Updated Outcome Analysis Nigeria

June 2013

Save the Children

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The Currency Rate:

At the time of the outcome analysis, value of the Nigerian Naira was NGN 150 = USD $1.

Photo Credits:

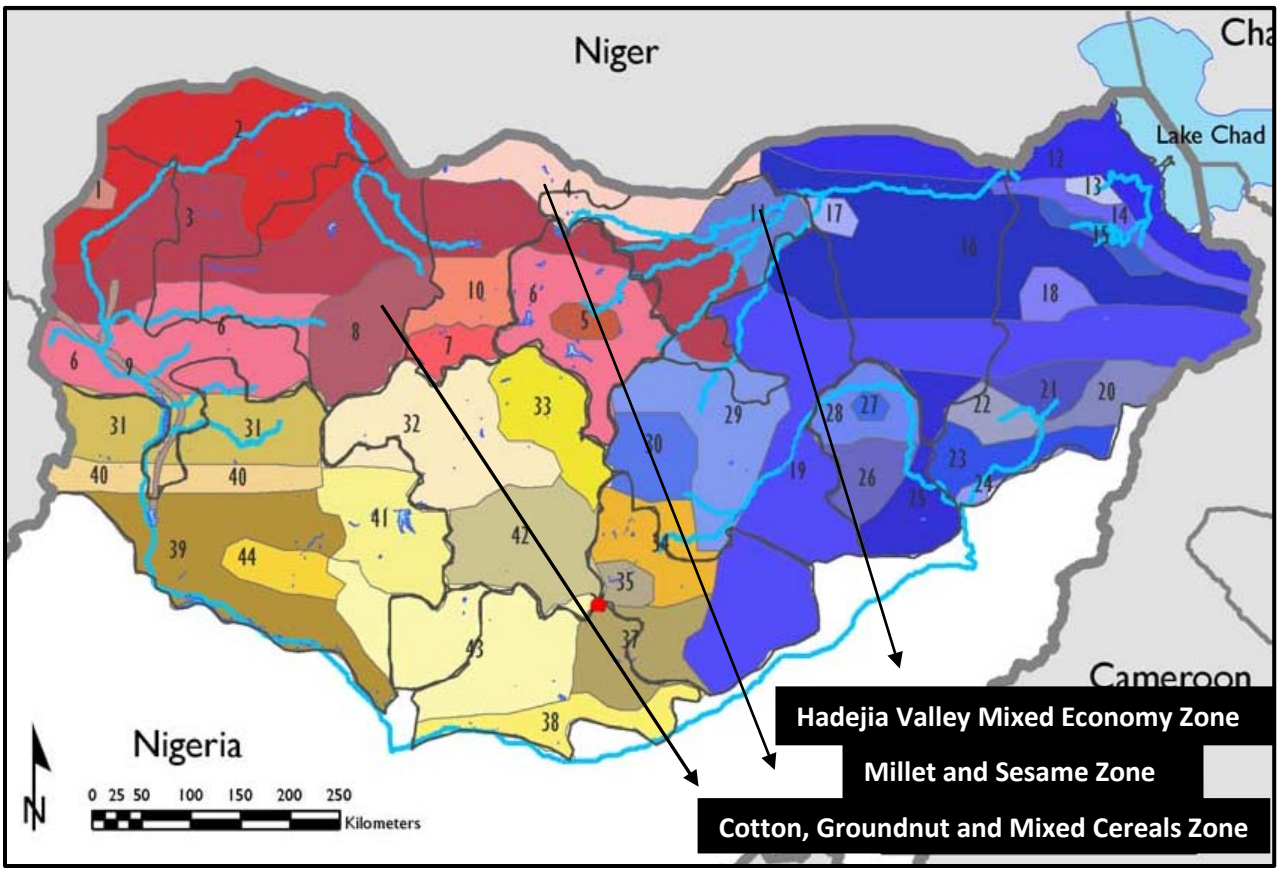
The photograph on the cover page was taken in Jigawa State @ by Auwalu Bello, December 2012.

Data Credits:

All the food, income and expenditure data graphed in the report is from primary field work carried out in November-December 2012. Production and price data used in the outcome analysis is from the Zamfara State ADP, Katsina State ADP and Jigawa State ADP (JARDA). Some price data was collected by the analysis team from Gusau (Zamfara), Daura (Katsina) and Hadejia (Jigawa) markets.

Livelihood Zone Map of Northern Nigeria

(Source: FEWS NET)



2013 Outcome Analysis Results, 3 Livelihood Zones, Nigeria

Summary of the Findings

Summary of Outcome Analysis Results by Wealth Group and by Livelihood Zone			
	CGC	**HVM**	**MAS**
V.Poor		**Initial food deficit: 21%**	
	No deficit	No final deficit	No deficit
Poor		**Initial food deficit: 21%**	
	No deficit	No final deficit	No deficit
Middle		**Initial food deficit: 21%**	
	No deficit	No final deficit	No deficit
Better-off		**Initial food deficit: 6%**	
	No deficit	No final deficit	No deficit

The results from the outcome analysis show that there is **no need for emergency food or cash interventions to meet acute needs**. In the Hadejia Valley Mixed Economy (**HVM**) Zone, floods led to reduced crop output and higher prices resulting in an initial food deficit of 21% of the annual food needs of most households. . An assumption in the analysis is that for the most part, affected households have some ways of coping with economic shocks. In this case, given higher cash crop prices in the current year, farmers in need of cash to buy staple grain will sell high value crops (rice, tomatoes, peppers and onions for example) to purchase a low value grain such as millet instead. With the cash generated, it is assumed that they will be able to cover the initial food deficit created from flood damages.

Recommendations:

1. Continue to focus development efforts on assisting the very poor and the poor to secure more stable sources of income to complement crop and livestock farming.

2. Monitor the supply of lower cost staple grains in the market (i.e., millet and sorghum).

3. Begin to gather long-term trend data on items that make up the survival non-food basket and the livelihood protection basket (soap, salt, fertiliser, and kerosene for example).

4. Update population estimates disaggregated by rural or urban location. These figures are required to accurately calculate assistance needs in the event of a survival or livelihood protection deficit.

What are survival and livelihood protection thresholds? Measuring food and income deficits in HEA.

HEA analysis is designed to measure whether households in a certain area fall below survival or livelihood protection thresholds. The survival threshold represents a survival food minimum (2100 kcals per person per day) as well as the basic non-food costs of preparing food. The livelihood protection threshold represents the cost required to maintain livelihoods at the baseline level. As the livelihood status of the very poor and the poor falls below USD 1 pppd, this is clearly not a development goal. Instead, it is meant to help planners decide whether there is need for an emergency intervention and if so, how much food or cash is needed for how many people and for how long.

Background and Methodology

From 6-7 June 2013, SCI staff from Zamfara and Katsina offices, together with government and ACF International partners in Zamfara and Jigawa States came together to analyse the impact of rising consumer prices and low production on the household economy in three

livelihood zones. This analysis updates an earlier one in February which focused on the impact of poor production caused by flooding. The June analysis used price data from April-May 2013. Although consumer prices typically peak around June-July-August, nonetheless, by April, prices have already begun to rise. The extent of price increases in April can indicate how severe price rises will likely be by the peak period. Thus the analysis is indicative of the likely economic status of households during the hunger season.

