to protect their existing livelihood assets to prevent the use negative coping strategies and falling to survival deficit which is life threatening.

Summary of Outcome Analysis Results: Wealth Groups/Livelihood Zones Facing Deficits

	MAS	CGC	HVM	SCG	MCG	MSC	MCS
Very Poor	SD= 20% LPD= 11%	LPD= 16%	No deficits	No deficits	No deficits	No deficits	LPD= 2%
Poor	LPD= 8%	LPD= 7%	No deficits	No deficits	No deficits	No deficits	No deficits
Middle	No deficits	No deficits	No deficits	No deficits	No deficits	No deficits	No deficits
Better Off	No deficits	No deficits	No deficits	No deficits	No deficits	No deficits	No deficits

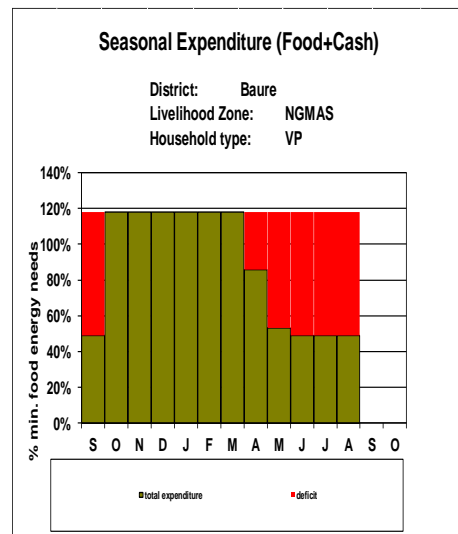
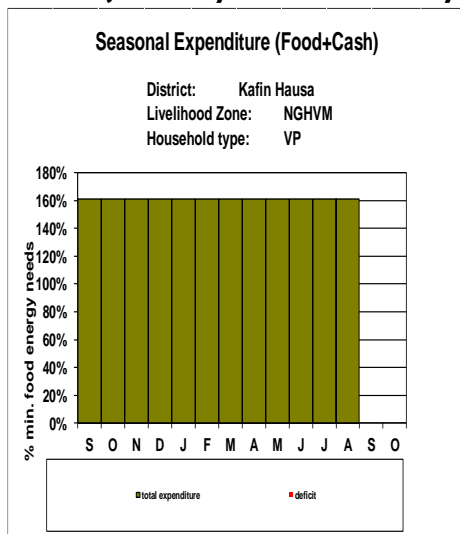
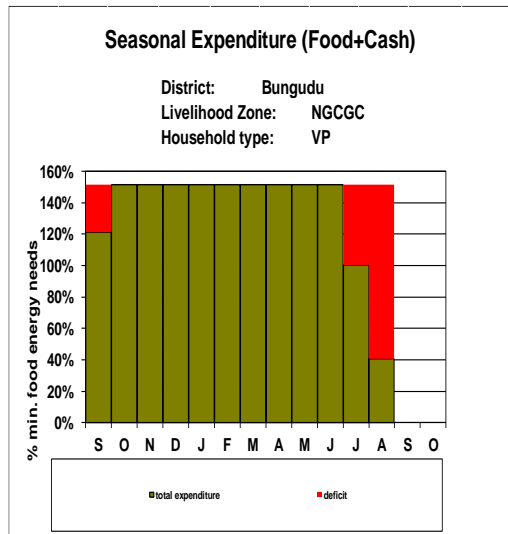
V- SEASONALITY

By combining information on total income with seasonal calendar data showing when different sources of food and cash become available, it is possible to generate projected pattern of consumption/ expenditure, by month, from **September 2017 – August 2018 as projected**. Based on the analysis above, the period when households are unlikely to be able to cover their livelihood protection needs (deficit) is shown in red on a seasonal expenditure graph presented below.

