



**NORTHERN GHANA FOOD SECURITY
AND NUTRITION MONITORING SYSTEM
MONTHLY BULLETIN**

November 2010

Regional Highlights

Northern region

- Available preliminary crop estimates – for only 6 out of 20 districts - suggest that most districts recorded a deficit in the production of major staple cereals. Tolon-Kumbungu is the only district which reported an increase in production of all major staples over the previous year.
- In 92% of reporting sentinel sites, the sale of agricultural produce was the main source of income for men, but in the case of women, 33% of sites identified the sale of agricultural crops as the main income source. Household food consumption requirements were met using stocks from the households' own production in 86% of reporting sentinel sites.
- Maize prices declined by 10% between October and November and are 38% higher than the five-year average. Millet price also dropped by 6% between October and November and is 11% higher than the five-year average price in Tamale.
- Labour-to-maize terms of trade increased from 5.8kg in October to 8.8kg in November as a result of an increase in the cost of labour.

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Upper East Region

- Growing conditions were generally favourable for the cultivation of maize and groundnuts during the 2010 growing season, resulting in a production increase of 54% and 7% respectively over the previous year. On the other hand, the production of millet and rice decreased by 54.2% and 30% respectively over 2009.
- In all reporting sentinel sites (100%) in the region, household food consumption requirements were met in November using stocks from their own production. In 66% of reporting sentinel sites, adequate supplies of food grains either in the local market or a market in the nearby village ensured easy physical market access. Just as in the Northern Region, the sale of agricultural produce constituted the main source of income for men in all reporting sentinel sites with only 33% of sites identifying agricultural crop sale as the main source of income for women. Another 33% of sentinel sites identified petty trading as an important source of income for women.
- In spite of the apparent increase in maize production over last year in the region, Bolga market recorded 11% increase in the price of maize over the previous month. Maize price is also 35% above the five-year average.
- In view of the prevailing price of maize in the region, labour-to-maize terms of trade for November improved to 14.8kg from 11kg in October.

Upper West

- With a 26.6 percentage point increase in maize production over 2009, the region is well positioned to continue its role as a major supplier of maize to markets in some parts of the Upper East Region. However, the production of other crops, such as millet, groundnuts and rice recorded a deficit as a result of which household food security and purchasing power may be constrained.
- Though the price of maize is currently at its November 2009 level, it remains 62% higher than the five-year average and 5% lower than the previous month. Subject to the continuing inflow of adequate market stocks, the price of maize may follow the same trend as in 2009 and decrease further between November and December. With most harvested grain still being processed, available stocks are being kept off the market for households' consumption.
- All reporting sentinel sites obtained their cereal consumption for the month of November through stocks from their own production. In 91% of these reporting sentinel sites, men obtained their income primarily from the sale of agricultural produce, but only 36% of sentinel sites cited crop sale as the main source of income for women.
- Labour-to-maize terms of trade improved from 4.1kg in October to 17 kg in November as a result of a reduction in the price of maize.

The Food Security and Nutrition Monitoring System is implemented by the
**STATISTICS, RESEARCH AND INFORMATION DIRECTORATE of the
MINISTRY OF FOOD AND AGRICULTURE**

In cooperation with:

**Ministry of Health/Ghana Health Service
United Nations World Food Programme**

Through support from:

**The Canadian International Development Agency and
The Spanish Government**

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1. Average cereal harvest in northern Ghana

Statistics available from the Ministry of Food and Agriculture revealed that the total maize production for Upper East and Upper West Regions recorded a 36 percentage point increase over last year. The increase in production has been attributed largely to a substantial expansion in the area cultivated under the Ministry of Food Agriculture/ Northern Rural Growth Program Block Farm system. Production statistics for only 6 out of the 20 districts in the Northern Region indicate that 4 of the reporting districts recorded at least 89% deficit in maize production when compared to the previous year. Reports also suggest that many large-scale maize farmers, discouraged by their inability to secure market for their agricultural produce from 2009, reduced their area under cultivation, slightly denting the total quantity of maize produced. Maize production in Upper East and Upper West Regions, estimated to be around 133,068.401 metric tons, may be adequate to meet the consumption requirements of the population in those two regions.

