Regional Highlights

Northern region

- Due to a slight appreciation in the terms of trade between labour and maize, the average daily labour wage for May 2010 could purchase 7 kilograms of maize, up from 4.3 kilograms in May 2009.
- The proportion of sentinel sites with depleted food stocks at 12% (3 sites) is high when compared to the previous month during which no sentinel site reported empty stocks of cereal.
- With a progressive decline in household food stocks in response to seasonal trends, 68% (17 sites) of sentinel sites consumed two meals a day in May 2010, up from 45% (10 sites) in April 2010.
- The price of a medium size goat has slightly appreciated over its level for May 2009, resulting in improved terms of trade against the price of maize. Accordingly, proceeds from the sale of a medium size goat could purchase 77 kilograms of maize, enough to feed an average family of 6 people for up to 30 days.
- The current price of maize in Tamale market at GHC 36 is 56% lower than its level for May 2009 (GHC 56) and 2.3% higher than the five year average.
- The analysis was conducted with data from 25 out of the 54 sentinel sites in the region.

Upper East Region

- The proportion of sentinel sites in which food stocks are depleted increased from 18% (2 sites) in April 2010 to 37% (3 sites) in May 2010 and is likely to deteriorate further before the next harvest in late August and early September.
- Most sentinel sites (73% or 8 sites) currently consume two meals a day, which remains comparable to the previous month.
- The terms of trade between labour and maize has appreciated when compared to the same period last year and as a result, the daily labour wage for May 2010 could purchase 5.8 kilograms of maize, up from 3 kilograms in May 2009.
- Proceeds from the sale of a medium size goat could purchase 65 kilograms of maize, up from 37 kilograms in May 2009. This means that a family of 6 could obtain meals for up to 26 days from the sale of one goat as compared to 15 days for May 2009.
- The current price of maize is 21.4% higher than that of May 2009 and 12% higher than the five-year average.
- The results presented here are based on data received from 8 out of the 24 sentinel sites in the region.

Upper West

- With marginal agricultural households currently unable to take advantage of prevailing low market price of cereal grains due to low incomes, the proportion of sentinel sites reporting empty food stocks is 42% (5 sites).
- Due to reduced access to food in most reporting sentinel sites (83% or 10 sites) households are compelled to eating only 2 meals a day. Whereas no sentinel site reported eating 3 meals a day in May 2010, a few sites (14% or 2 sites) reported eating 3 meals a day during this same period in 2009.
- Proceeds from the sale of a medium size goat could purchase the equivalent of 84 kilograms of maize, enough to feed a family of 6 for 34 days, up from 68 kilograms (27 days) in May 2009.
- The current price of maize is 36% lower than that of May 2009 and 11% higher than the five-year average. Since January 2010, the price of maize has been falling, resulting in year-to-date marginal decrease of 3.6%.
- The analysis was conducted with data from 12 out of the 24 sentinel sites in the region.
1. Growing Conditions in Northern Ghana

The start of the current growing season has been marked by wide spatial variability in the distribution of precipitation, which held up the smooth commencement of planting in large stretches of the Northern Region. However, the timely onset of rains at the beginning of May 2010 and its fair distribution throughout the month in the Upper East and Upper West Regions suggest that normal land preparation and planting were carried out in most localities in those two regions.

Figures 1 through 3 are the distribution of rainfall during the three dekads (10 days) of May 2010. In the first dekad, the onset of rains in all three northern regions signaled the start of the growing season in earnest. During the second dekad however, only portions of the Upper West and Upper East regions received sufficient moisture levels to sustain planting activities. The situation got progressively worse for the Northern Region during the third dekad when the entire east to west stretch of the region remained largely dry while the Upper West and Upper East Regions received moderate levels of moisture to support planting and further land preparation. The available rainfall information suggests that parts of the Northern Region most likely experienced failed planting as farmers who planted after the first rains in May would have experienced poor germination and may have to replant those fields.

The erratic start to the growing season in the Northern Region could have serious ramifications on food security, nutrition and incomes of farm households. In particular, food insecure households may experience a lengthy “lean season” as the arrival of new crops is delayed while early cultivation of cash crops such as groundnuts to aid early recovery from the lean period may have been strained. With the expected resumption of the rains in June, many farmers in the Northern Region will have a relatively narrow window to complete planting before the middle of July when all planting normally ends.

In the most likely scenario, planting and other activities during the short window (June to Mid-July) could be interrupted by periods of dry spells, which could further jeopardize the prospects of the current growing season and heighten concerns about outcome of agricultural yields.