The current year production and price data is used to assess a change in baseline food and income access for four different wealth groups, and provide an analysis of the current year outcome. The **current year** for this outcome analysis is the period covering September 2012 to August 2013. The baseline data used in the analysis comes from field work undertaken in two phases. The first phase of data collection took place in November 2010 in the Millet and Sesame (**MAS**) Livelihood Zone in Katsina State. [1] The second phase of baseline work took place in November-December 2012 in the Cotton, Groundnut, and Mixed Cereals (**CGC**) Zone in Zamfara State as well as in the Hadejia Valley Mixed Economy (**HVM**) Zone in Jigawa State. [2] The baseline assessment gathers household food, income and expenditure data by wealth group. It also includes a compilation of basic household assets. Baseline data covers a particular reference year, typically a recent average production year. This is not the same year in each zone. More detail on the study`s methodology and analytical framework are covered in Annex I and Annex II.

It should be noted that the reference year was different for each of the three livelihood zones as seen in the table below.

	Reference Year (RY)	
Katsina MAS Zone	Sept 2009 -	Aug 2010
Jigawa HVM Zone	Sept 2010 -	Aug 2011
Zamfara CGC Zone	Sept 2011 -	Aug 2012

Update on the Current Year

In February 2013, an outcome (or impact) analysis of current flooding events on household food and livelihood security was undertaken for the three livelihood zones where SC UK and their partner ACF work. There were concerns that flooding in agricultural areas of northern Nigeria would lead to elevated levels of food insecurity. This situation could be aggravated by civil insecurity in the affected areas. Moreover, another possible disruption to food security was an anticipated reduced access to agricultural labour if better-off households decreased their level of hire during the weeding and harvest season. On a national scale, overall crop production in 2012 was 2% higher than 2011 which was considered a bumper year for the country. However, rice output was down from 2011 levels by 10% in the affected areas and this was cause for concern.

In May-June 2013, a second outcome analysis was run with updated consumer price data and

[1] Data for this study focuses on three livelihood zones. A FEWS NET exercise in 2007 identified 44 livelihood zones across the 15 states of northern Nigeria. Livelihood zones themselves are geographical areas in which households roughly share the same production and income options as well as similar market access.

[2] LGAs in the Zamfara CGC Zone include: Bungudu, Gusau, Maru and Tsafe.
In Katsina MAS Zone, only Daura LGA was covered during field work.
LGAs in Jigawa HVM Zone include: Kafin Hausa; Guri, Kiri Kasamma, Auyo, Malam Madori, Kaugama, and Biriniwa.

updated second season production data. In general throughout the north, there is concern that flood impacts and civil insecurity will disrupt markets and the supply of goods thereby pushing up consumer prices. This was one reason for running a second outcome analysis using updated monitoring information. The results will help planners to assess which zones, and which households, are at particular risk of food or income gaps in light of recent price changes.

Results by Livelihood Zone

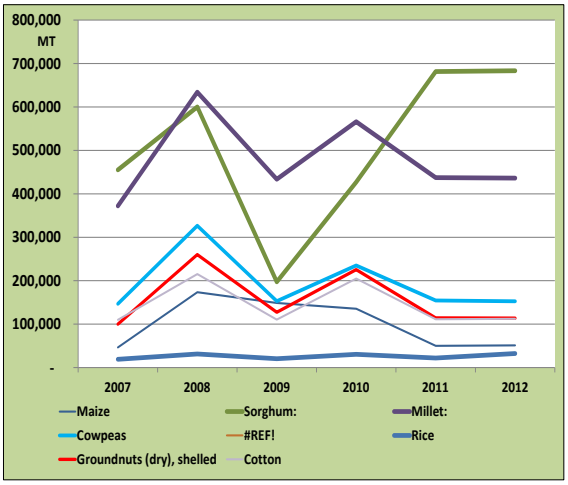
Zamfara CGC Results

Characteristics of the CGC Livelihood Zone

Cotton, Groundnuts and Mixed Cereals ZAMFARA State	
Livestock	Cattle, goats, sheep, poultry
Crops	*Rain-fed*: sorghum, millet, maize, groundnuts, soybeans, cowpeash
	Dry-season: rice, market vegetables
Cash Crops	Cotton
Income	Livestock sales, crop sales, casual labour, firewood sales, petty trade, milk sales
Other	Sales of baobab leaves, moringa, hibiscus, shea nut

Sorghum and millet are the two principal crops grown in the zone. In 2012, production trends were remarkably similar to 2011. Only sorghum did well in 2011 and 2012. Output was **below average** for all other crops (see graph at right).

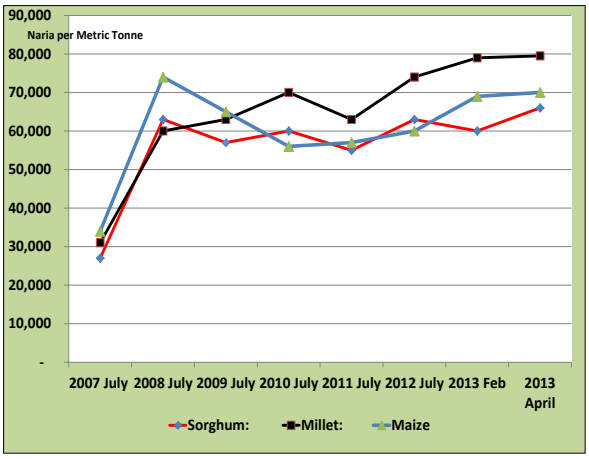
Cereal Yields (in MT), Zamfara State, 2007-2012



Consumer Grain Price Scenario

Pre-Harvest Staple Grain Prices: Staple grain prices typically peak from June-August when the poor have run down their own food stocks and purchase their food instead. In the current year, the consumer price of sorghum and millet shows only slight increases from the 2012 peak price. Nonetheless, even these increases can affect the household budget of the poor.

Pre-harvest Sorghum Purchase Price Trends, Naira per MT, 2007-2012, Gusau , Zamfara State



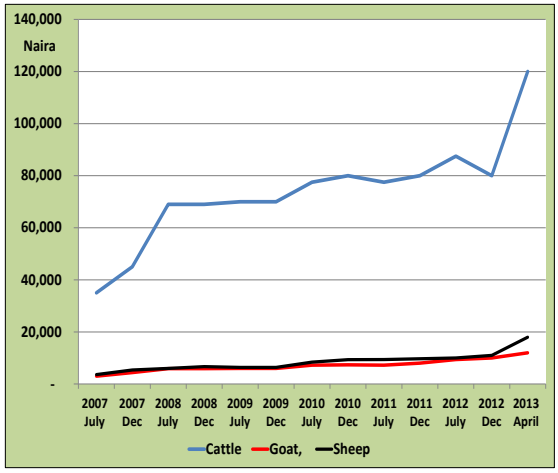
The largest difference in peak prices from July 2012 to May 2013 is maize (117% higher than

last year). For the most part, the poor buy sorghum and millet which show increases of 105-107% from the 2012 peak price. Notably, the overall trend since 2011 has been upward (see graph previous page).