The total production estimates for Millet and Rice for Upper East and Upper West Regions are 95,707.4 MT and 124,336.5 MT, down by 32% and 30% respectively from last year. As reported in the October Food Security and Nutrition Monitoring System bulletin, rice yields will be low both in the flood affected localities and the rest of northern Ghana. The production of groundnuts which is a major cash crop at 224,359.7 MT is down by 15% from last year, and is the result of poor germinations due to irregular moisture distribution and late planting of the crop in some cases. The deficit in groundnut production could reduce income sources for both men and women and as a result some farming areas could see an increase in the number of young people migrating to the southern parts of the country for on-farm employment opportunities.

2.0 Food Security Summary

With the arrival of the main harvest and increased market supply of cereals and other crops, the food security situation of rural and urban households is expected to improve tremendously, allowing commercial activities on agricultural commodities to flourish in December. Most rural and urban markets experienced a decline in the prices of staple cereals in response to the increased food availability at the household level. As a result, the processing and marketing of these agricultural products will increase trading activities and facilitate an increase in non-farm labour opportunities. As water recedes along the banks of the White Volta River and irrigation dam sites, dry season agriculture, driven by the use of hand pumps has already begun with the planting of maize and vegetables and is expected to increase the supply of these crops from December to March, helping many households to attain some moderate level of food security.

The supply of tubers from the Northern Region to the Upper East Region and Burkina Faso continued in earnest with 320 metric tons of yam exported to Burkina Faso in November 2010 through Paga. At the same time, 739.2 metric tons of beans, destined for Techiman market in the Brong Ahafo Region were imported into the country through Tumu in the Upper West Region. As is typical of the harvest season, the increased market supply of grains drove down prices and enhanced access to food by both rural and urban households in northern Ghana. Due to widespread deficits in the production of millet and sorghum, cross-border trade is playing an important role in the supply of these cereals to major markets, with reports pointing to increased importation of millet and sorghum from markets of southern Burkina to markets in the Upper East Region.

2.1 Northern Region

Market supplies in the region have improved due to the main harvest of long-cycle crops, helping to reduce prices of major staple cereals, thus improving food access at the household level across the region except in parts of West Mamprusi, Central Gonja, East Gonja and Kpandai districts which were affected by floods in September and October 2010. Preliminary crop estimates for 6 districts points to a substantial deficit in the production of maize, a trend that is likely to be repeated in some of the remaining 14 districts. With the exception of East Mamprusi and Tolon-Kumbungu districts, all the reporting localities – including Zabzugu-Tatale which is a major food producing area – recorded significant deficits in the production of maize. In the case of rice, only Tolon-Kumbungu recorded a 45% increase in production over last year, with the rest of the districts registering significant reduction in production.

The substantial deficit in the production of major staples will reduce household food stocks relative last year and could make marginal food producing households turn to the market earlier than normal in order to meet their food needs.

The erratic start to the 2010 growing season, coupled with irregular distribution of moisture at various stages of the season is the central cause of the decline in yields. In 92% of reporting sentinel sites, the sale of agricultural produce was the main source of income for men, but in the case of women, 33% of sites identified the sale of agricultural crops as the main income source. Similarly, household food consumption requirements were met using stocks from the households' own production in 86% of reporting sentinel sites. Labour-to-maize terms of trade increased from 5.8kg in October to 8.8kg in November as a result of an increase in the cost of labour.

Some communities in the southern districts of the northern region and along the White Volta River are expected to experience high incidence of food insecurity during most part of 2011 due to the impact of flooding. The price of livestock increased in November in response to high demand for the Muslim festival of Eid Al-Adha, giving rise to improvements livestock-to-cereal terms of trade. Livestock prices are expected to remain high from December through January because of Christmas and increased demand for livestock for funeral ceremonies which are normally carried during that time of the year.

2.2 Upper East Region

Growing conditions were generally favourable for the cultivation of maize and groundnuts during the 2010 growing season, resulting in an increase of 54% and 7% respectively over the previous year. On the other hand, the production of millet and rice decreased by 54.2% and 30% respectively over 2009. In spite of the slight increase in groundnuts production at the regional level relative to 2009, many districts recorded a deficit.

The decline in district level production of groundnuts and rice which are major cash crops in some localities could affect the purchasing power of rural households and undermine the accumulation of assets to build resilience to future shocks. Due to the substantial deficit in millet and sorghum production in most districts, many poor rural and urban households are likely to experience high incidence of food insecurity from February through September 2011. The food stocks of these households will only be marginally replenished for a few months and market dependence for their food needs may occur earlier than normal. In all reporting sentinel sites (100%) in the region, household food consumption requirements were met in November using stocks from their own production. In 66% of reporting sentinel sites, adequate supply of food grains either in the village market or a market in the nearby village ensured easy physical market access. Just as in the Northern Region, the sale of agricultural produce provided the main source of income for men in all reporting sentinel sites with only 33% of sites identifying agricultural crop sale as the main source of income for women. Another 33% of sentinel sites identified petty trading as an important source of income for women.

