





December 2010

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

### **Regional Highlights** *Northern region*

- According to a December 2010 crop assessment report by the Ministry of Food and Agriculture, maize production is estimated at 206,145 metric tons, up from 155,503 metric tons in 2009. The production of millet and sorghum decreased to 63,625 and 132,458 metric tons in 2010 from 94,077 and 136,577 respectively in 2009. This represents a regional deficit of 32% for millet and 3% for sorghum.
- With some of the key grain producing areas reporting a deficit in production of some cereal grains, early stock depletion could expose marginal agricultural households to high incidence of food insecurity for an extended period of time.

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• Though the price of maize remained unchanged between November and December 2010, it was 33% higher than the five-year average. The relatively high prices may likely compromise the purchasing power of the poor and affect the ability of market dependent households to access food.

# **Upper East Region**

- Based on a 2010 crop assessment report, maize production is estimated at 51,035.8 metric tons, up from 33,092.4 metric tons in 2009 production. Similarly, the production of sorghum at 93,360 metric tons is up from 87, 495 metric tons in 2009. On the other hand, the production of millet at 46,911 is down from 79,629.3 metric tons in 2009. Though the production of maize and sorghum is up by 54.2% and 6.7% respectively, marginal agricultural households in areas of localized production shortages may likely see a rapid decline in their stocks due to the fact that some part of their harvest may be exchanged for income to buy other types of food or condiments they do not produce for their own consumption.
- The wholesale price of maize was 7.6% lower than December 2009 and 38% higher than the five-year average. Millet prices which declined by 2% between November and December was 3.8% lower than the price for December 2009 and 31.5% higher than the five-year average. Although sorghum price was 3.5% higher than its level for December 2009, it increased by 3.8% between November and December and was 50% higher than the five-year average.

### Upper West

- Maize production increased by 26.6%, but the production of millet and sorghum recorded a decrease of 21.8% and 41% respectively over 2009.
- Food security conditions are currently favourable due to the extensive availability of grains from households own production, easing pressure on food purchases by farming households and providing them with opportunities to sell seasonal crops to earn some money.
- In comparison to the 5-year average, the wholesale price of maize decreased by 5.5% in Tumu market where it remains 10% higher than December 2009 and 68% higher than the five-year average. The wholesale price of sorghum was comparable to its level for December 2009, but in the absence of sufficient supplies to meet market demand in the early part of 2011, prices may begin to increase significantly. The wholesale price of sorghum is 5.8% higher than December 2009 and 28.5% higher than the five-year average.

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#### 1.0 Dry conditions and hazards

With the end of the rains and the onset of dry conditions, medium and large-scale rice farmers are at an increased risk of having their field crops destroyed by bushfires if harvest is delayed longer than usual. Pre-harvest loss and spoilage of various grains during storage could compromise household food stocks and reduce food reserves. As the seasonal harvest comes to a conclusion, off-season planting which utilizes residual moisture along major river banks and dams will commence, helping some households to make up for the shortfall in crop production during the past growing season. In a bid to settle debts and other unmet household needs, farming households are likely to upload some of their grains into the market, thus reducing their reserves, but enabling wealthy traders to acquire more stocks in their warehouses.

The rebuilding of the 2,097 houses which collapsed during the heavy rains and floods in northern Ghana will be essential to recovery efforts, but the logistical and financial resource requirements may further strain the food security conditions of flood affected communities as well as other rural communities in northern Ghana where mud brick-constructed dwellings often collapse during the rainy season. In the Upper East Region, residents of flood affected communities are reported to have moved to higher ground, with most of them settling in Talensi-Nabdam and Bawku West Districts. As is typical of bad agricultural years in northern Ghana, many ablebodied men are moving to urban areas of the country to find work.

Statistics available from the Statistics Research and Information Directory (SRID) of the Ministry of Food and Agriculture (MoFA) indicate that the total area cultivated for maize, millet and sorghum for the three regions combined was 221,860, 153,087 and 243,738 hectares, representing an increase of 38%, and a decrease of 18% and 7% respectively. Consequently, the combined output of millet, maize and sorghum in the three northern regions at 159,333, 339,213 and 350,033 metrics tons represent a decrease of 32.3% and an increase of 33.8%, and 1.2% respectively.