Cotton Groundnut & Mixed Cereals LZ

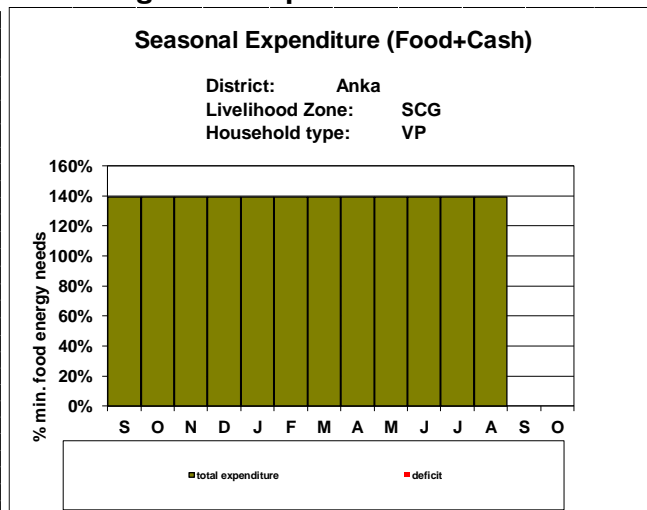
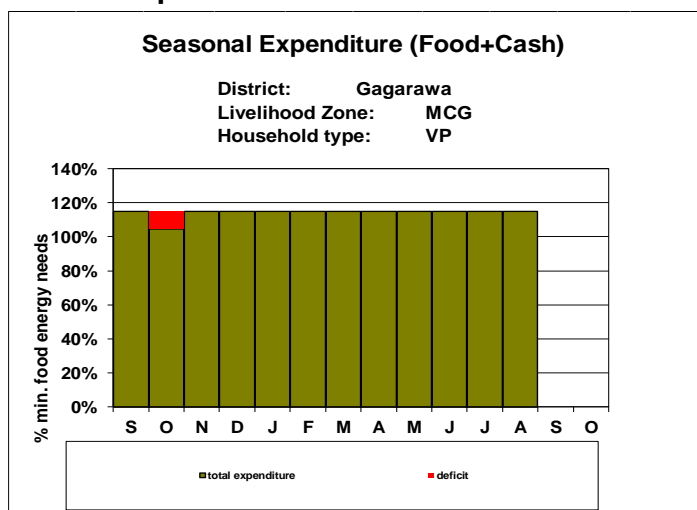
Hadejia Valley Mixed Economy LZ

