Regional Highlights

Northern region
- Food stock levels have reduced further in response to seasonal trends, with 58% of sentinel sites reporting depleted stocks, up from 12% in May 2010. During this same period in 2009, 61% of sentinel sites reported empty granaries of cereal.
- Due to favourable terms of trade between maize and a medium size goat, proceeds from the sale of one goat could purchase 71 kg of maize, down from 77 kg in May 2010.
- Whereas 51% (24 sites) of sentinel sites reported consuming 3 meals a day in June 2009, only 42% (15 sites) currently consume 3 meals a day. Similarly, 58% (21 sites) of reporting sites currently consume 2 meals a day, as opposed to the 49% (20 sites) in June 2009.
- With a year-to-date increase of 2.8% in the price of maize in Kumbungu market, the current price is 67% lower than that of June 2009 and 10.4% lower than the five-year average.
- The analysis was conducted with data from 36 out of the 54 sentinel sites in the region.

Upper East Region
- With the reduced harvest of crops from the past two seasons and the significant loss of household assets resulting from the conflict in Bawku, an estimated 5,000 vulnerable individuals, mainly widows, disabled people and female-headed households are currently at risk of severe food insecurity.
- The current state of insecurity in Bawku and its environs could cause food production in the area to suffer further decline during the current season, with the consequence that the most vulnerable groups in the population may require food aid for a greater part of 2011.
- Farming households continue to experience serious constraints to food access with 45% (5 sites) of sentinel sites reporting empty granaries of cereal while the remaining 55% of sites (6 sites) indicated that stocks are on the verge of depletion. In May 2010, 37% (3 sites) of sentinel sites reported empty granaries.
- The majority of reporting sentinel sites consumes 2 meals a day which is comparable to the level for both May and April 2010.
- The terms of trade between labour and maize continue to appreciate and as a result, the daily labour wage for June 2010 could purchase 8 kg of maize, up from 5.8 kg in May 2010.
- The current price of maize in Bawku market is 25% lower than that of June 2009 and 8.8% higher than the five-year average price.
- The results presented here are based on data received from 11 out of the 24 sentinel sites in the region.

Upper West
- With the most vulnerable households experiencing the worst effects of reduced food access since the beginning of the year, the proportion of sentinel sites reporting empty granaries of cereal is 67%, up from 40% in June 2009.
- Households in most reporting sentinel sites (77% or 14 sites) currently consume 2 meals a day which is a slight improvement from May 2010.
- The current terms of trade between labour and maize at 8 kg of maize is comparable to the level reported in May 2010.
- The market for livestock remains competitive and as a result the average price for a medium size goat in reporting sentinel sites could yield 84 kg of maize which is comparable to May 2010.
- The price of maize decreased by 18.5% between January and June 2010 in Tumu market, making it 27.2% lower than its level for June 2009 and only 1.4% higher than the five-year average.
- The analysis was conducted with data from 12 out of the 24 sentinel sites in the region.
1. Progress of the season in Northern Ghana

Many parts of northern Ghana experienced spells of dry conditions during the month of June as a result of which planting activities may have been delayed in those localities. With the exception of the first dekad (ten days) of June (Figure 1), when the entire northern Ghana received adequate distribution of precipitation, dry conditions

![Figure 1. Number of dekads with more than 30mm of rainfall in May and June 2010 Source: FEWS/USGS](image1)

(30mm or less) were experienced in a number of locations during the second and third dekads (Figure 2 and 3). Some of the districts which experienced dry conditions during the second dekad include parts of Bawku Municipality and Garu-Tempane district of the Upper East Region and all districts in the Upper West Region with the exception of Sissala East District.

![Figure 2. Number of dekads with more than 30mm rainfall in May and June 2010 expressed as a percent of the long term average. Source: FEWS/USGS](image2)

During the third dekad, the whole of the Upper West Region, the northern portions of the Northern Region and the western districts of the Upper East Region all received less than 31 mm of rainfall. The areas which experienced two consecutive dekads of poor rains, mainly districts in the Upper West Region and the southern portions of the Bunkprugu-Yunyoo district likely suffered the worst effects of this dry spell. Consequently, late planting may be widespread in these areas.

![Figure 3. Percent of Rainfall in June 2010 as compared to June 2009 Source: FEWS/USGS](image3)

The subsidy scheme instituted by the Government of Ghana (up to 50% reduction in price) has improved access to fertilizer by smallholder farmers and will likely contribute to improved yields during the current season. The price of NPK fertilizer at GH 27 Cedis represents a slight increase of 3.8% from 2009 season while the cost of ploughing one acre of land (at GH¢ 20) remains comparable to 2009 season.
Under the Care International FARM PLUS project which is funded by the European Commission, 9000 households consisting of 1800 each in the Garu-Tempane District of the Upper East Region, East Mamprusi District of the Northern Region as well as the Lawra, Jirapa and Nadowli Districts in the Upper West Region have benefited from 100 kilograms of maize seeds and assorted inputs valued at GH 86 Cedis to help boost their agricultural production during the current season while catering for their immediate food needs.