#### 2.0 Food Security Summary

Despite lower than expected yields from the 2010 harvest, food availability in northern Ghana has improved significantly due to increased stocks from the main harvest, allowing households to improve their food reserves and quality of diet. Food availability has been bolstered by satisfactory production in most districts, with sufficient regional stocks to mitigate any shortages in areas of low production and localized areas which were adversely affected by poor rains during the 2010 season. Due to the deficit in crop production in many districts, food security conditions in the early part of 2011 will be marked by limited household access and an upswing in the prices of major staples in both rural and urban markets earlier than normal.

Farming households with poor grain handling and storage facilities may likely suffer significant post harvest losses which could reduce their stock levels and compromise household food security. In Central Gonja, East and Kpandai Districts of the Northern Region where floods were caused by inundation of low lying areas as a result of a rise in the level of the Volta River, fishing and agricultural livelihoods continue to suffer as the water has not receded. As some households had their entire production for the year wiped out by these floods, children under the ages of five years could suffer acute malnutrition due to very low intake of food and poor quality of diet. An upswing in prices may occur early in 2011 as market supply may likely be affected by the general deficit in the production of most crops. These cereal price increases will further constrain access to food by market-dependent and non-food producing households.

Most households will employ a variety of coping strategies to maintain their well-being and preserve their existing assets, including labour migration to southern Ghana. So far, the volume of cereal grain trade in local markets has increased from the previous months, providing an important source of incomes for poor households. Cross border trade continues to play an important role in the inflow of food commodities between markets of Burkina Faso and northern Ghana with tubers of yam exported to Burkina Faso while sorghum and millet grains are arriving in markets of the Upper East Region. Improvement in prices of livestock and small ruminants in response to increased demand for various customary and funeral rites has contributed to more favourable terms of trade against cereals.

## 2.1 Northern Region

Although food security conditions are stable in most localities in the region owing to good availability in rural and urban markets, household level stocks are much lower than the previous year due to average yields. The general decline in the production of seasonal crops such as maize, groundnuts, millet, sorghum and yam could ultimately affect market supply, but the likely injection of ruminant stocks from last year may help ease up supply constraints. Moderate level of food insecurity in isolated parts of the region is both the result of dry spells and devastating floods along the White Volta which affected riverine communities in West Gonja, Central Gonja, West Mamprusi and Kpandai Districts. An inter-agency assessment mission to the affected areas in October estimated that 140,000 people were seriously affected by recent flooding in Northern Ghana. Although emergency food distributions were carried out by the World Food Program along with the supply of non-food items by the National Disaster Management Organization, continued assistance is required to restore productive assets and livelihoods in order to prevent severe food insecurity and malnutrition.

According to a December 2010 crop assessment report by the Ministry of Food and Agriculture, maize production in the 2010 growing season is estimated at 206,145.4 metric tons, up from 155,503.2 metric tons when compared to 2009. Out of the 20 districts, 10 reported a deficit in maize production with an average district deficit of 51%. The production of millet and sorghum decreased to 63,625 and 132,458 metric tons in 2010 from 94,077 and 136,577 respectively in 2009. This represents a regional deficit of 32% for millet and 3% for sorghum. Market purchases and other forms of exchange will provide a crucial source of supplementary food as stocks from the less than normal harvest is only likely to ease food insecurity for some poor houses for up to four months. These food purchasing households will then face high prices relative to the same period last year, making food less accessible. The decline in the quantity of fish catch which accompanied the rise in the level of the Volta River has constrained the livelihoods of fishing households and their access to food. These livelihoods are unlikely to recover until the receding water brings the fish back into the main rivers channel between February and March 2011. In these flood affected areas, where over 80% of households are reported to have been impacted, food insecure households are combining livestock and labour sale to maintain their access to food. The food security situation of these households is expected to worsen when the prices of cereal grains begin to increase in early 2011.

