September 2010

NORTHERN GHANA FOOD SECURITY AND NUTRITION MONITORING SYSTEM

MONTHLY BULLETIN

Regional Highlights

Northern region

Contents:

Progress of the season………....2
Food security summary...............3
Price trends……………..……...5
Health and Malnutrition……......6
Conclusions.…………...….........7
Price ANNEX…………………..8

- In the eastern corridor of the region comprising Kpandai, Nanumba North and Nanumba South, Gusheigu, Karaga, Zabzugu-Tatale, Yendi and Bunkprugu-Yunyoo Districts, most households have recovered from the food shortages that characterized the "lean season" and now rely mostly on food available from their own production. Consequently, the proportion of sentinel sites with depleted food stock declined from 60% in August to 29% in September 2010.
- In 64% of sentinel sites, households consumed 3 meals per day, which represent a 14 percentage point increase from August.
- Maize and Sorghum prices are 11% and 22% lower than their level for September 2009, but are 14% and 30% higher than the five-year average respectively. With maize prices now 20% lower than at the peak of the "lean season" in June, further price decreases are expected after the main harvest in October and November.
- The Goat-to-maize terms of trade appreciated to 89.6 kg in September from 71kg as a result of a decrease in the price of maize grain. Similarly, the labour-to-maize terms of trade appreciated slightly to 7.8 kg in September from 6.5 kg in August. Improving terms of trade against cereal has the potential to improve food access for households which are dependent on the market for their food needs.

Upper East Region

- Above average harvest of cereals and legumes in September in most districts of the region is enabling households to replenish their food stocks and improve consumption of a wide variety of food groups. The 62% of sentinel sites reporting quarter-full granaries of cereal most likely reflect this stock replenishment process while 22% of sites reported at least half-full granaries of cereal.
- Currently, food security conditions are marked by increased food access from households' own production and a revival of agricultural income-earning opportunities as more avenues for wage earning becomes available in the harvesting of new grains. Thus, 63% of reporting sentinel sites consumed 3 meals per day in September, compared to only 21% in August 2010.
- Maize price is 14.2% lower than its level for September 2009, but it is 12.5 % higher than the 5-year average while millet price is 9.1% lower than its level for September 2009 and 13.6% higher than the five-year average.
- Whilst the labour-to-goat terms of trade at 8 kg remained unchanged from the previous month, goat-to-maize terms of trade increased to 63kg from 54kg in August 2010.

Upper West

- The food security situation in the region remains precarious largely because poor households have seen very meager replenishment of their food stocks from the harvest so far during this season, leaving them with continuing dependence on the market for their food needs and reliance on unstable income sources to purchase food.
- In 57% of sentinel sites, households have depleted their food stocks, but this represents a substantial decline from August when 80% of sites had empty granaries. Similarly, 57% of sentinel sites still rely mostly on 2 meals per day, indicating that the region has endured an extended lean season this year.
- The price of millet is currently 33% higher than its level for 2009 and 32% higher than the five-year average. For sorghum, September price was 11% higher than its level for 2009, but was 28.9% higher than the five-year average. However, maize price is currently at the same level as that of September 2009 and 23% higher than the five year average.
- Goat-to-maize terms of trade are 88 kg whilst labour-to-maize terms of trade are 8.7, bringing both back to their July 2010 levels.

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

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1. Progress of the season in Northern Ghana

Above-normal rainfall conditions in northern Ghana ensured sufficient moisture availability for the continuing growth of both long and short cycle crops which are at different stages of development (Figure 1). The major harvest of early planted short cycle cereals commenced in September and is expected to be superseded with the harvest of late planted and long cycle crops in October and November. Yields of most harvested maize, yams, cowpea and groundnuts range from average to above average for most localities across northern Ghana. The majority of late planted maize are at the stage of grain filling and maturity with crop stand described as fair to good.

