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NORTHERN GHANA FOOD SECURITY AND NUTRITION MONITORING SYSTEM MONTHLY BULLETIN

Regional Highlights *Northern region*

- Food security conditions are steadily improving in the eastern part of the region where households are generally better off in terms of food availability following the harvest of tubers, groundnuts and cereals. In the western part of the region comprising the West Mamprusi, West Gonja and Bole Districts, the food security situation remains precarious following the late commencement of normal planting.
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- The initial harvest of various crops in limited quantities is unlikely to guarantee adequate replenishment of the cereal stocks of poor households. Thus, sentinel sites reports reflect only marginal recovery as the proportion of sentinel sites consuming 3 meals a day reached 50%, up
- from 30% in July 2010. The proportion of sites reporting empty cereal stocks at 60% is the same as the previous month.
 In August 2010, a bag of 100kg maize was selling at GH¢ 34 in Tamale, GH¢ 32 in Kumbungu and GH¢ 31.25 in Savelugu. In view of this, the current prices are lower than those of August 2009 by 33.5% in Savelugu, and 22% in Kumbungu, but remain unchanged in Tamale.
- Goat-to-maize terms of trade and labour-to-maize terms of trade remain unchanged from the previous month when they were 71kg and 6.5kg respectively.

Upper East Region

- As stocks are slowly being replenished from the ongoing harvest, the proportion of sentinel sites with food stocks on the verge of depletion decreased from 75% in July to 57% in August 2010. In turn, the proportion of sentinel sites with quarter-full granaries of cereals increased from 0 to 21% between July and August 2010.
- The proportion of sentinel sites in which households consume 3 meals per day increased from 0% in July to 21% in August 2010 reflecting the gradual improvement in food access.
- In Bolgatanga, maize prices decreased by 7.9% between July and August 2010 and are currently 40% below their level for August 2009
- The goat-to-maize terms of trade at 70 kg represent an improvement over July 2010 when it stood at 65.5 kg. Similarly, the labour-to-maize terms of trade at 7kg are comparable to the previous month.

Upper West

- Compared to the previous month, food stock levels in reporting sentinel sites have not improved, with 80% of these sites currently reporting depleted stocks. As the pace of stock replenishment remains slow, poor households will continue to exhaust their meager income on food purchases and may increase their reliance on agricultural wages, as well as the sale of charcoal and firewood.
- In 87% of reporting sentinel sites, households continue to skip meals and mostly consume 2 meals. In July 2010, 81% of sentinel sites consumed 2 meals a day.
- When compared to August 2009, maize price in Wa is 2.8% high. Over a period of two months (June to August 2010) the price of maize increased by 26% in Wa. This increasing price trend reflects the growing market speculation by traders about yield outcomes in the next harvest. Prices are however stable in Tumu.
- Currently, goat-to-maize terms of trade at 63kg represent a significant decline (of 24 kg) from July 2010 when it stood at 87kg. Similarly, labour-to-maize terms of trade depreciated from 8.3kg in July to 5.7 kg in August. This is attributable to the continuing increase in the prices of cereals in some major markets which is not matched by a corresponding increase in the prices of labour and livestock.

Send your comments and suggestions to NguyenDuc Hoang NguyenDuc.Hoang@wfp.org

1. Progress of the season in Northern Ghana

Rains in August were generally normal for most districts in northern Ghana when compared to the five-year average (2005 to 2009) for August (Figure 1). The spillage of water from the Bagre Dam in Burkina Faso caused moderate levels of flooding in twenty-nine communities located along the White Volta Basin mostly in Bawku West District of the Upper East Region. Generally, the area flooded was minimal compared to 2007 when large tracks of field crops were destroyed, and reports of crop damage are limited to farmlands close to the river bank. Some bridges and culverts also collapsed under heavy rains in the Upper West Region. More flooding could likely occur along the banks of the Black and White Volta Rivers as rains are generally expected to intensity in September.

Early harvest of maize, groundnuts and yam started in many districts in northern Ghana with Market Information System Officers of the Ministry of Food and Agriculture (MoFA) reporting promising yields in Savelugu-Nanton, Yendi, Bunkprugu-Yunyoo, Gusheigu, and Kpandai Districts of the Northern Region. In the Bole District where the rains have been erratic this season, some early planted crops such as yam, maize and groundnuts recorded poor yields. Maize and yam play a major role in the food consumption of households in most of the major producing areas and poor yields could increase the

vulnerability of those households to food insecurity



Figure 1. Rainfall estimate for August 2010 as a percent of the five-year average for August Source: FEWS/USGS

during the next hungry season. In Zabzugu and East Mamprusi Districts of the Northern Region, poor yields of groundnuts are the result of poor germination and filling of pods due to erratic rains.