Marginal agricultural households in the rest of the region will endure a difficult lean season, following the reported 50% decline in yields of some cereal grains. With some of the key grain producing areas reporting a deficit in production of some cereal grains- due to unfavourable precipitation distribution at various stages of development – early stock depletion could expose marginal agricultural households to severe food insecurity for an extensive period of time. In the most likely scenario, the prices of cereal grains will experience a gradual increase as the lean season progresses, putting pressure on the purchasing power of food insecure households and constraining their ability to invest in inputs to increase production during the next cropping season.

# 2.2 Upper East Region

The abundance of staple foods in rural and urban markets in the immediate aftermath of the main harvest is enabling most households to reinforce their food reserves and reduce their dependence on market purchases. However, the prognosis for food security in the next three months is of great concern due to the heavy crop loses and reduced yields in most districts as a result of excessive rains during the grain filling stage of millet and sorghum. The production of millet, sorghum and rice fell short of the previous year in most districts of the region, but maize production increased partly as a result of a substantial increase in areas cultivated under a joint Ministry of Food and Agriculture and IFAD initiative. According to a December 2010 crop assessment report by the Ministry of Food and Agriculture, maize production is estimated at 51,035.8 metric tons, up from 33,092.4 metric tons in 2009 production.

Similarly, the production of sorghum at 93,360 metric tons is up from 87, 495 metric tons in 2009. On the other hand, the production of millet at 46,911 is down from 79,629.3 metric tons in 2009. Though the production of maize and sorghum is up by 54.2% and 6.7% respectively, poor households in areas of localized production shortages and marginal agricultural households may see a rapid decline in these stocks due to the fact that some part of their harvest may be exchanged for income to buy other types of food or condiments they do not produce for their own consumption. As a result, these households may turn to the market as early as April to buy food, most likely at significantly higher

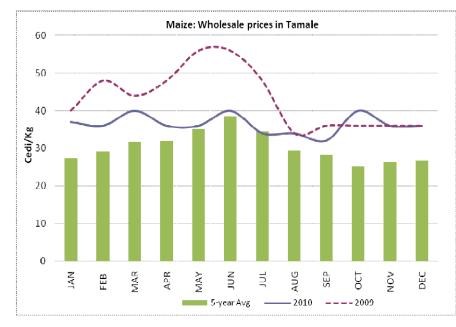
prices at a time when they have limited purchasing power. The result is likely to be reduced food access for poor households before the onset of the traditional hunger season in June.

### 2.3 Upper West Region

Maize production increased by 26.6%, but production of millet and sorghum recorded a decrease of 21.8% and 41% respectively over 2009. Food security conditions are currently favourable due to the good availability of grains from households own production, easing pressure on food purchases by farming households and providing them with opportunities to sell seasonal crops to earn some money. Food security conditions are also marked by improvement in daily food consumption and higher than normal (above five-year average) prices of most cereals. The areas of food security concern in the region are those communities along the Black Volta River which were affected by floods, as well as areas of localized food deficits associated with spells of dry conditions during the cropping season.

Deterioration in food insecurity conditions is expected in the marginal agricultural areas of the region following the below average to average production during the past season as a result of which general food access may be more constrained than the previous year. In view of this, the number of food insecure people is likely to increase during the lean season, accompanied by increased incidence of child malnutrition. Following the conclusion of the harvest, the food security situation in food deficit districts is likely to remain stable, with the help of sufficient stock inflows from surplus production areas, but as the stock levels reduces in response to seasonal trends in food availability, prices will gradually increase. Areas of reduced grain production are likely to experience moderate food insecurity in the first few months of the 2011 and households are expected to endure an extended period of food insecurity for the greater part of the year.