Livestock Price Scenario

Cattle and goat prices in Gusau saw a steep rise between July 2012 and April 2013 to 130-140% of the baseline value. Sheep prices increased more steeply still. In the Gusau market, sheep prices in April 2013 were 180 % higher than in July 2012. (See graph below.) Higher prices in April 2013 perhaps represent a shortage of cattle and goats on the market. Notably, comparative prices from December 2011 and December 2012 remained stable, and this is the period when livestock sales are highest.

Livestock Price Trends, Naira per Animal, 2007-2013, Gusau, Zamfara State



Other Sources of Income

The main sources of income for poor households in the CGC livelihood zone are firewood sales and casual labour. In April 2013, prices were a 125-135% of their baseline value (i.e., compared to July 2012). These price and wage increases are likely in response to price increases in other general goods. It is expected that they will help to cushion the effect of rising prices on the household budget of the poor.

Inflation

In order to account for possible inflation, items such as kerosene, firewood, pulses, milk, fertiliser, seeds and agricultural labour are tracked for price changes. Such price changes reflect shifts in the cost of living that can then be compared to shifts in other parameters.

In the Zamfara **CGC** livelihood zone, there is limited price data for goods in the survival non-food basket (which includes salt, soap, kerosene, firewood and water). A price increase of 133% was applied. This reflects firewood price increase. A price increase of 125% was applied to the livelihood protection basket reflecting price increases of pulses, milk, oil, fertiliser and agricultural labour.

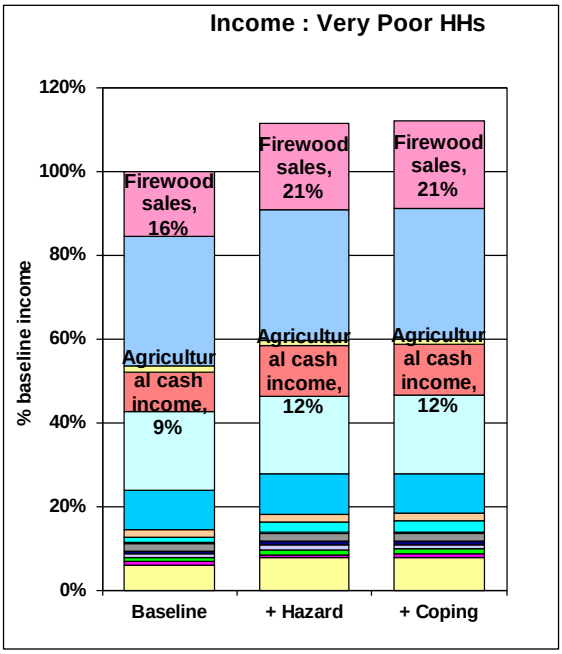
Summary – Current Year Specification

In the following table, a detailed problem specification shows the percentage change in value from the reference year to the current year using updated consumer price figures from April 2013. A figure greater than 100 means that production or prices increased since the reference year.

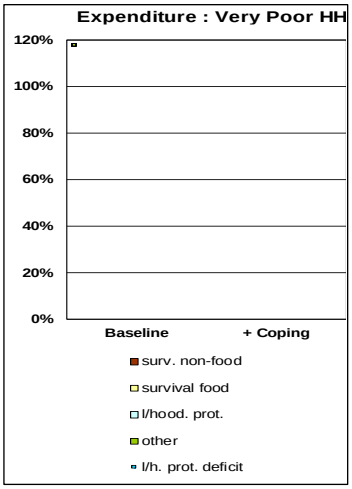
Current Yr. Scenarios CGC - Zamfara		
Source	Production problem	Price problem
milk	105%	150%
cattle sales		120%
goat sales		126%
sheep sales		147%
sorghum		99%
millet		129%
maize	102%	115%
rice	148%	121%
cowpeas	99%	150%
soybeans	102%	202%
groundnuts		97%
cotton	101%	141%
ag. labour		126%
construction		
firewood sales		133%
petty trade		
purchase		
staple		106%
survival non-food		133%
livelihood prot		125%
cells left blank mean 100% of RY value		

Outcome Analysis Results

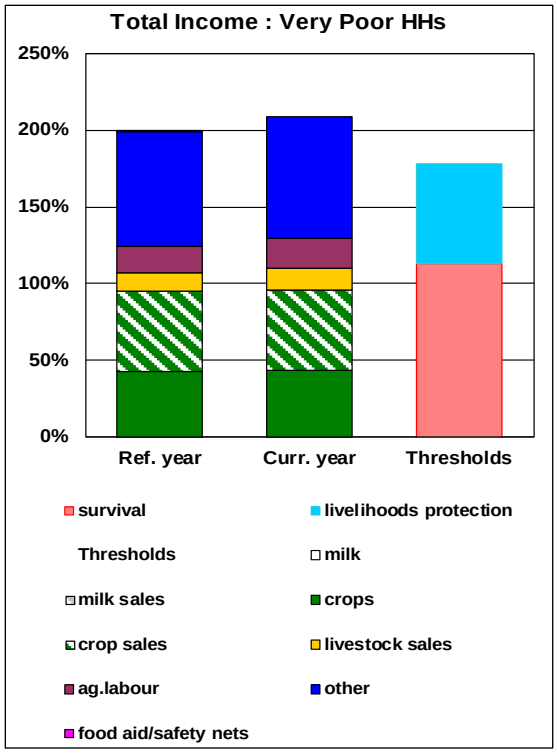
The results for the current year scenario analysis show that there will be no emergency survival or livelihood protection deficits. Production was stable with last year`s output although compared to trends over the past 5 years, production was low. Due to low production, staple prices are higher than last year`s peak pre-harvest prices. Nonetheless, most households should be able to cope with these problems. Arguably, the poor will secure a bit more income than last year by benefiting from higher firewood prices. Wage rates increased during the year and this will also help poor labourers earn more income to pay for rising staple grain prices (see graph right).



The expenditure graph below shows that with the extra income earned from firewood sales, casual labour, crop sales and livestock sales, even the very poor should be able to cope with higher expenditure needs due to the increased cost of living. In other words, they should be able to maintain their standard of living notwithstanding the higher cost of goods and services.



The total income graph below shows that the resources of the very poor are sufficient to cover their survival and livelihood protection needs in the current year. The result is depicted by the **Current Year** bar which is higher than the Thresholds bar, indicating that no emergency assistance required.