The region remains one of the poorest in the country, where many households are characterized by high vulnerability to food insecurity each year due to their susceptibility to shocks and low productivity. Thus, the reduction in production of many crops will reduce agricultural labor opportunities in processing and marketing of farm produce. Talensi-Nabdum, Kassena-Nankana and Buisa districts all recorded deficits in maize production and may experience increased food insecurity for the greater part of 2011. Though the market system is likely to facilitate the movement of maize grain from areas of high production to the deficit areas, low purchasing power of most households in the affected districts will limit their ability to purchase food.

2.3 Upper West Region

Following the conclusion of the 2010 growing season and the harvest of long-cycle crops, preliminary crop estimates from MoFA suggest that the production of major food and cash crops suffered a decline in the region and household food stocks are generally expected to be low. Most of the crop losses experienced in the region have been attributed to the combination of a late start to the season and unfavourable distribution of precipitation at different stages of crop development leading to significant deficit in food production in some districts. Some field crops along the banks of the Black Volta River were also destroyed by floods in October.

Maize production recorded an increase in most districts and the region is generally expected to be self-sufficient in the supply of this cereal. With a 26.6 percentage point increase in production over 2009, the region is well positioned to continue its role as the major supplier of maize to some parts of the Upper East Region. However, the production of other crops, mainly millet, groundnuts and rice recorded a deficit as a result of which household food security and

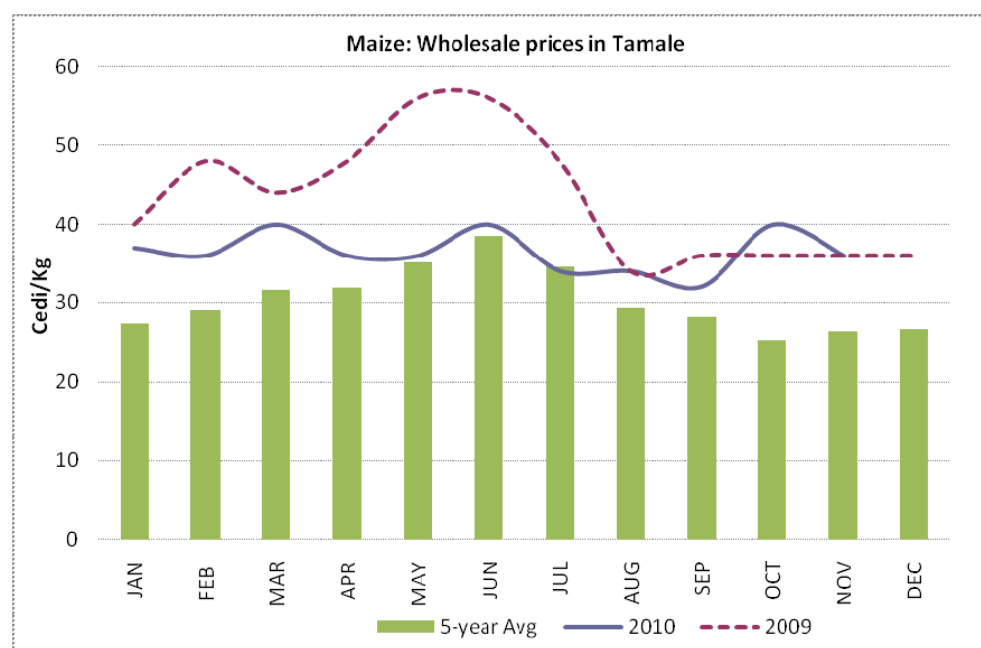
purchasing power will be impacted. Due to the large production deficit, many poor households are unlikely to meet their food requirements and may endure high level of food insecurity at the peak of the lean season. All reporting sentinel sites obtained their cereal consumption for the month of November through stocks available from their own production. In 91% of these reporting sentinel sites, men obtained their income primarily from the sale of agricultural produce with only 36% of sentinel sites identifying agricultural crop sale as the main source of income for women. Women reported more diverse income sources which include artisan work, petty trading and small businesses. Labour-to-maize terms of trade improved from 4.1kg in October to 17 kg in November as a result of a reduction in the price of maize.