Millet & Sesame LZ

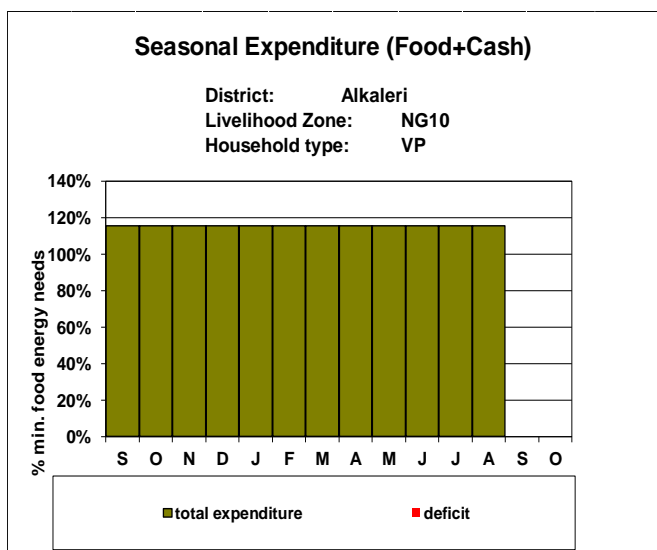


Millet Cowpeas & Groundnut LZ

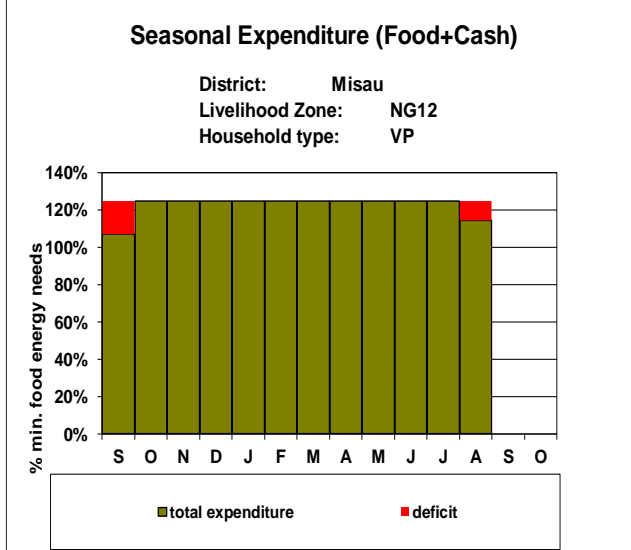
Sorghum Cowpeas and Groundnut LZ



Maize Sorghum & Cotton (NG10) LZ



Millet Cowpeas and Sesame (NG12) LZ



The seasonal expenditure graph depicts the month and timing for any form of intervention that the very poor and poor households might likely require; which is significant enough to have direct impact on their livelihood protection.

VI- RESPONSE OPTIONS AND RECOMMENDATIONS

- Livestock protection program as well as improvement in the security situation especially within CGC livelihood zone to avert rustling.
- Improve food access for the very poor and poor households as well as livelihood
- Government support in establishing food preservation programs especially vegetables.
- A joint assessment with partners is being encouraged.
- Secondary data should be sourced from all relevant agencies and a more reliable data is used for analysis.
- Government support to the Agriculture Development program (ADP) to ensure effective system support with respect to agriculture and as well data collection to inform decision making.

CONCLUSION

The Very poor households in MAS LZ facing survival deficit of 20% would need urgent intervention/support in order to save lives during the deficit period, while households facing livelihood protection deficit would also need support to protect their existing livelihood assets to prevent the use of negative coping strategies and depleting of assets.

In the longer term, development efforts should continue to focus on assisting the very poor and the poor to secure more stable sources of income to complement crop and livestock farming.

VII- ANNEX

7.1- Table summarizing key parameters figures (problem specification)

NG08: NW Cotton, Groundnuts and Mixed Cereals Livelihood Zone

Problem Specification for NW Cotton, Groundnuts and Mixed Cereals Livelihood Zone		
Key parameter	Production Problem	Price Problem
Cattle	70%	166%
Goats	70%	141%
Sheep	70%	146%
Cow's Milk	100%	
Maize	115%	156%
Millet	139%	145%
Rice	120%	145%
Cowpeas	118%	159%
Soya beans	130%	129%
Sorghum	128%	145%
Groundnuts	132%	124%
Cotton	37%	93%
Agricultural labor	95%	161%
Construction	80%	162%
Fetching water	80%	85%
Firewood sales	90%	159%
Credit	45%	-----
Self-employment	80%	81%
Components of the Livelihood Protection Basket (LPB)		
Fertilizer: Urea		161%
Staple Food (Sorghum)		246%
Inflation		196%

Legend: ---- means that price problem specification for those items was left blank in the LIAS because data were not available during the analysis. In such cases, the spreadsheet will apply automatically the problem specification for inflation (169%) to those items.

NG04: NW Millet & Sesame Livelihood Zone

Problem Specification for NW Millet & Sesame Livelihood Zone		
Key parameter	Production Problem	Price Problem
Cattle	85%	104%
Goats	90%	119%
Sheep	90%	167%
Cow's Milk	100%	123%
Millet	145%	
Cowpeas	110%	
Sorghum	112%	
Sesame	118%	137%
Agricultural labor	95%	157%
Construction	85%	133%
Firewood sales	90%	145%
Self-employment	95%	115%
Components of the Livelihood Protection Basket (LPB)		
Fertilizer: Urea		
Staple Food (Millet)		289%
Inflation		243%

Legend: ---- means that price problem specification for those items was left blank in the LIAS because data were not available during the analysis. In such cases, the spreadsheet will apply automatically the problem specification for inflation (210%) to those items.