Katsina MAS Results

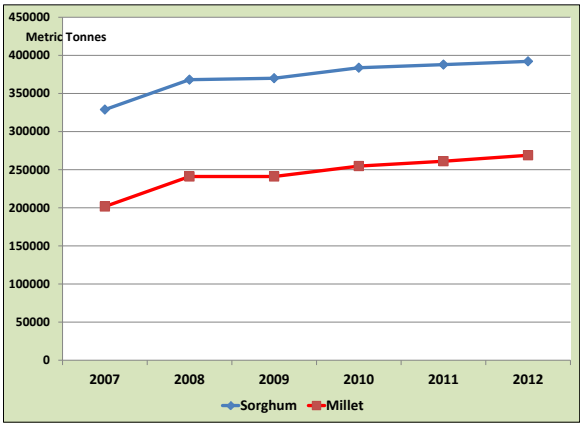
Characteristics of the MAS Livelihood Zone

Millet and Sesame Zone KATSINA State	
Livestock	Cattle, goats, sheep, poultry
Food crops	Millet, sorghum, cowpeas
Cash crops	sesame
Income	Livestock sales, milk sales, crops sales, agricultural labour, construction labour, petty trade, firewood sales

Crop Production Scenario

There is no updated crop production data to report in this June 2013 scenario analysis. The current year production outcome for the principal crop, millet, was good in comparison to the last 5 years (see graph below). Note that in this zone, the reference year was based on the 2009 harvest. Compared to the last three years, 2009 was slightly below-average.

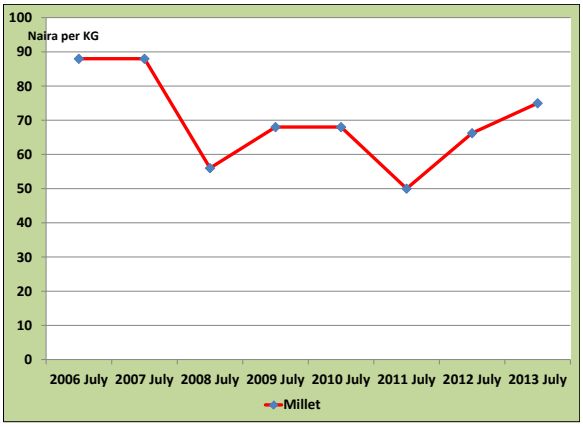
Millet & Sorghum Yields (in MT), Katsina State, 2007-20012



Consumer Grain Price Scenario

Pre-Harvest Millet Purchase Price: In the last two years, since 2011, the consumer price of millet has risen sharply despite some gains in overall output over the last three years.

Millet Pre-harvest Consumer Price Trends, Naira per KG, 2007-2012, Daura, Katsina State

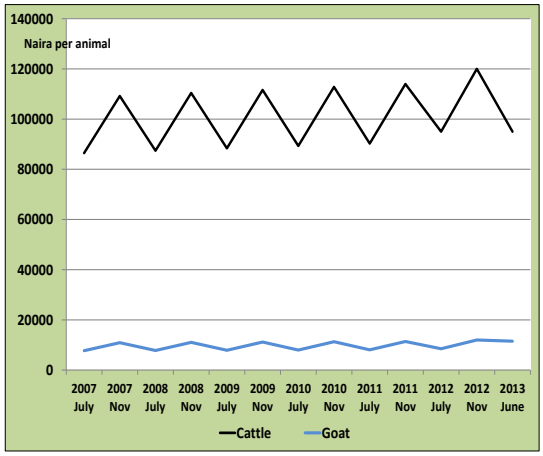


However, since the baseline year (i.e., comparing the current year peak price to the peak price in July 2010), the price increase has not been as sharp. Millet prices in the current year (May/June 2013) increased to 112% of their baseline value. This will affect poor households' spending power during the current hunger season.

Livestock Price Scenario

Since 2007, cattle, goat and sheep prices have very slowly risen (see graph below).

Livestock Price Trends, Naira per Animal, 2007-2013, Daura, Katsina State



The price rise (107% for cattle and 122% for sheep and goats, taking an average price for the year) is similar to the consumer price increase of the staple grain, millet (112%).

Other Sources of Income

Wage rates increased in the current year compared to the 2009-2010 baseline year as did the producer price of firewood. These price increases – 125% for agricultural income and firewood; 107% for construction labour - are in line with the consumer price increase of millet. This means that the income of the poor will likely increase enough to meet rising food bills, as long as the demand for labourers and demand for firewood is sustained even at the higher price level.

Inflation

Prices for most goods in the survival non-food and livelihood protection baskets have increased since 2009. Goods such as firewood, pulses, sorghum, milk, cooking oil, fertiliser and agricultural labour increased in price to 105-140% of the baseline value. An average price increase for all goods of 125% has been applied in the 2012-2013 scenario analysis.

Summary – Current Year Specification

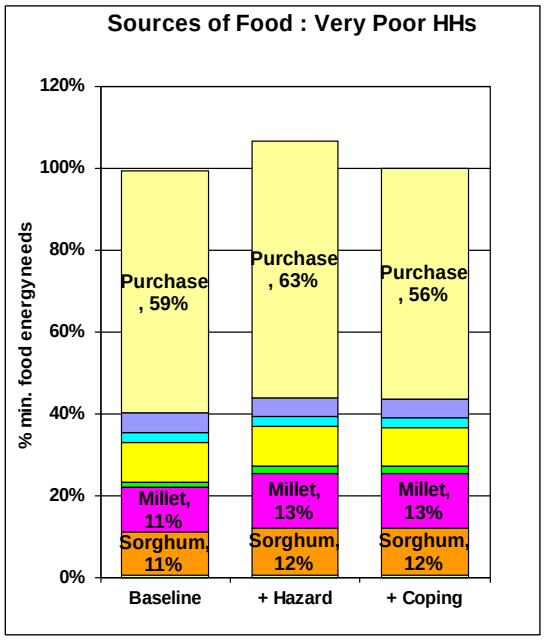
Current Yr. Scenarios MAS - Katsina		
Source	Production problem	Price problem
milk	133%	115%
cattle sales		107%
goat sales		123%
sheep sales		122%
sorghum	108%	191%
millet	125%	99%
cowpeas	131%	285%
sesame	109%	122%
ag. labour		124%
construction		107%
firewood sales		125%
petty trade		
purchase		
staple		112%
survival non-food		125%
livelihood prot		125%
cells left blank mean 100% of RY value		

Outcome Analysis Results

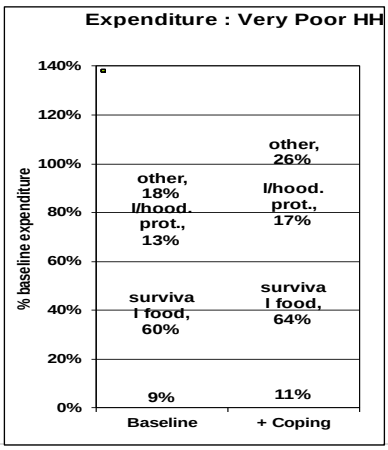
The results for the Katsina Millet & Sesame Zone analysis show that households – even the very poor households – will not require emergency aid this year. Production outcomes have improved since 2009 (the baseline year) which means that food access will also improve.

In particular, food access from millet production increased in the current year. Millet production increased from 11% to 13% of annual food needs for the very poor; from 28% to 35% for the poor; from 34% to 43% for the middle-income; and from 77% to 96% for the better-off. The graph below shows the result for poor households in the Millet and Sesame Zone.