The lower than expected yields have put cereal prices on an increasing path since July 2010 and the deficit in the production of both millet and sorghum could have a far-reaching impact on other cereals like maize. This is because some consumers are likely to meet the shortfall in the production of millet and sorghum with an increased consumption of maize, thus contributing to increased market demand for maize. The 25 percentage point deficit in the rice production over last year could drive up prices, enabling local producers to increase their earnings. The price increase scenario is also likely to encourage an increased consumption of imported rice varieties.

3.0 Price trends and marketing activities

3.1 Northern Region

Sustained market anxiety about the level of crop production arising out the widespread late planting of crops during the 2010 growing season, coupled with less than normal supply of key staple grains in October helped to drive up prices.



However, increased market supply of the major staple grains, following the conclusion of the 2010 harvest, helped to restore market prices to their November 2009 level. Though the region enjoyed low price of maize relative to 2009, prevailing prices are unlikely to decrease substantially in December and January. In spite of a 25 percentage point increase between September and October, maize price declined by 10% between October and November and is 38% higher than the five-year average. Millet price dropped by 6% between October and November and is 11% higher than the five-year average price in Tamale. The decrease in maize price may be short-lived as millet

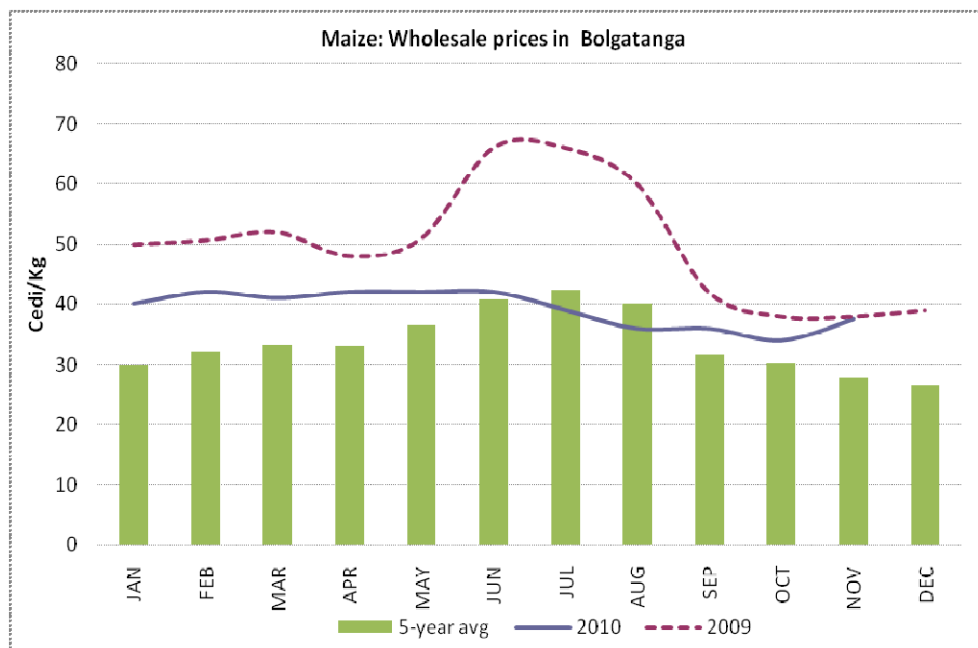
Figure 1. Price of maize in Tamale

Source: MoFA/SRID

production in the region is generally low and may soon limit the availability of tradable stocks, thus driving up prices. In sharp contrast to the declining price trend for maize, the price of sorghum increased by 7% between October and November and is also 46% above the five-year average. (See ANNEX).

3.2 Upper East Region

In spite of the apparent increase in maize production over last year in the region, Bolga market recorded 11% increase in the price of maize over the previous month. Maize price is also 35% above the five-year average. These prices have



been generally stable throughout the year and the estimated increase in production over last year may help stabilize prices at their 2009 level for the next few months.