NGI I: Hadejia Valley Mixed Economy Livelihood Zone

Problem Specification for Hadejia Valley Mixed Economy Livelihood Zone		
Key parameter	Production Problem	Price Problem
Cattle	100%	146%
Goats	100%	159%
Sheep	100%	152%
Cow's Milk	100%	181%
Maize	122%	185%
Millet	123%	170%
Rice	200%	170%
Wheat	157%	107%
Cowpeas	128%	150%
Sorghum	130%	167%
Rice irrigated	100%	-----
Pepper	111%	160%
Onions	114%	170%
Tomatoes	111%	167%
Agricultural labor	95%	182%
Construction	75%	170%
Fish sales	80%	168%
Self-employment	80%	150%
Components of the Livelihood Protection Basket (LPB)		
Fertilizer		214%
Staple Food (Maize)		308%
Inflation		217%

Legend: ---- means that price problem specification for those items was left blank in the LIAS because data were not available during the analysis. In such cases, the spreadsheet will apply automatically the problem specification for inflation (188%) to those items.

NG03: NW Millet, Cowpeas and Groundnuts Livelihood Zone

Problem Specification for NW Millet, Cowpeas and Groundnuts Livelihood Zone		
Key parameter	Production Problem	Price Problem
Cattle	100%	134%
Goats	100%	136%
Sheep	100%	135%
Cow's Milk	100%	132%
Sorghum	135%	128%
Millet	123%	195%
Rice	200%	169%
Cowpeas	128%	148%
Maize	122%	140%
Groundnuts	165%	159%
Pepper	111%	111%
Agricultural labor: pre-harvest	85%	173%
Construction	65%	158%
Firewood & Charcoal sales	80%	164%
Trade: livestock & dry goods	80%	140%
Components of the Livelihood Protection Basket (LPB)		
Fertilizer		200%
Labor		174%
Animal drugs		162%
Ploughing/Land rental		175%
Transport		163%
Education		180%
Medicine		210%
Tax		180%
Staple Food (Millet)		275%
Inflation		176%

Legend: ---- means that price problem specification for those items was left blank in the LIAS because data were not available during the analysis. In such cases, the spreadsheet will apply automatically the problem specification for inflation (250%) to those items.

NG06: NW Sorghum, Cowpeas and Groundnuts Livelihood Zone

Problem Specification for NW Sorghum , Cowpeas and Groundnuts Livelihood Zone		
Key parameter	Production Problem	Price Problem
Cattle	80%	155%
Goats	80%	124%
Sheep	80%	150%
Cow's Milk	100%	176%
Sorghum	130%	141%
Millet	142%	165%
Rice	120%	132%
Cowpeas	117%	133%
Maize	119%	151%
Groundnuts	146%	142%
Pepper	142%	103%
Onions	134%	150%
Agricultural labor: pre-harvest	85%	165%
Construction	60%	158%
Fetching Water	70%	167%
Firewood & Charcoal sales	65%	171%
Trade: livestock & dry goods	75%	107%
Components of the Livelihood Protection Basket (LPB)		
Fertilizer		175%
Labor		157%
Animal drugs		160%
Ploughing/Land rental		165%
Transport		172%
Education		172%
Medicine		184%
Tax		
Staple Food (Sorghum)		194%
Inflation		176%

Legend: ---- means that price problem specification for those items was left blank in the LIAS because data were not available during the analysis. In such cases, the spreadsheet will apply automatically the problem specification for inflation (152%) to those items.