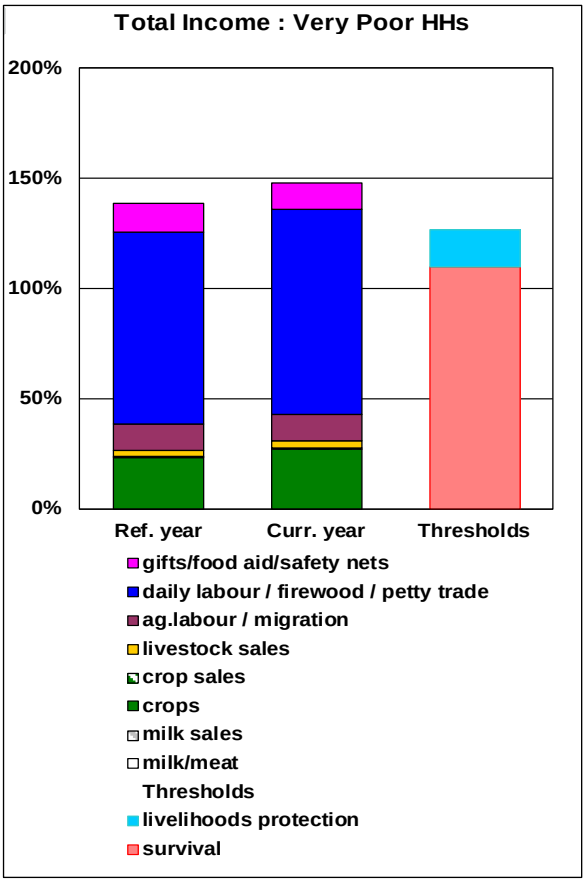
Notably in this zone, food purchases comprise a significant proportion of annual food energy. For instance, food purchases by the very poor comprise an estimated 57%-63% of annual food needs in the current year.



In the current year, the poor will have to cope with higher millet prices. However, it is expected that they will be able to cope with higher millet prices through income earned from casual labour, firewood sales and goat sales. Wage rates and other producer prices increased in the current year relative to the baseline year and these price increases will help absorb the cost of higher staple grain prices.



The expenditure graph, left, illustrates these trends. Very poor household income is projected to increase to 120% of baseline levels. When calculated as real income, this increase amounts to Naira 15,000-20,000 per household per year. Per capita, the increase is Naira 2,150-2,900 per year. The expenditure graph shows that with this projected higher income, the very poor can absorb a rise in staple food expenditures from 60% in the baseline year to 64% of current year.



The total income graph above illustrates two important points. First, in the current year, total household resources of the very poor will be sufficient to cover survival and livelihood protection needs as production conditions have improved since 2009-2010.

Second, the very poor in this zone secure very few resources from their own crops and livestock. These two sources comprise only 30% of total household resources. The rest is

secured through casual labour, petty trade and firewood sales. The analysis uses price data for these income sources but formal data on casual job availability or demand for firewood is not easily collected. Hence, the analysis assumes that the supply of jobs and the demand for firewood is stable. If this assumption is wrong, then clearly the very poor would not earn sufficient income to cover rising millet costs and other price increases.

Jigawa HVM Results

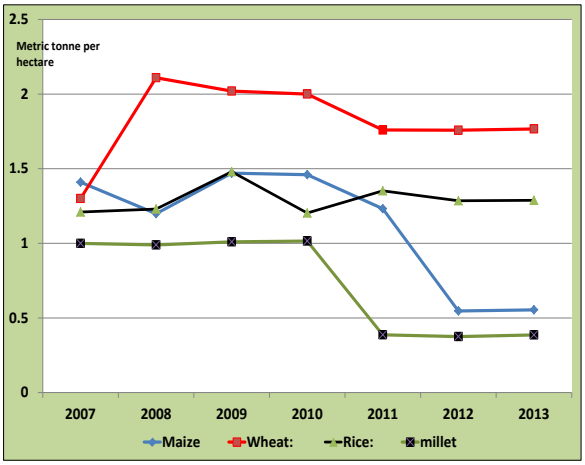
Characteristics of the HVM Livelihood Zone

Hadejia Valley Mixed Economy Jigawa	
Livestock	Cattle, goats, sheep, poultry
Crops *Food and Cash Crops*	*Rain-fed* : maize, millet, sorghum, rice, cowpeas
	Dry-season : wheat, rice, market vegetables,
Income Source	livestock sales, milk sales, crop sales, agricultural labour, construction
Other	Fish sales
Reference Year (RY)	
September 2010 - August 2011	

Crop Production Scenario

In the **HMV** livelihood zone, maize, millet, rice and wheat are the principal crops grown. Secondary crops include sorghum, cowpeas and sesame. In 2011 and 2012, maize and millet production was notably low. Rice and wheat yields also fell due to flood impacts (see graph below).

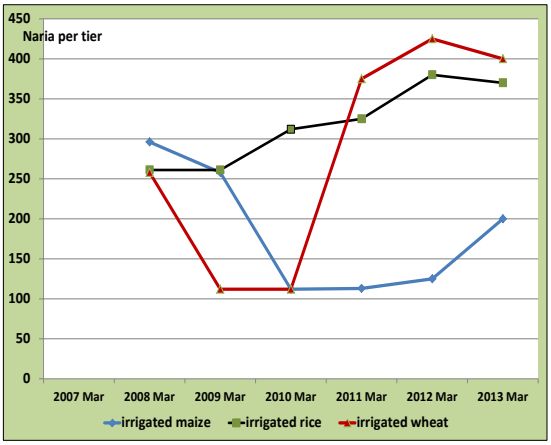
Staple Grain Yields, MT/ha, 2007-2012, Jigawa State



Price Scenario

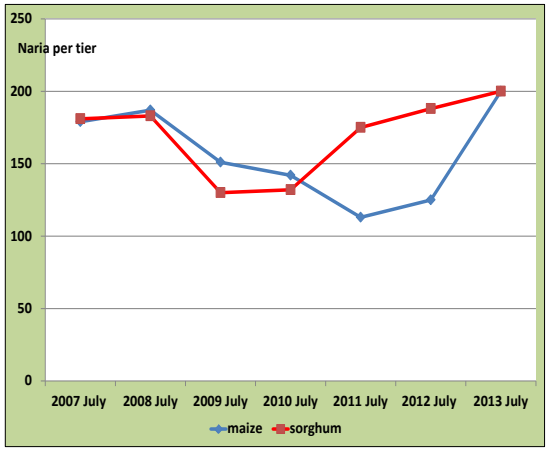
Post-harvest Crop Prices: The high price of dry season (or irrigated) crops reflects the very poor harvest outcome. However, high post-harvest producer prices benefit farmers who sell a portion of their harvest as long as there is a cheaper grain to purchase in exchange. For the most part, farmers from all wealth groups should have some rice and wheat to sell at a price about double the cost of maize and sorghum. This should help cushion the blow of poor production (see graph below).