In Lawra, Sissala East/West, West Gonja and Wa East Districts of the Upper West Region, very little harvest has occurred except for yam and cowpea with most maize crops currently tussling or at the grain filling stage. However, with the rains expected to intensity further in September, poor sunny intervals and moisture saturation may have adverse impact on the performance of those late planted crops. The flooding of valleys and paddy rice fields which is essential for the growth of this crop began in August and crops stand is generally good.

The outlook for maize harvest in September and October is generally good in most districts with normal to above normal yields expected across some of the major food producing districts. However the harvest outlook for the large tracks of maize fields planted under the Block Farm system remains uncertain, with the fate of those late planted crops largely tied to the extension of the seasonal rains into late October. The East Gonja, West Mamprusi, Bole and West Gonja Districts will particularly be hard hit by the failure of these late planted crops. In the East Mamprusi and West Mamprusi Districts, a deficit in the production of maize and rice could be result of the large number of farmers who could not plant as a result of erratic rains and also the considerable number of farmers who planted late.

2.0 Food Security Summary

The food security situation in northern Ghana is showing signs of improvement following the onset of the harvest of cereals, beans and tubers in August. Total crop production is generally expected to be normal in most districts (25 out of the 38 districts), but uncertainty about production levels remains high in localities that experienced a delay in the start of the current season. The cessation of seasonal rains at the critical grain filling stage of maize crops in October may cause

a substantial deficit in maize production in those areas. The ongoing harvest of early planted crops signals the beginning of recovery in households' food stocks, but pockets of highly food insecure households will persist throughout the three northern regions over the next two months. Household income levels will be aided by the ongoing harvest of groundnuts which is an important source of purchasing power that could be leveraged to improve food access and consumption.

A major harvest of maize in September and October will see the flow of food from the major production areas to reinforce market supply in the late planted localities. As the newly harvested crops trickles into both rural and urban markets, major decreases in prices of the food commodities will continue to occur. This could enable some marginal agricultural households to improve their access to food or increase daily food consumption through access to the increasingly available on-farm labour opportunities. General improvement in food security is expected between October and December when food becomes widely available after the major harvest of maize and other cereals. Food security trends in the three northern regions during the rest of the current growing season could be shaped by two most likely scenarios between September and October.

Scenario one (food secure): This scenario applies to areas that experienced a normal start to the growing season and have reported normal to above average harvest of cereals, groundnuts and tubers. The outlook for the major harvest of maize in September and October is normal to above normal. In these localities, the food security situation is steadily improving and increased market supply of cereals could see a significant improvement in household food access by the end of September. These districts include Bunkprugu-Yunyoo, East Mamprusi, Gusheigu, Karaga, Yendi, Zabzugu-Tatale, Saboba, Savelugu, Nanumba North, Nanumba South, and Kpandai Districts in the Northern Region.

Scenario two (moderate to severe food insecurity): The outlook for major harvest of cereal grains remains unclear. This is associated with food producing districts that experienced a late start to the growing season with very limited ongoing harvest of cereals, although the harvest of tubers is reported to be satisfactory. A vast majority of these localities will require the extension of seasonal rains beyond mid-October to enable grain filling of maize crops. A cessation of rainfall before the end of October could result in significant cereal production shortages. In these localities, poor households will be unable to replenish their food stocks and food insecurity will intensify among poor households until the next harvest next year. The early cessation of these seasonal rains could also result in sharp rise in food prices in major markets of the worst affected districts.

2.1 Northern Region

Food security conditions are steadily improving in the eastern part of the region where households are generally better off in terms of food availability following the harvest of tubers, groundnuts and cereals. In the western part of the region comprising the West Mamprusi, West Gonja and Boles Districts, the food security situation remains precarious following the late commencement of normal planting. In Bunkrugu-Yunyoo, Zabzugu, Yendi and Gushegu Districts where the ongoing harvest is reported to be normal, increased food production will bolster the current market supply and increase cereal availability in both rural and urban markets in the coming months, thus helping to stabilize prices. With schools due to reopen in the third week of September, much of the early harvest of groundnuts will be sold immediately to pay schools fees and meet urgent family needs.