NGI0: NC Maize, Sorghum and Cotton Livelihood Zone

Problem Specification for NW Sorghum , Cowpeas and Groundnuts Livelihood Zone		
Key parameter	Production Problem	Price Problem
Cattle	100%	131%
Goats	100%	140%
Sheep	100%	111%
Cow's Milk	100%	130%
Maize	133%	145%
Sorghum	140%	140%
Rice	129%	150%
Millet	108%	145%
Cowpeas	94%	110%
Soya beans	122%	128%
Groundnuts	122%	153%
Onions	111%	120%
Tomatoes	117%	119%
Pepper	122%	110%
Agricultural labor: cultivation	90%	125%
Construction	80%	154%
Domestic Labor	60%	105%
Other self-employment	80%	----
Components of the Livelihood Protection Basket (LPB)		
Fertilizer		188%
Pesticide		200%
Land rental		120%
School		127%
Medicine		111%
Animal Drugs		140%
Staple Food (Sorghum)		248%
Staple Food (Maize)		205%
Inflation		176%

Legend: ---- means that price problem specification for those items was left blank in the LIAS because data were not available during the analysis. In such cases, the spreadsheet will apply automatically the problem specification for inflation (152%) to those items.

NGI2: NE Millet, Cowpeas and Sesame Livelihood Zone


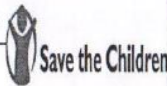
Problem Specification for NW Sorghum , Cowpeas and Groundnuts Livelihood Zone		
Key parameter	Production Problem	Price Problem
Cattle	100%	131%
%Goats	100%	140%
Sheep	100%	111%
Cow's Milk	100%	130%
Maize	133%	
Sorghum	140%	140%
Rice	129%	
Millet	108%	145%
Cowpeas	94%	110%
Groundnuts	122%	153%
Onions	111%	120%
Agricultural labor: cultivation	90%	125%
Construction	80%	154%
Components of the Livelihood Protection Basket (LPB)		
Fertilizer		188%
School		127%
Medicine		
Staple Food (Maize)		205%
Inflation		176%

Legend: ---- means that price problem specification for those items was left blank in the LIAS because data were not available during the analysis. In such cases, the spreadsheet will apply automatically the problem specification for inflation (152%) to those items.

7.2 Table summarizing the Outcome Analysis results

Country	LZ description	Baseline	State	LGAs	Population	Wealth Groups	% Population	Timing of Deficit	Survival Deficit	LP Deficit (%Kcal)
NIGERIA	Millet & Sesame LZ (MAS)	Sept09-Aug10	Katsina	Baure, Daura, Dutsi, Mashi, Zango & Sandamu	1,351,607	VP	34%	Apr- Aug, 2018	20%	11%
						P	32%	August, 2018	No deficit	8%
						M	19%	No deficit	No deficit	No deficit
						BO	16%	No deficit	No deficit	No deficit
	NW Cotton, Groundnuts & mixed Cereals LZ (CGC)	Sept11-Aug12	Zamfara	Bungudu, Gusau, Maru & Tsafe	1,604,678	VP	26%	Jul-Aug, 2018	No deficit	16%
						P	26%	August, 2018	No deficit	7%
						M	26%	No deficit	No deficit	No deficit
						BO	22%	No deficit	No deficit	No deficit
	Hadejia Valley Mixed Economy LZ (HVM)	Sept10-Aug11	Jigawa	Kafin Hausa, Auyo, Guri, Kiri Kassama, Malam Madori & Kaugama	1,333,560	VP	38%	No deficit	No deficit	No deficit
						P	20%	No deficit	No deficit	No deficit
						M	23%	No deficit	No deficit	No deficit
						BO	19%	No deficit	No deficit	No deficit
	Maize, Sorghum and Cotton LZ (MSC)	2012-13	Bauchi	Alkaleri, Bogoro, Dass, Gamjuwa, Ningi, Toro & Tafawa Balewa	2,259,076	VP	30%	No deficit	No deficit	No deficit
						P	26%	No deficit	No deficit	No deficit
						M	23%	No deficit	No deficit	No deficit
						BO	21%	No deficit	No deficit	No deficit
	Millet, Cowpeas and Sesame LZ (MCS)	2012-13	Bauchi	Misau, Katagum, Gaide, Gamawa, Darazo & Damban	1,817,466	VP	27%	August, 2018	No deficit	2%
						P	29%	No deficit	No deficit	No deficit
						M	25%	No deficit	No deficit	No deficit
						BO	18%	No deficit	No deficit	No deficit
Millet Cowpea and Groundnut					VP			No deficit	No deficit	
					P			No deficit	No deficit	
					M			No deficit	No deficit	
					BO			No deficit	No deficit	
Millet Cowpeas and Groundnuts LZ (MCG)	Sept12-Aug13	Jigawa	Gagarawa, Buji, Jahun, Birnin Kudu, Kiyawa, Dutse, Miga & Taura	1,878,024	VP	34%	No deficit	No deficit	No deficit	
					P	21%	No deficit	No deficit	No deficit	
					M	20%	No deficit	No deficit	No deficit	
					BO	26%	No deficit	No deficit	No deficit	
Sorghum Cowpea and Groundnut LZ (SCG)	Sept12-Aug13	Zamfara	Anka, Bukkuyum & Gumi	756,288	VP	33%	No deficit	No deficit	No deficit	
					P	20%	No deficit	No deficit	No deficit	
					M	23%	No deficit	No deficit	No deficit	
					BO	24%	No deficit	No deficit	No deficit	