Following the projected decline in the production of millet and sorghum, cross border trade with markets of southern Burkina Faso could continue to play an important role in regulating the supply of these cereals to Bolgatanga and other markets. Traders in Bolgatanga and Navrongo markets indicated that most of their millet and sorghum supplies for November came from southern Burkina Faso where prices are much lower. The price of millet recorded a 7 percentage point increase between October and November and is also 30%

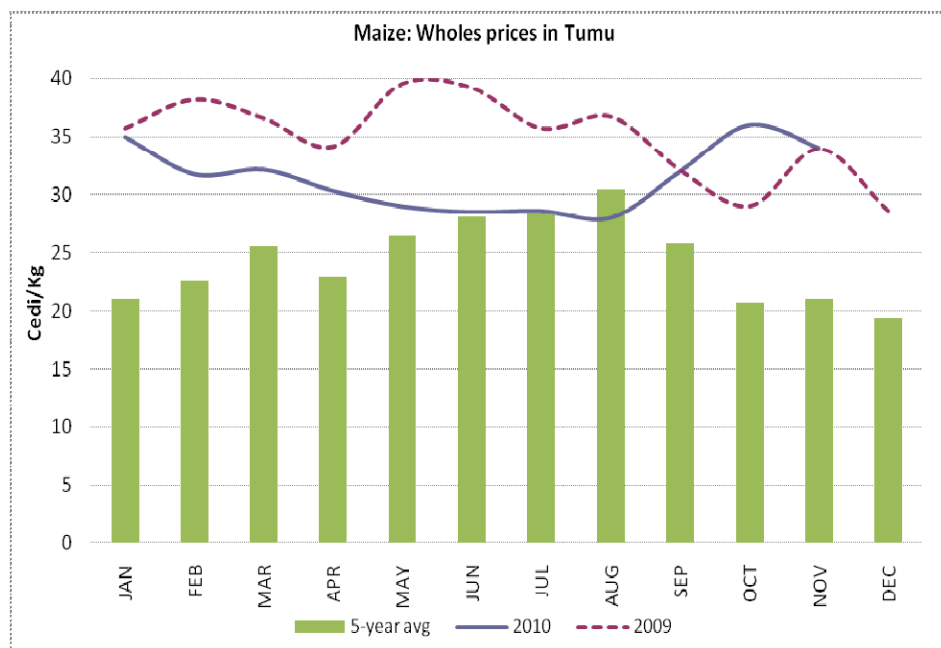
Figure 2. Price of maize in Bolgatanga

Source: MoFA/SRID

above the five-year average. Sorghum prices dropped by 5% between October and November and sits at 48% above the five-year average. (Figure 3 and ANNEX).

3.3 Upper West Region

Though the price of maize is currently at its November 2009 level, it remains 62% higher than the five-year average, but 5% lower than the previous month. Subject to the continuing inflow of adequate market stocks, the price of maize may



follow the same trend as in 2009 and decrease further between November and December. With most harvested grains still being processed, available stocks are being kept off the market for households' consumption. However, starting from December when all grain processing is set to be completed, market supplies for millet and sorghum could increase substantially, thus easing market demand pressure and further reducing prices.

Localized food insecurity could occur in various parts of the region as a result of the localized production deficits which may impact on market supply and induce price increases later in 2011.

Figure 3. Price of maize in Tumu

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 was gathered from ten (10) 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 data is therefore from individuals who are patronizing children health services so there is an element of self-targeting. The percentages of these 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 (September 2010)

Region	Total number of children examined	Global (95% CI) ² (<-2SD) ³		Severe (95% CI) (<-3SD) ⁴		National DHS, 2008 (6-59 months)	
		Regional	DHS, 2008	Regional	DHS, 2008	-2 SD	-3 SD
Upper West	119	19.3% (11.8% - 26.8%)	13.1%	5.0% (0.7% - 9.4%)	3.3%	13.9%	3.1%
Upper East	109	14.7% (7.8%, 29.6%)	27%	5.5% (1.0%, 15.7%)	5.5%		
Northern	303	30.0% (25.1%, 35.4%)	21.8%	10.9% (7.9%, 14.9%)	3.4%		

Note: The DHS data is for children under 5 years and the growth monitoring data are by no means comparable to each other but for reference purposes.

Observation

This information reflects the combined effects of acute and chronic malnutrition are currently high for the children in the northern region especially during this period of harvesting from the farm level. The figures for the northern region are a reflection of the effects of floods which affected low lying communities in this region and as such may result in reduced food availability at the household level.

5.0 Conclusions

Availability: Food stock levels have been bolstered by the recent harvest, enabling households to meet their food consumption requirements using food from their own production. The risk of food insecurity remains high among flood affected communities in the Northern Region where food purchases may be crucial in sustaining household consumption, given that many households lost their crops.

Access: The improving market supply of some staple cereals has reduced prices to their 2009 level and could help increase access for poor rural and urban households who continue to rely on the market to meet their food needs.

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 <-2SD figures include children who are below -3SD. Usually referred to as Global malnutrition

⁴ <-3SD figures show children with severe malnutrition.

ANNEX: Market Prices for Northern Ghana