Most of the stocks obtained from the ongoing harvest will ease the current food insecurity and "bridge" the end of the lean season and the major harvest in late October and November. As a result, the initial harvest is unlikely to guarantee sufficient recovery in households' cereal stocks and a variety of coping and food access mechanisms are expected to be employed until the major cereal harvest. Nonetheless, sentinel sites reports reflect a growing trend towards marginal recovery as the proportion of sites consuming 3 meals a day reached 50%, up from 30% in July 2010. In view of these slight improvements, the proportion of sites which consumed 2 meals a day recorded a 23 percentage point decline from the previous month. At the same time, the proportion of sentinel sites reporting empty granaries of major staples at 60% remains unchanged from the previous month. This apparent improvement in daily food consumption may be due to the increasingly available labour opportunities, the wide variety of vegetables, cereals and tubers as well as improved market access as prices become stable in both rural and urban markets. Both the Goat-to-maize terms of trade and labour-to-maize terms of trade remain unchanged from the previous month.

2.2 Upper East Region

Increasing availability of cereals, legumes and vegetables from the localized harvest of crops is stimulating a gradual improvement in household food access in some parts of the region. Some of the early harvest of maize occurred along the banks of the White Volta River in August and were mostly sold in its fresh form, enabling most of these farmers to avert crop losses due to the spillage of water from the Bagre Dam. Although some parts of the region experienced a normal start to the current growing season, significant variations in the distribution of rainfall in other districts like the Bawku Municipality, Bawku West and Garu-Tempane Districts led to moisture deficits, thus causing delays in crop growth and maturity. As stocks are slowly being replenished from the ongoing harvest, the proportion of sentinel sites with food stocks on the verge of depletion decreased from 75% in July to 57% in August 2010. In turn, the proportion of sentinel sites in which households are skipping meals is gradually reducing with 21% consuming 3 meals in August as compared to 0% in July.

In the absence of sufficient stocks from the households own production which is usually a more secure source of food for farming households, the risk of food insecurity remains moderate to high as market purchases and casual labour become some of the most reliable options. Further harvest of maize and early maturing sorghum is expected in September and could bolster household food stocks until the late harvest in October and November.

The fragile food insecurity situation in Bawku remains a great concern mainly because reduced agricultural activities in the face of insecurity may contribute to a deficit in food production in the municipality. As a result, the general improvement in households' food consumption which usually characterizes the major harvest season in the region would likely be minimal in the conflict affected locations. The estimated 150,000 people at risk of food insecurity in the Municipality may require humanitarian assistance from December 2010 through July 2011 as the harvest from the current agricultural season may not be enough to ameliorate the chronic food insecurity experienced by these households since the start of the current conflict in September 2008. In the short-term, some food assistance to the severely affected households is needed for at least one month.

2.3 Upper West Region

As harvest in the region is mostly localized and restricted to yams, cowpea and in a few cases maize, only marginal improvement in household food security indicators has occurred. The food security situation in the region is likely to remain fragile and significant pockets of food insecurity will persist, but the general food security situation is expected to see some improvement from late September and early October when the major harvest of most crops is expected.

Compared to the previous month, food stock levels in reporting sentinel sites have not improved, with 80% of these sites currently reporting depleted stocks. As the pace of stock replenishment remains slow, poor households will continue to exhaust their meager income on food purchases and may increase their reliance on agricultural wages, as well as the sale of charcoal and firewood. The increasing prices of cereals are likely to erode the purchasing power of poor households and render them vulnerable to malnutrition. In 87% of reporting sentinel sites, households continue to skip meals and mostly consume 2 meals. In July 2010, 81% of sentinel sites consumed 2 meals a day.

As the sale of agricultural crops to earn income is currently limited to a few households which have already harvested groundnuts, the sale of small ruminants like sheep and goats to pay school fees and other expenses could increase significantly, potentially bringing down the prices of livestock and eroding the terms of trade with cereals. Currently, the goat-to-maize terms of trade at 63kg represent a significant decline (of 24 kg) from July when it stood at 87kg. Similarly, labour-to-maize terms of trade depreciated from 8.3kg in July to 5.7 kg in August. This is attributable to the continuing increase in the price of cereals in some major markets which is not matched by a corresponding increase in the prices of labour and livestock.

3.0 Price trends and marketing activities

3.1 Northern Region

The price of maize has remained stable in both rural and urban markets of the region since June 2010. This stability is attributable to the favourable harvest outlook and ongoing harvest of maize and other crops as well as



the availability of large stocks of maize from the previous The quantity of crops year. already harvested is low, but as the harvest of more crops continues, the impact on price trends is expected to be greater. In August 2010, a bag of 100kg maize was selling at GH¢ 34 in Tamale, GH¢ 32 in Kumbungu and 31.25 in Savelugu. As a result, the current prices are lower than those of August 2009 by 33.5% in Savelugu. and 22% in Kumbungu, but remain unchanged in Tamale (Figure 2).