Figure 1. Rainfall estimates for the first dekad of May 2010
Source: FEWS/USGS

Figure 2. Rainfall estimates for the second dekad of May 2010
Source: FEWS/USGS

Figure 3. Rainfall estimates for the third dekad of May 2010
Source: FEWS/USGS
2.0 Food Security Summary

The food security status of households which experienced poor agricultural production during the 2009 season is becoming precarious as food stocks become depleted, a trend that will most likely increase the incidence of food insecurity and malnutrition in some parts of northern Ghana. Other households whose food stocks are already depleted may likely be suffering from the lingering effects of several years of bad agricultural production, which could eventually erode their resilience and render them highly susceptible to food insecurity. With the peak of the “lean season” approaching, an increasing number of these households will likely see a plunge in diversity and consumption frequency of different food groups as additional resource requirement for the preparation and management of new fields for the current season exerts further stress on available income.

Increased market dependence for cereals by households currently facing poor access to food will continue to be constrained by the above average (5-year average) prices of staple food crops and decreased access to income-generating activities. There also are emerging food insecurity concerns in the Bunkprugu-Yunyoo District of the Northern Region where inter-ethnic conflict among the Kambatiak, Gbandauk, Nasiabuk, Tubong and Gbankon communities led to destruction of food stocks and the displacement of 4048 people from 369 households. While the resumption of peace has enabled some households to plant their fields, the loss of key livelihood assets could affect the ability of those families to engage in full-scale agricultural activities.

According to the Bank of Ghana, the country’s inflation rate which peaked at 20.7% in March 2009 has been reduced to 10.68% in May 2010. In spite of this decline, most households in northern Ghana will likely not feel the impact in their cost of living, as the price of the average food basket remains high. Moreover, the increase in utility tariffs announced at the end of May 2010 has heightened concerns about the likely reversal of the 10 months decline in inflation rate, which could further erode the purchasing power of urban and some rural households.

Currently, the risk of a dry spell during the rest of the planting period remains moderate to high and the resulting uncertainty and staple market price speculation may cause prices to increase. If the current growing season progresses well, prices are expected to follow a normal trend and attain their peak in July. However, the onset of a lengthy dry spell in the major cereal producing areas of northern Ghana may heighten concerns about the prospects of poor yields and cause price to deviate from their normal trend. This could worsen the food insecurity situation of the most vulnerable households.

2.1 Northern Region

Food security conditions in some parts of the region are currently being shaped by the progressive decline in food stocks among poor rural households and increased market dependence for their food needs. With the likely delay in the arrival of the new harvest, the ability of these households to cope with deteriorating food security conditions through the most viable coping strategies may be overstretched. The expected increase in demand for on-farm labour will create cash income sources for some households, but this alone may not be sufficient to ameliorate the food insecurity of many market dependent households. Produce marketing and petty trade-related employment activities are also likely to decline substantially during the rest of the growing season.

An early harvest of yam in July in the northeast part of the region could improve food security among some farming households, but prices will likely remain high until large-scale harvest improves market supply in August and September. Currently, the proportion of household with depleted food stocks at 12% (3 sites) is high when compared to the previous month during which no sentinel site reported empty stocks of cereal. Most reporting sentinel sites (60% or 15 sites) currently have quarter-full granaries of cereal and may likely reduce the number of meals consumed a day in order to avoid an earlier than normal depletion of stocks. This partly explains why 68% (17 sites) of sentinel sites consumed two meals a day in May 2010 as compared 45% (10 sites) in April 2010. With household food stocks expected to deplete further, the proportion of sentinel sites consuming one meal, which currently stands at 4%, will likely continue to increase until the arrival of a new harvest.

The terms of trade between labour and maize show a slight appreciation when compared to the same period last year, which is explained by the generally low price of maize and a slight increase in the average
price of labour. Currently, daily labour wage could purchase 7 kilograms of maize as compared to 4.3 kilograms of maize in May 2009.

At the same time, the average price of a medium size goat shows a slight appreciation over its level for May 2009, resulting in improved terms of trade against the price of maize. In May 2010, proceeds from the sale of a medium size goat could purchase 77 kilograms, enough to feed an average family of 6 people for up to 30 days. This suggests that an average rural family of 6 people whose food stock is already depleted will need to sell up to 3 medium size goats to meet their food needs until a new harvest arrives in early September. In May 2009, the sale of a medium size goat could purchase 50 kilograms of maize.

2.2 Upper East Region
The greatest food insecurity concerns are in the Upper East region where agricultural households in most parts of the region experience food shortages even in a normal year because of small landholding size coupled with low organic matter content and poor fertility associated with the coarse textured soils. As a result, most rural households tend to exhaust their food stocks much earlier than their counterparts in the other northern regions.