Post-Harvest Producer Price Trends for Cereals, Naira per tier, 2008-2013, Hadejia, Jigawa State



Pre-harvest Consumer Prices for Staple Grains: Just as producer prices rose in the current year, reflecting low supply due to poor production, so too have consumer prices for staple grains. The projected July 2013 price uses data from May 2013. Prices may continue to rise in June-July-August which will be hard on the poorer households who are relying more on market purchases this year to access their staple grains (maize, sorghum and millet). Maize prices rose to 177% of the baseline (July 2011) value. Sorghum rose to 114% and millet increased to 123% (see graph below).

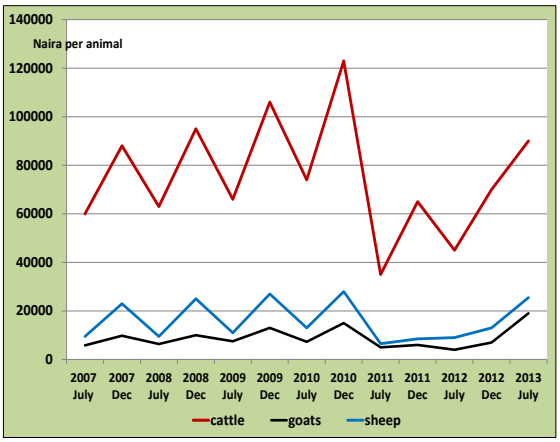
Pre-harvest Consumer Price Trends for Staple Grains, Naira per Tier, 2007-2013, Hadejia, Jigawa



Livestock Prices Scenario

In general, in the Hadejia Valley livelihood zone, the period of highest livestock sales is November/December. April is a second peak period of sales. The prices plotted in the graph below reflect the seasonal highs and lows. Prices typically peak in December then fall in July. However, in the current year, prices for cattle, goats and sheep have continued to rise. This will benefit farmers who sell livestock at this time although the high price may suggest a shortage of livestock on the market.

Livestock Price Trends, Naira per Animal, 2007-2013, Hadejia , Jigawa State



Other Sources of Income

In the **HMV** livelihood zone, other sources of income include agricultural labour, construction labour, fish sales, and, to a lesser extent, firewood sales. Of these income sources, there is reliable data on wage rates (both for agricultural labour and for urban construction labour). In the current year, men`s agricultural wage rates increased compared to the reference year. However, women`s wage rates dropped.

Inflation

In the 2012-2013 current year analysis, small increases in the cost of the survival non-food and livelihood protection basket were applied. These reflect the price increase for milk, cowpeas, and (male) agricultural labour. Price data for other items such as soap, salt, kerosene, firewood, fertiliser and seeds, which are also key goods in the survival and livelihood protection baskets, was not available for the current analysis. For this reason, the inflation problem specification is a rough estimate.

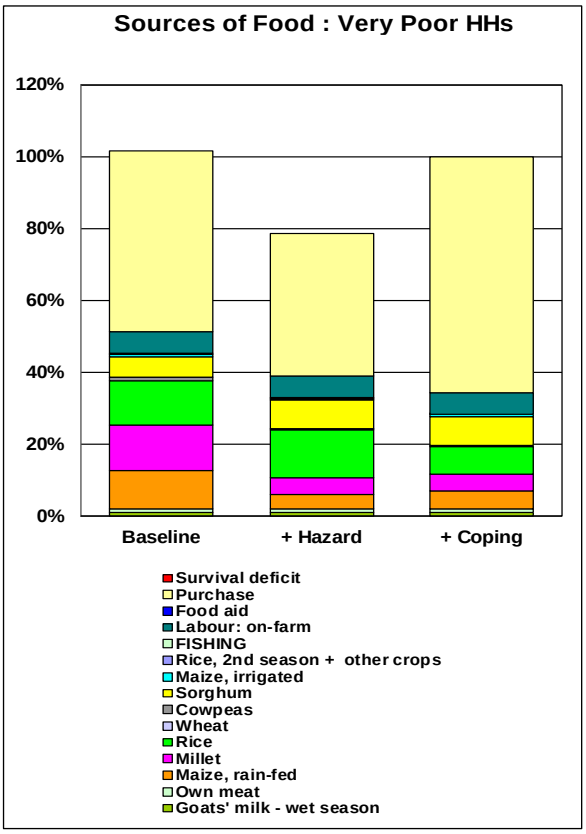
Summary – Current Year Scenario

The scenario for the HMV livelihood zone uses the monitoring data from JARDA to assess production and price changes since the 2010-2011 reference year. The scenario also reflects that 2012-2013 was a second bad year and hence does not apply all coping strategies. In particular, the scenario assumes that agricultural labour cannot be expanded. The scenario also uses a consolidated staple price problem using May 2013 prices for maize, millet and sorghum.

Current Yr. Scenarios HVM - Jigawa		
Source	**Production problem**	**Price problem**
milk		113%
cattle sales		101%
goat sales		130%
sheep sales		112%
sorghum	145%	81%
millet	38%	107%
maize	70%	150%
rice	107%	129%
cowpeas	35%	114%
wheat	88%	125%
maize irrigated	38%	177%
tomatoes	146%	93%
ag. labour		93%
construction		
fishing		
petty trade		
purchase		
staple		138%
survival non-food		115%
livelihood prot		115%
cells left blank mean 100% of RY value		

Outcome Analysis Results

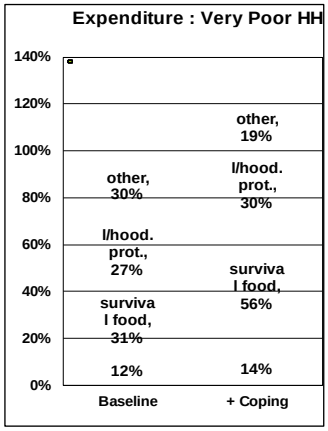
Significant harvest shortfalls in 2012, particularly of maize, wheat, millet and cowpeas mean that many farming households will face a huge drop in own-crop consumption. Given the importance of crop production in the local food economy, very poor, poor and middle-income households will all face initial deficits of about 21% of their annual food needs. **In other words, compared to the baseline year, own crop consumption drops by 20% of annual food needs.** The question then becomes do the very poor, poor and middle-income households have the means to make up this gap?



The graph above shows the initial effect of flood impacts on food access for very poor households. There was a significant drop in millet and maize production in the current year (with hazard). The potential food gap can likely be filled through purchases.