## 3.0 Price trends and marketing activities



#### 3.1 Northern Region

Figure 1. Price of maize in Tamale Source: MoFA/SRID

The increased availability of food commodities from the just ended harvest has boosted supplies to major markets across the region. Based on anecdotal information from cereal grain dealers in Tamale, the level of stock inflows in December was low relative to the same period in 2009 when the harvest was very good. Consequently, the price of maize stabilized at its December 2009 level, while millet and sorghum attained lower prices than in December 2009.

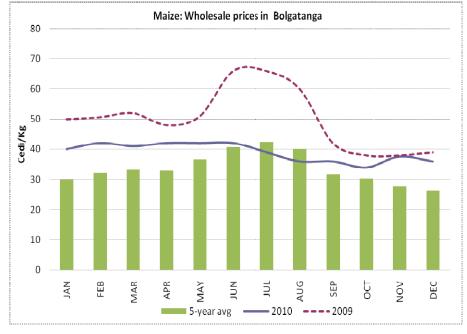
The relatively low stock inflows into markets may be linked to the fact that a significant number of farmers planted late in the season, many of whom may currently be preparing their produce for the market. Though the price of maize remained unchanged between November and December 2010, it was 33% higher than the five-year average. The relatively

high prices may likely compromise the purchasing power of the poor and affect the ability of market-dependent households to access food. As millet and sorghum prices are higher than maize, households will continue to substitute maize for the two cereals in their daily consumption or sell millet to purchase maize since it improves the quantity of food accessible to households. The price of millet was 19% higher than the five-year average and 22% lower than the level for December 2010. In the case of sorghum, December price was 51% higher than the five-year average and 12.5% lower than its level for the same period in 2009. According anecdotal information from traders in Tamale market, high industrial demand for maize is contributing to the current steady price of maize. Two cereal grain supply

companies from the Brong Ahafo region have been responsible for the bulk of the market purchase over the past two months. Increased demand from breweries, pharmaceutical companies and food processing companies for maize sorghum and cowpea will continue to increase in the coming months as more grains are supplied into the market (Figure 1 and ANNEX).

## **3.2 Upper East Region**

Since the arrival of the new harvest, there has been no significant decline in the price of maize in the region. After an



initial decrease between June and September, the price of maize increased slightly between October and November before falling between November and December. June to September wholesale price decrease was 14% while November to December decrease was 5%.

The wholesale price of maize was 7.6% lower than December 2009 and 38% higher than the five year average. Millet prices which declined by 2% between Novemeber and December, was 3.8% lower than the price for December 2009 and 31.5% higher than the five year average. Although sorgum price was 3.5% higher than its level for December 2009, it increased by 3.8% between November and December and was 50% higher than the five-year average (Figure 2 and ANNEX).

Figure 2. Price of maize in Bolgatanga Source: MoFA/SRID

# 3.3 Upper West Region

In comparison with the 5-year average, the wholesale price of maize decreased by 5.5% in Tumu market where it

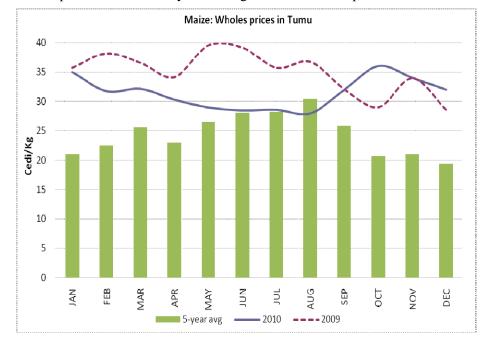


Figure 3. Price of maize in Tumu Source: MoFA/SRID

remains 10% higher than December 2009 and 68% higher than the five-year average. The slow arrival of maize into the market, partly because of the extensive late planting created anxiety among traders and caused unusual price increases between September and October of 2010. However, the recent decrease in prices will ease pressure on the purchasing power of households who acquire most of their food through market purchases. The food security scenario for the next five months is likely to be mixed, as an increase in the cost of transportation could translate into increase in cereal prices, which could jeopardize poor household's access to food grains. Furthermore, local production deficits may impact on market supply and induce price increases in the early part of the 2011.