As seasonal trends continue to shape access to food, reliance on income from agricultural labour and remittances to fill the food gap could gain greater importance, although it is unlikely to guarantee adequate food access for those households. The proportion of sentinel sites in which food stocks are depleted increased from 18% (2 sites) in April 2010 to 37% (3 sites) in May 2010 and is unlikely to improve until the next harvest in late August and early September. Thus, the consumption frequency of household meals will continue to decline along with the diversity of food groups consumed. This could lead to an increase in the rate of malnutrition especially among children under 5 years. The relatively low prices of cereal grains which currently prevail in local markets may likely ease off pressure on poor households to sell their small livestock at the height of the lean season when prices of these animals are usually low.

Most sentinel sites (73% or 8 sites) currently consume two meals a day, which remains comparable to the previous month. Farming households, which cropped early millet in parts of the region in May 2010, will get some temporary relief on food purchases by late July. However, this harvest generally lasts for a month because of the small size of the area cropped.

The terms of trade between labour and maize shows a slight appreciation when compared to the same period last year which is explained by the generally low price of maize and a slight increase in the price of labour. Currently, daily labour wage could purchase 5.8 kilograms of maize as compared to 3 kilograms of maize in May 2009.

The average price of maize from sentinel sites is currently 33% lower than the level for May 2009 while the average price of a medium size goat is also 31% higher than that of May 2009. Based on these current average prices, proceeds from the sale of a medium size goat in the region could purchase 65 kilograms of maize as compared to only 37 kilograms in May 2009. This means that a family of 6 could obtain meals for up to 26 days from the sale of a medium size goat as compared to 15 days for May 2009.

Sentinel sites reports suggest that the current agricultural season started very well in all the reporting locations (100% of reporting sites) and the continuation of this trend could create ideal conditions for successful yield outcomes.

2.3 Upper West Region
The normal start to the season in the region, aided by sufficient moisture trends, is expected to accelerate the pace of land preparation and the completion of planting which is crucial in the large food producing areas of Sissala East and Sissala West, which are the food basket for the region. The food security situation of marginal agricultural households is becoming more precarious in response to seasonal trends, with the likelihood that further deterioration in food stocks in the coming months will increase the rate of malnutrition among the most vulnerable groups.
In spite of the prevailing low market prices of cereals in the region, reduced incomes derived from coping mechanisms such as petty trading and the sale of charcoal among others, imply that poor households will be unable to take full advantage of these price trends to improve their food stocks. **Currently most sentinel sites (50% or 6 sites) are reporting quarter-full granaries, but a large proportion (42% or 5 sites) of sites is also reporting empty granaries. This however remains lower than in May 2009 when 50% (7 sites) of sentinel sites reported empty granaries.**

The current average price of maize is 11% lower than the same period last year while the average price of a medium size goat is also 11.4% higher than in May 2009. **Thus, the sale of a medium size goat could purchase the equivalent of 84 kg of maize, enough to feed a family of 6 for up to 34 days. During the same month last year, a medium size goat could purchase the equivalent of 68 kg of maize, enough to feed an average family of 6 for up to 27 days.**

Currently, reduced access to food has compelled households in most reporting sentinel sites (83% or 10 sites) to resort to eating only 2 meals a day. Whereas no sentinel site reported eating 3 meals a day in May 2010, a few sites (14% or 2 sites) reported eating 3 meals a day during this same period in 2009.

**Price trends and marketing activities**

**3.1 Northern Region**

The current price of maize in Tamale market has exhibited significant stability, with year-to-date increase of just 2.7% as compared to an increase of 40% for January to May 2009. The fairly stable market price of maize is due to increased market supply, complemented by the improved yields obtained in the 2009 season. Markets in the region may likely see a small upward adjustment in prices of major staples between June and July this year as a result of declining market supplies coupled with increasing household demand for more staples and increased cost of trading goods under poor road conditions during the rainy season.

Figure 4 is current price of maize in the Tamale market as compared to prices for May 2009 and a five-year average. The current price of maize is 56% lower than in May 2009, but just 2.4 percent higher than the five-year average. In many respects, the continuing stability of grain prices in the region during the next three months hinges on the progress of the agricultural activities especially the pattern of precipitation distribution as it could affect the yield of field crops.