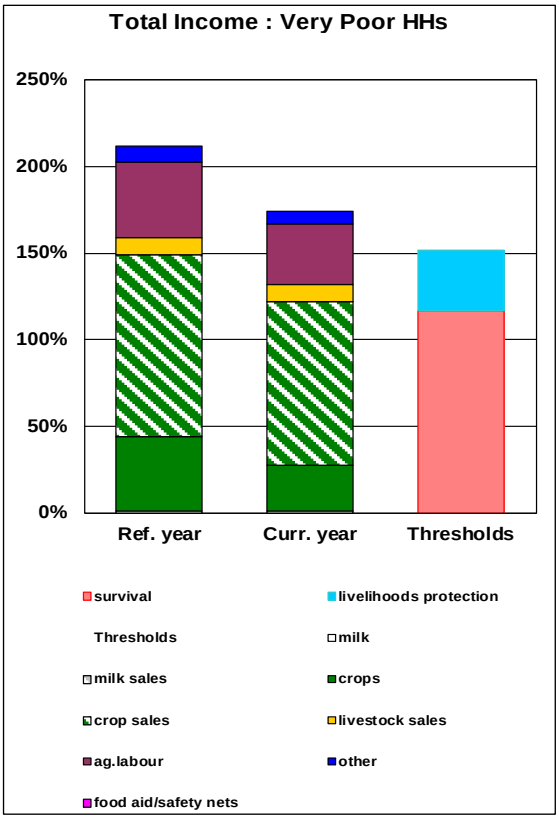
To make up the deficit with purchases, affected households need to increase their income (or

forgo some other goods and services). It is likely that affected households will increase their income through a combination of four strategies: (i) take advantage of higher cash crop prices (i.e., rice, wheat) to consume less and sell more, then use the income to purchase lower value grains such as millet or sorghum. This strategy is called consumption switching. (ii) Sell market vegetables; (iii) Sell an additional goat; and (iv) look for additional construction labour or other casual labour jobs in urban areas.



The very poor need to secure an additional Naira 35,000-40,000 per household per year in order to have sufficient cash to meet higher survival food needs (i.e., staple purchases) and still meet their livelihood protection expenses. It is estimated that they should be able to earn this needed cash using consumption switching, goat sales; and increased days doing off-farm casual labour jobs.

Poor households would likewise need to earn additional income to cover all their survival and livelihood protection needs in face of rising staple food costs. It is estimated that in order to be able to afford the same range of goods that were purchased in the baseline year, poor households would have to secure an additional Naira 60,000 per household per year. On a per capita basis, this amounts to Naira 6,000 per year (compared to Naira 4,750 per person per year for the very poor).



The graph above depicts the total (food + income) resources secured by the very poor in the baseline year as a percentage of their annual food needs (**Ref.year bar**). The graph highlights the significant drop in total resources in the current year due to flood impacts (**Curr.year bar**). It is estimated that overall household resources will remain sufficient to cover basic needs as long as the very poor are able to sell sufficient rice and market vegetables to raise needed income, as well as find more casual labour (on or off-farm).

For these reasons, a general emergency intervention is not recommended. However, farmers whose production was wiped out by the floods completely will clearly not be in a position to sell rice or vegetable as a way of coping. Thus localised responses may be required for those more severely affected.

The key concern is whether the market supply of staple grains will be sufficient to meet higher demand in the coming months. Output was low for the staple maize as well as millet. Sorghum output was higher than in the baseline year but overall production of sorghum in Jigawa State is relatively low compared to maize, rice and wheat. Hence, if supply of these staple grains is outstripped by demand, pushing prices rapidly upwards in the next couple of months, then there could be food access problems. **Thus, the supply of low cost staple grains in the market should be monitored.**

Conclusion

Summary of the Findings

The results of the updated outcome analysis show that higher staple grain prices in the current year do not require an emergency response. Staple grain price increases were lowest in the Zamfara CGC livelihood zone (106% of the baseline value) and highest in the Jigawa HVM livelihood zone (138% of the baseline). The Katsina MAS livelihood zone had price increases in-between the other zones (112% of the baseline). In each case, there were other factors that helped households to cope with staple grain price increases. In the CGC zone, a second consecutive bumper year for sorghum, coupled with higher producer prices for livestock and cash crops, and higher wage rates, will allow all wealth groups to cover higher income needs and rising costs. In Katsina MAS zone, steady increases in staple grain production since the 2009 reference year, as well as higher wage rates and producer prices mean that households will generate sufficient food and income to pay for higher costs.

The situation in the Jigawa HVM zone is quite different. Households have had to cope with a poor production year as well as rising staple grain costs. The initial effect of flood damage is a food deficit of 21% of annual food energy needs facing very poor, poor and middle-income households. However, the analysis also shows that most households will have the capacity to cope with this potential food gap by selling their high-value crops including rice, wheat and market vegetables. In this way, they will benefit from the relatively high producer prices for cash crops and in exchange they will be able to buy lower-cost grain to make up production deficits. It will be important to monitor whether there is sufficient low value staple grains reaching markets in the zone during the crucial June-August period.

Recommendations

1. Continue to focus development efforts on assisting the very poor and the poor to secure more stable sources of income to complement crop and livestock farming.

2. Monitor the supply of low cost staple grains in the market (i.e., millet and sorghum).

3. Begin to gather long-term trend data on items that make up the survival non-food basket and the livelihood protection basket (soap, salt, fertiliser, and kerosene for example).

4. Update population estimates disaggregated by rural or urban location. These figures are required to accurately calculate assistance needs in the event of a survival or livelihood protection deficit.

ANNEX 1

THE HEA ANALYTICAL FRAMEWORK

Outcome analysis is the term used to describe the process of taking information on the current situation (the monitoring data) and combining it with information on the reference year (the baseline) to project total income for the current year. Three types of data are combined: data on baseline access, data on hazard (i.e. factors affecting access to food and cash this year, such as crop production or market prices) and data on coping strategies (i.e. the sources of food and income that people turn to when exposed to a hazard)[3]. The approach can be summarised as follows:

Baseline + ***Hazard*** + ***Coping*** = ***Outcome***

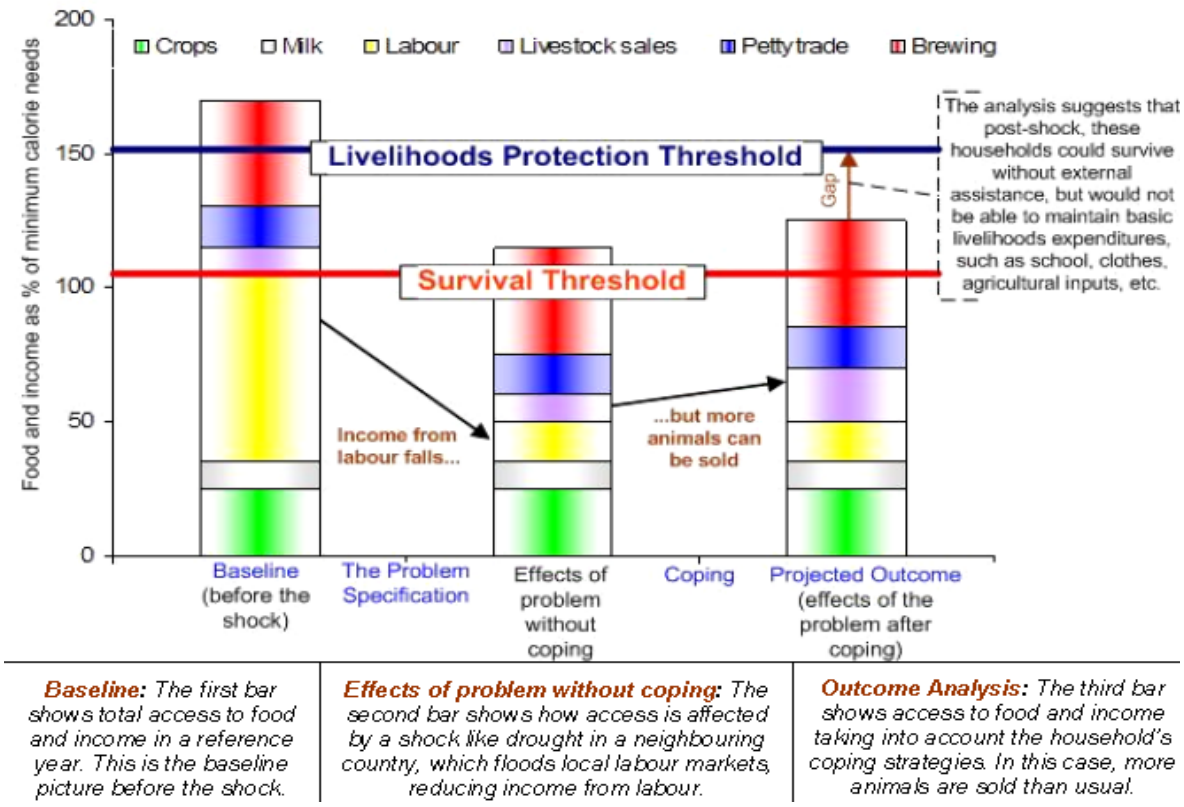
In this context, the purpose of this analysis is to utilise available information on current hazards and their likely effects on baseline sources of food and cash income. The output from an outcome analysis is an estimate of total food and cash income for the current year, once the effects of current hazards and income generated from coping strategies have been taken into account. No negative or damaging coping strategies are included in the analysis.