The wholesale price of sorghum was comparable to its level for December 2009, but if sufficient supplies are not available to meet market demand in the early part of 2011, prices may begin to increase significantly. The wholesale price of sorghum was 5.8% higher in December 2009 and 28.5% 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 was assessed using the weight-for age (WFA) indicator. Data was gathered from twelve (12) 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 child health services so there is an element of self-targeting. The percentages of these underweight children examined (95% CI) show the combined effects of acute and chronic malnutrition, are shown by the figure 1 -which compares the nutritional status of children between December 2010 with the corresponding status in November 2010 and December 2009.

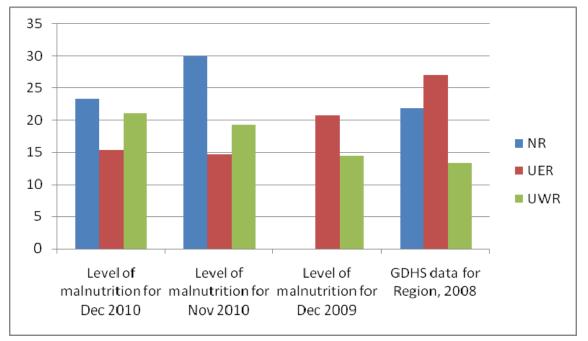


Figure 4. Trend in nutritional status among children under 2 years between 2009 and 2010 Source: MOH/GHS

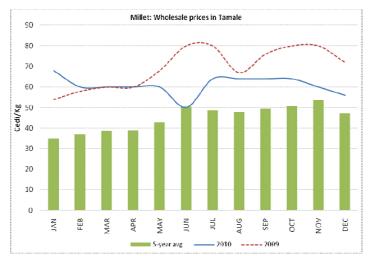
#### **Observation**

The above information reflects a reduced level of nutritional status for children in the Upper East Region, with a reversed situation in the Upper West Region. The Northern Region has shown an increased level of malnutrition in 2010, reflecting the effects of floods which affected more low lying communities in this region and as such may result in reduced food availability at the household level.

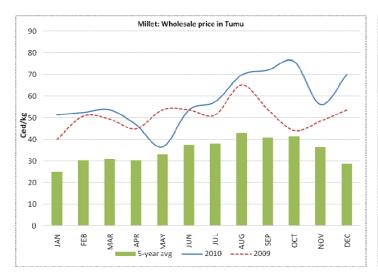
### **5.0** Conclusions

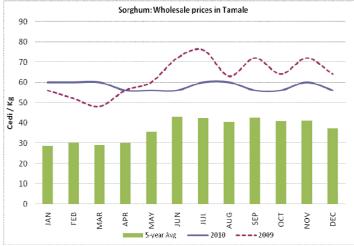
*Availability*: The food security situation is expected to remain stable across the three northern regions with the exception of localized areas of severe cereal deficit and flood affected areas. On the whole, the household food reserves have recovered, but are expected to be marginally lower than the harvest of 2009. As a result, some rural households will experience a decrease in their access to food before the normal start of the season.

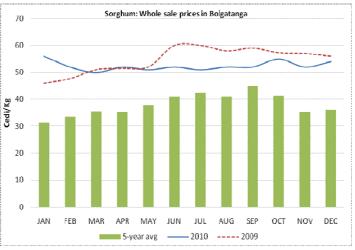
*Access:* The prices of cereal grains are stable, but high and could constrain food access for poor rural and urban households who continue to rely on the market to meet their food needs.

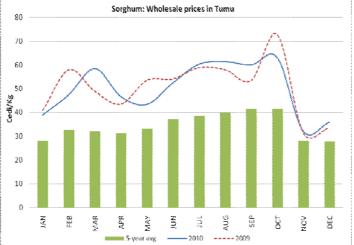


#### Millet: Wholesale prices in Bolgatanga 80 70 60 ...... 50 00 Kg 30 20 10 0 NON JAN FEB MAR APR MAY NUľ ĩ AUG SEP 0CT DEC 2010 ---- 2009 5-year avg









# **ANNEX: Market Prices for Northern Ghana**