![Figure 4. Price of maize in Tamale market](source: MoFA/SRID)
3.2 Upper East Region
Markets in the region are currently well supplied with food commodities when compared to the same period last year, thanks in part to large quantities of grain movement from the Northern and Upper West Regions. The price of maize grain in Bolgatanga market continues to hold steady as local supply is complemented by grain arrivals from Langbinsi, Guabuliga, and Nalerigu in the Northern Region as well as Techiman in the Brong Ahafo Region and Tumu in the Upper West Region.

Figure 5 is the price of 100 kg maize for 2010 in the Bolgatanga market as compared to the prices for May 2009 and a 5-year average. Since January 2010, the price of maize in this market has seen a marginal increase of 5%, thanks to higher yields recorded in the major producing areas of northern Ghana during the 2009 agricultural season. The current price of maize is 21.4% higher than that of May 2009 and 12% higher than the five-year average.

The prevailing low cereal prices may likely enable some poor households to temporarily access sufficient food through market purchases which could help ease the rising food insecurity in the region. Over a period of three years (2007 to 2009), the price of maize exhibited an increase of between 21% and 29% in the Bolgatanga market between May and July and then began to fall in August. In the absence of a major weather related event with the potential to substantially strain yields in the next harvest, prices are unlikely to undergo this significant increase during the next three months.

Figure 5. Price of maize in Bolgatanga market
Source: MoFA/SRID

3.3 Upper West Region
Though the current price of maize is above the five-year average in the Wa market, it is below the level for May 2009. This trend towards market stability has been observed in other cereals in other markets in the region. Figure 6 is the price of maize in Wa market for 2010 in comparison with prices for 2009 and a five-year average.
The current price of maize is 36% lower than that of May 2009 and 11% higher than the five-year average. Since January 2010, the price of maize has been falling, resulting in year-to-date marginal decrease of 3.6%. The current trend represents a deviation from the normal situation when prices usually begin to increase from April and reach their peak in July and August at the height of the “lean season”. The low price trend is an indication of increased market supply which may slightly ease problems of food access generally faced by low income households at this time of the year.

In some years, prices of most cereal grains in the region normally undergo an increase of between 4% and 29% per month from May to July due to decreasing market supplies for grain coupled with increasing demand by market-dependent households and rising cost of transportation. However, during years of low prices (as in 2006) similar to the current year, the magnitude of price increase is sometimes in the order of 4% to 15%. Under these circumstances, the prices of most cereals normally start decreasing in August in the absence of any uncertainty about the outcome of the next harvest.

Figure 6. Price of maize in Wa market
Source: MoFA/SRID
4. Health and Malnutrition

The nutritional statuses of selected children under two (2) years of age in the Northern and Upper East regions were assessed using the weight-for-age (WFA) indicator. Data was gathered from selected health institutions in districts close to the respective Ministry of Food and Agriculture (MoFA) sentinel sites (Table 1).

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 and Upper East regions of Ghana¹ (May 2010)

<table>
<thead>
<tr>
<th>Region</th>
<th>Total number of children examined</th>
<th>Global (95% CI)² (&lt;-2z scores)³</th>
<th>(95% CI)³ (&lt;-3z scores)⁴</th>
<th>National GDHS, 2008</th>
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<td>(Regional DHS, 2008)</td>
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<td>Regional DHS, 2008</td>
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<tr>
<td>Upper East</td>
<td>239</td>
<td>29.7% (15.4%, 44.0%)</td>
<td>27% 12.6% (1.7%, 23.4%)</td>
<td>5.5% 13.9% 1.1%</td>
</tr>
<tr>
<td>Northern</td>
<td>130</td>
<td>21.5% (6.4%, 32.4%)</td>
<td>21.8% 5.4% (0.1%, 11.5%)</td>
<td>3.4%</td>
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Observation

The data above shows that the food security and nutritional needs of target children still requires attention especially in this “lean season”.

5. Conclusions

Availability: All major markets in northern Ghana are well supplied with large quantities of cereal grain, thanks to the normal agricultural yields attained during the 2009 agricultural season. The steady market supply of large quantities of food commodities at this time of the year has kept prices lower than their level for May 2009.

Access: With the price of food commodities remaining fairly stable since the start of the year, the prevailing low cereal prices may likely enable some poor households to temporarily access sufficient food through market purchases which could help ease the rising food insecurity among those households. In spite of the generally low prices of cereals in northern Ghana, the price of maize in the Bolgatanga market (Upper East Region) is currently 17% higher than that of Tamale market (Northern Region) and 18% higher than that of Wa market (Upper West). As a result, poor households in the Upper East Region could experience higher expenditure on cereal grain and perhaps more restricted access than their counterparts in the other northern regions.

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