The next step is to compare projected total income against two clearly defined thresholds to determine whether an intervention of some kind is required. See graph next page. Total food income in the reference year is shown in the left-hand bar, while total food income in the analysis year after the inclusion of coping strategies is shown in the right-hand bar. This is then compared against two thresholds.

Where total income falls below the livelihoods protection threshold an emergency intervention is required to sustain livelihoods in the short and medium terms (so that people can continue to pay for health, education, productive inputs, etc.). Where total income falls below the survival threshold, intervention is required to maintain food intake at a minimum acceptable level (2100 kcals per person per day) in addition to sustaining livelihoods. Given the current emphasis on preserving livelihoods in addition to saving lives, deficits – and therefore intervention needs – are usually calculated in relation to the livelihoods protection threshold, not the survival threshold.

[3] Information on coping strategies is collected as part of the baseline assessment.

Figure 2: The Household Economy Analytical framework: a simplified illustration



The Survival threshold: The income required to cover 100% of minimum food needs plus survival non-food.[4]

The Livelihoods Protection Threshold: The income required to cover additional expenditure on health, education, inputs, etc. [5]

[4] The survival threshold is set at slightly above 100% of minimum food needs to allow for expenditure on survival non-food items. These are items associated with food preparation (e.g. salt, soap, cooking fuel) and water for human consumption, where these were paid for in the reference year.

[5] The 'livelihood protection basket' includes 100% of expenditure by each wealth group on productive inputs for crop and livestock production, health and education costs. Other items (related to standard of living) have been included at 25-100% of the level of poor household expenditure (e.g. clothes, non-staple food items, basic non-food items etc).

ANNEX 2

METHODOLOGY

There are four main steps in an HEA outcome analysis. (1) **Problem Specification**: quantify the change in production and prices from the reference year to the current year. (2) Define the **Expandability Factors**: quantify (i.e., as a percentage of the baseline level) to what extent households can cope with a shock by expanding certain food or income sources. "Expandability" also includes the option of switching high value crops out of consumption and into sale. (3) Define the **Intervention Thresholds**. This step involves deciding which items go into the survival non-food basket and which items go into the livelihood protection basket (and at what level of baseline expenditure). (4) Run the **Outcome Analysis**.

The HEA Outcome Analysis is designed to assess both an initial deficit as well as a final deficit. (1) The **Initial Deficit** is the impact of the hazard on household food and income without accounting for household coping. (2) The **Final Deficit or Outcome** is the impact of the hazard on household food and income with coping. This deficit is measured either as a survival deficit or as a livelihood protection deficit. A **survival deficit** means that total household resources (food + income) are insufficient to meet annual household survival needs. This means that households do not have the resources to meet their staple food costs in the current year nor prepare the food. A **livelihood protection deficit** means that total resources are insufficient to cover both livelihood expenditures and survival costs. Households may have enough to meet their survival needs but income is insufficient to pay for necessary livelihood inputs as well as school fees and medicine. The thresholds are meant to prevent households from becoming worse off in the current year compared to the reference year. They represent emergency thresholds, not development goals

The **current year** for this outcome analysis is the period covering September 2012 to August 2013. As such, it comprises the "consumption" year for rain-fed crop-based economies which in northern Nigeria begin with the harvest in September and end in August at the end of the "lean season". As the current year is not yet over, the outcome analysis is a projection of emergency needs for the coming year and, in particular, the upcoming lean season (June-August). If there were a food gap, it would typically emerge during that period.

Key Parameters

Only those food and income sources that make a significant contribution to household food and livelihood security are monitored. A food or income source is considered a key parameter if it contributes 10% of more to the annual food energy of one wealth group or at least 5% of the annual food energy of two or more wealth groups. Once the key parameters are identified, then monitoring data is collected from the relevant state agencies. In this instance, the Zamfara ADP, the Katsina ADP and JARDA (Jigawa ADP) provided the production and price data needed for the outcome analysis.

The table at right lists all the food and income sources that are found in the three different livelihood zones. Those that are key parameters for a particular zone are shaded grey and marked with an `x`. The table below lists the major components of the survival non-food and the livelihood protection baskets – or at least those items for which prices that can be reliably

tracked. For a complete list of the items that comprise these two “baskets” see Annex 1.

survival non-food		price
firewood		x
water (fees, labour)		x
kerosene		x
livelihood protection		**purchase price**
pulses		x
milk		x
fertiliser		x
seeds		x
labour		x

Key Parameters by Livelihood Zone

Food	CGC		HVM		MAS	
and Income Source	yield	price	yield	price	yield	price
milk	x		x	x	x	x
cattle sales	x	x	x	x	x	x
goat sales	x	x	x	x	x	x
sheep sales	x	x	x	x	x	x
sorghum	x	x	x	x	x	x
millet	x	x	x	x	x	x
rain-fed maize	x	x	x	x		
dry season maize			x	x		
rain-fed rice			x	x		
dry season rice	x	x	x	x		
cowpeas	x	x	x	x	x	x
soybeans	x	x				
groundnuts	x	x				
sesame					x	x
tomatoes, fresh			x	x		
peppers, dry			x	x		
onions			x	x		
cotton	x	x				
fishing				x		
ag labour paid in food		x				x
labour-agricultural		x		x		x
labour-construction		x		x		x
fetching water		x				x
firewood sales		x				x
petty trade		x		x		x
purchase						
staple grain		x		x		x
survival non-food		x		x		x
livelihood prot		x		x		x

a cell left blank mean that the source is not a key parameter