2.0 Food Security Summary

Food insecurity has persisted among the most vulnerable households in the Bawku Municipality and its surrounding areas in the Upper East Region since early March 2010 due to the inter-tribal conflict which has drastically affected agriculture and other livelihood activities since 2008. Consequently, up to 5% of the population in the conflict affected areas may likely experience severe food insecurity until some harvest becomes available in August and September.

The flow of trade in cereals in northern Ghana remains steady as road conditions to most rural and urban markets remain good and food availability continues to be satisfactory, but some of these roads are likely to deteriorate as the rains intensify. In particular, the road between the major food supply market of Tumu in the Upper West Region and markets in the Upper East Region will likely deteriorate considerably with more rains, thus impacting on market supply and prices of food commodities.

In the most likely scenarios:

- The current state of insecurity in Bawku and its environs could cause food production in the area to suffer further decline during the current season, with the consequence that the most vulnerable groups in the population may require food aid for a major part of 2011.
- Cereal prices – particularly maize - are unlikely to increase considerably between July and August 2010 in the absence of significant anomaly in distribution of precipitation which could cause some anxiety in the cereal market. The current seasonal outlook, combined with analysis of price trends for normal agricultural years suggest that prices will likely begin to fall in August.
- The relatively low prices of maize could affect the ability of some farmers to sell excess stock from the 2009 season to purchase agricultural inputs.
- The market for food commodities such as maize, soya beans and rice is likely to be boosted by purchases carried out by the National Buffer Stock Company which was initiated by the Government of Ghana through the Ministry of Food and Agriculture with the aim of boosting food security, and to stem the perennial importation of rice into the country. With seed funds of GH¢ 1 million, the program has mopped up excess stocks of food from farmers and has since purchased about 70 metric tons of rice in the Northern Region alone. The company has also purchased up to 10 metric tons of maize in the Upper East Region. This will most likely reduce the export of maize to Burkina Faso where the grains have higher prices.
- WFP’s Purchase for Progress would further boost food production, thereby improving WFP’s local food procurement for use in-country as well as for the sub-region.

2.1 Northern Region

Household food access continues to tighten, as the lean season reaches it peak, with stocks of food completely exhausted among some households. Four sentinel sites located in Saboba, Karaga, Yendi and Gusheigu Districts reported empty granaries of cereal. All those sentinel sites currently consume two meals a day. As Figure 4 shows, the current cereal stock levels remain comparable to June 2009. The proportion of sentinel sites reporting depleted food stocks increased from 12% in May 2010 to 58% in June 2010. During this same period in 2009, 61% of reporting sentinel sites reported empty granaries of cereal.
Though marginal agricultural households may be facing grave difficulties in meeting their daily food needs, the presence of diverse assortment of cereal stocks at this time of the year may likely be an indication of a relatively satisfactory level of food availability as a result of households’ own production from the 2009 season. The existence of such stocks will permit inter-household sharing or borrowing of food. For the majority of sentinel site communities in the region, cereal stocks may likely hold steady until the arrival of some harvest in August and September. The terms of trade between a goat and maize remains favourable as proceeds from the sale of one goat could purchase 71 kg of maize, down from 77 kg in May 2010.

2.2 Upper East Region

Food security conditions are generally precarious in parts of the Bawku Municipality where restricted movement associated with the inter-tribal conflict and the consequent security measures have led to reduced trading activities, the loss of capital and strained access to food. Since the start of the extended curfew hours in the township of Bawku and its surrounding areas in January 2008, food insecurity conditions among the most vulnerable households have persisted as some farmers have been unable to cultivate their farmlands for two consecutive years for fear of being killed on the way to their farms.

With the reduced harvest of crops from the past two seasons and the significant loss of household assets, an estimated 5000 vulnerable individuals, mainly widows, disabled people and female-headed households are currently at risk of severe food insecurity. Figure 5 is the level of cereal stock from reporting sentinel sites as compared to 2009 in the Upper East Region. Based on these sentinel sites reports, food access is generally poor in the region as compared to the Upper West and Northern Regions with 45% (5 sites) of sentinel sites reporting empty granaries while the remaining 55% of sites (6 sites) indicated that stocks are on the verge of depletion. In terms of food consumption frequency, 64% (7 sites) of reporting sentinel sites currently consume 2 meals a day with another 18% (2 sites) living on one meal a day. The average price of maize remains comparable to the May 2010, but the average price of a medium goat has declined, resulting in a slight depreciation in the terms of trade between maize and goat to 56 kg of maize from 64 kg in May 2010.

2.3 Upper West Region

The food security situation continues to deteriorate from the level reported in May 2010 in response to season decrease in food availability. With the most vulnerable households experiencing the worst effects of reduced food access since the beginning of the year, the proportion of sentinel sites reporting empty granaries is 67% as compared to 40% in June 2009. The increased proportion of sentinel sites with empty granaries may be an
indication that majority of small holder cultivators could not substantially increase their output in 2009 partly because they lacked the required inputs to increase yields. These households may likely cope with reduced access to food by increasing the proportion of family members engaged in daily casual labour or by receiving remittance from relatives outside the community. Figure 6 is the current level of cereal stocks in reporting sentinel sites as compared to June 2009.