Figure 2. Maize prices in Tamale, Savelugu and Kumbungu markets Source: MoFA/SRID



Figure 3. Maize prices in Bawku and Bolgatanga markets Source: MoFA/SRID

3.2 Upper East Region

In Bawku market, maize prices for August 2010 were 19% lower than the same period last year, but remained unchanged from the previous month. In Bolgatanga, maize prices decreased by 7.9% between July and August 2010 and are currently 40% below their level for August 2009 (Figure 3).

The generally low price trend as compared to the previous year has the potential to enable better food access for both poor urban and rural dwellers. However, the prevailing low prices are detrimental to local food producers who may be compelled to sell their produce at low prices.

3.3 Upper West Region

In Wa market of the Upper West Region, the price of maize has continued to increase since June 2010. Compared to



August 2009, maize price is now 2.8% high, reflecting the growing market speculation by traders about vield outcomes in the next harvest. Over a period of two months (June to August), the price of maize increased by 26% in Wa (Figure 4). The continuing price increase may partly be the effect of the tightening of local market stocks and not a reflection of regional decrease in market availability. In Tumu where maize prices increased to their March 2010 level between June and July. prices are currently 12.8% lower than their level for August 2009. As the harvest outlook for most of the region remain mixed, prices are unlikely to fall significantly below their level for 2009.

Figure 4. Maize prices in Wa and Tumu markets Source: MoFA/SRID

4.0 Health and Nutrition

The nutritional status of selected children under two (2) years of age in the Northern, Upper West and Upper East regions were assessed using the weight-for age (WFA) indicator. Data were gathered from seventeen (17) selected health institutions in ten (10) districts close to the respective Ministry of Food and Agriculture (MoFA) sentinel sites in the three northern regions. The information was gathered during growth monitoring sessions carried out by the Ghana Health Service (GHS) at outreach points of these health centres. The percentages of underweight children examined (95% CI), are shown in Table 1 below.

Table 1:

Prevalence of malnutrition among selected children under 2 years monitored in the Northern, Upper East and Upper West regions of Ghana¹ (August 2010)

Region	Total number of children examined	$Global (95\% CI)^{2}$ $(<-2z \ scores)^{3}$		(95% CI) (<-3z scores) ⁴		National GDHS, 2008	
		Regional	DHS, 2008	Regional	DHS, 2008	-2 SD	-3 SD
Upper West	82	22.0% (14.4% - 32.1%)	13.1%	4.9% (1.9% - 11.9%)	3.3%	13.9%	3.1%
Upper East	300	16.8% (8.7%, 30.0%)	27%	5.3% (3.0%, 9.1%)	5.5%		
Northern	243	30.5% (25.0%, 36.5%)	21.8%	11.9% (8.4%, 16.6%)	3.4%		

¹ Severity of Malnutrition by prevalence ranges: Acceptable - <10%, Poor - 10-19%, Serious - 20-29%, Critical - >=30% (Source: Measuring & Interpreting Malnutrition and Mortality - WFP 2005; Centres for Disease Control & Prevention) ² CI - Confidence Interval

³ <-2z score figures show that the population indicated have their average weight being *less* than 80% of the standard reference weight for their respective age group

⁴ <-3z score figures show that the population indicated have their average weight being *less* than 70% of the standard reference weight for their respective age group

Observation

This parameter which reflects the combined effects of acute and chronic malnutrition are currently high for the children in the three (3) northern regions especially during this period of flooding and reduced food availability at the household level. There is the need to pay adequate attention to the food security and nutritional needs of the vulnerable children.

5.0 Conclusions

Availability: The replenishment of household food stocks in many locations has been delayed due to the late start of the current growing season and as result, food rationing by poor households may likely extend into late September and early October. In localities which experienced a normal start to the growing season, food availability is steadily improving as food stocks are gradually being replenished.

Access: Household incomes are gradually picking up due to increasing agricultural labour demands and cash crop sales from the ongoing harvest which could improve the purchasing power of marginal farm households and increase their access to food. At Wa in the Upper West Region, food access through market purchases may be restricted by the increasing price of maize grain.

Utilization: The quality of meals and the dietary diversity of households is improving as a variety of vegetables, legumes and tubers become available at this time of the year.