7.3 List of participants

ATTENDANCE SHEET									
		Outcome Analysis Workshop							
Date: 16th to 19th October, 2017.					Location: Kano State				
S/N	Names	Sex	Organization	State	Email/phone number	16/10/2017	17/10/2017	18/10/2017	19/10/2017
1	Ahmed Yr. Kangiso	M	IFAD-CASP	Katsina	0808037705	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	Mamir Ahmed Zapo	M	K.A.A.P.	Katsina	0706435280	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	Mubeccar Farbi	M	JISWA ADP	Sigma	khuseidgi589@gmail.com	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4	Mattmoo Bala Umar	M	Manu-Bauchi	Bauchi	abumamam2kg@mail.com 05039172312	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5	Onutt Innocent	M	SGR (FMAR)	FCT	innocentonut@gmail.com 08069228824	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6	Nuruddeen Lallo	M	SEMA	Zamfara		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7	Ksch m' lallo	M	2.A.SP	Zamfara	08065971281	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8	YALAN BOBO ABBU	M	SCI	DAKAR	+22178638046	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
9	Emilie PASQUET	F	SCI	DAKAR	+221777408979	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10	AFI VOSSAH	F	SCI	Dakar	+221777889255	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
11	Abubakar Sadiq Hassan	M	ADP	Bauchi	abubakarhassan.sadiq@gmail.com 08069062627	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
12	Abubakar Hassan	M	IFAD	Jigawa	abubakarhassan.jigawa@gmail.com 07067324147	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
13	Labaranm Salisu	M	Budget Jg.	Jigawa	labaranm.salisu@gmail.com 08065722526	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
14	Benjamin Morris Ramnap	M	CSW-N	Jigawa	07037170557	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

15	UMAH OUYEMAECHI UMAH	M	NOTICE	KATSINA	07036771841	U	U	U	U
16	Ibi C. Yusuf	M	W/F Centre	Katsina	ydem2019@yahoo.com	I	I	I	I
17	Harung Abubakar	M	NEMA	Bauchi	abubakarharung162@gmail.com	H	H	H	H
18	Abdulrazak Usman M.	M	State Bureau of Stat	Zamfara	amuriki@yahoo.com	A	A	A	A
19	AKA CHIMEZIE BRIGHT	M	N.P.T.S G.S. Unit	ABUJA	pkwail@yahoo.com	A	A	A	A
20	Gegey Monyei	M	Majesty Fundat	Abuja	8023391481 Majestyfund.com	S	S	S	S
21	Joseph-O. Akwiri	M	fmb.n.p	Abuja	0703461532	J	J	J	J
22	Agbo Imuluy	M	SCI	Abuja	08020389179	A	A	A	A
23	Chinyere Anyagba	M	SCI	Abuja	0806720732	C	C	C	C
24	Alhassan Alhassan	M	NEMA	Abuja	07039520037	A	A	A	A
25	AKA CHIMEZIE								
26									