As the average wage for casual labour has shown considerable stability in sentinel sites across the region since the start of the year, this could provide an avenue for laboring households to supplement their food access during the rest of the lean season. The current terms of trade between labour and maize at 8 kg remains comparable to the level reported in May 2010. Similarly, the market for livestock remains competitive and the average price for a medium size goat in reporting sentinel sites could yield 84 kg of maize which is comparable to May 2010.

Price trends and marketing activities

3.1 Northern Region

The market prices of maize and millet have shown different trajectories of change since the beginning of this year. Figure 7 is the price of maize in Kumbungu for 2010 as compared to 2009 and a five-year average. With formidable stability in the price of maize, the year-to-date increase is only 2.8%. This apparent stability is rooted in the widespread cultivation of maize as it is a staple crop for most households in northern Ghana and the increased market supply of the commodity this year. The price of maize is currently 66% lower than its level for June 2009 and 10.4% lower than the five-year average. The low price of maize is important for expanding food access for market-dependent individuals and households.

Figure 8 shows the price trend of millet in Kumbungu market for 2010 as compared to prices for June 2009 and a five-year average. The year-to-date increase in the price of millet is 7%, but the current price is 14.2% lower than its level for June 2009 and 25% higher than the five-year average.

Millet is generally cultivated in smaller quantities than maize in northern Ghana and with the next harvest not expected until November and December 2010, prices will likely stabilize at their current level and begin to decrease upon the arrival of a new harvest in November.
3.2 Upper East Region

The inflow of cereal grain from other regions to the Upper East Region continues to be satisfactory, although trading activities with Bawku is constrained by security concerns in the area. Figure 9 is the price trend of maize for 2010 in Bawku market as compared to 2009 and a five-year average. Currently, the price of maize is 25% lower than its level for June 2009 and 8.8% higher than the five-year average.

With the reduced economic activities associated with the state of insecurity in the Bawku area, the limited access to income-earning opportunities for market-dependent households will constrain food access in spite of the generally low prices of cereal in the market.

3.3 Upper West Region

Contrary to the steady maize price situation in the Northern Region since the start of 2010, the price of this commodity has seen a steady decline in Tumu market since the beginning of 2010 as shown in Figure 10. The year-to-date decrease in Tumu market is 18.5%. This market is a major supplier of maize to other markets in the Upper East Region where prices are currently up to 32% higher. In spite of the reduction in the market price of maize, the current price is 1.4% higher than the five-year average and 27.2% higher than its level for June 2009. At the current price level, market-dependent households could get a better value for their money on food purchases than in June 2009. Figure 11 is the price of millet in Tumu market. The year-to-date increase in price is 4.2%. However, the price of millet is currently at
the same level as it was in June 2009 and is expected to follow a normal trend by reaching its peak in August. The current price is 25% higher than the five-year average.

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 was gathered from twenty six (26) selected health institutions in thirteen (13) districts close to the respective Ministry of Food and Agriculture (MoFA) sentinel sites.

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 West and Upper East regions of Ghana¹ (June 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)⁴ (&lt;=3z scores)⁴</th>
<th>National GDHS, 2008</th>
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<td></td>
<td></td>
<td>Regional</td>
<td>DHS, 2008</td>
<td>Regional</td>
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<tr>
<td>Upper West</td>
<td>85</td>
<td>18.8% (4.2% - 38.1%)</td>
<td>13.1%</td>
<td>4.7% (0.7% - 6.6%)</td>
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<tr>
<td>Upper East</td>
<td>178</td>
<td>16.9% (8.5%, 25.2%)</td>
<td>27%</td>
<td>6.2% (1.8%, 10.5%)</td>
</tr>
<tr>
<td>Northern</td>
<td>376</td>
<td>26.9% (12.4%, 49.7%)</td>
<td>21.8%</td>
<td>11.2% (5.3%, 22.1%)</td>
</tr>
</tbody>
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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 lean season. This is a pointer to the need to pay adequate attention to the food security and nutritional needs of the vulnerable children.

5.0 Conclusions
Availability: Market supply for most cereals and livestock remains competitive in the three northern regions thanks to large quantities of stocks from last year and the current good condition of roads to major rural and urban markets. Access: As the lean season attains its peak, the proportion of sentinel sites reporting depleted granaries have progressively increased in the three regions. With a reduced access to food and the consequent decrease in the frequency and diversity of food consumed, the rate of malnutrition will inevitably increase in some localities. In many localities in the Bawku Municipality, some households have become vulnerable to food insecurity as trade, agriculture and other livelihood activities become constrained by the state of insecurity. Utilization: With the presence of large bodies of open water which provide suitable breeding grounds for mosquitoes, the likely increase in the incidence of malaria could affect health status of individuals and their food intake.