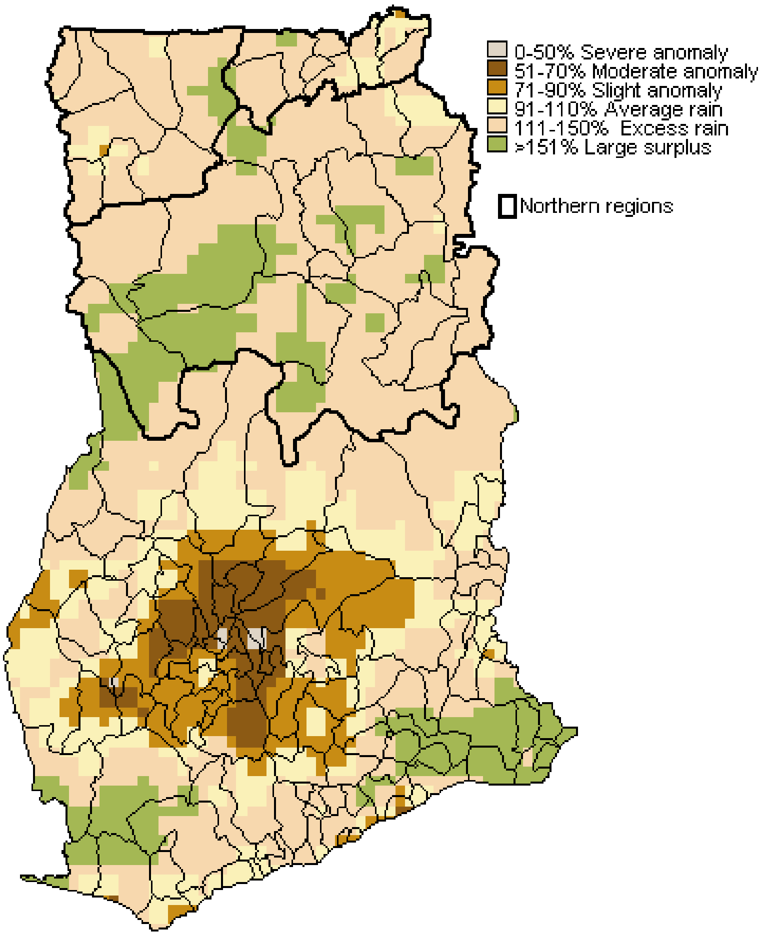

Figure 1. Rainfall estimates for September 2010 as a percent of the five-year average for September
Source: FEWS/USGS

There are isolated report of floods in Damongo, Gusheigu Central Gonja and Kpandai Districts of the Northern Region as well as Kassena-Nankana East District of the Upper East Region. Though these floods are not expected to cause substantial shortfall in food production in the affected areas, seasonal agricultural activities were disrupted and many farmers could not access their fields for a few weeks. In the Galwei area of the Gushegu District, 250 acres of maize, 1030 acres of sorghum and 593 acres of soybeans were inundated by water.

Heavy rains and flooding in parts of the East Gonja and Kpandai Districts resulted in the inundation of field crops, damage to sections of the road network linking the towns of Kpandai and Salaga and caused post harvest loss of food stuffs which could not be conveyed to the market on time. An estimated 10% of farmers in the Kassena-Nankana East District are reported to have been affected by floods resulting from the overflow of water from the Tono irrigation dam with rice and maize as the worst affected crops. Flooding could likely have a negative impact on yields of rice, maize and millet among low lying communities located along the tributaries of the White Volta River in the West Mamprugu District.

Following the late start of the season in several districts in northern Ghana and the high proportion of late planted maize fields, there are concerns that food production deficit could result if maize and other crops do not reach maturity before the stoppage of the rains in October. Poor performance of late planted maize could drive up the price of maize by the end of November. The yield prospects of some late planted maize could also be compounded by the reported excessive moisture saturation of fields as a result of heavy rains in September which caused crops to become yellow.

Thus, the outlook for cereal harvest in October and November remains mixed, as it is contingent on the distribution of moisture in October. In effect, the production level for late planted maize in most districts in the Upper West Region as well as West Gonja, East Gonja, Central Gonja, and West Mamprusi are all still tied to moisture trends in October.

2.0 Food Security Summary

Household food security has begun to stabilize in northern Ghana following the start of major harvest of cereal grains, tubers and legumes in various localities particularly in districts which planted early in the season. With only limited harvest of maize, cowpea, and groundnuts in September in some of the late planting localities, the main harvest in October and November is expected to substantially improve the supply of cereals and ultimately drive down prices of food commodities, thereby improving household food access for both rural and urban poor in northern Ghana.

The increasing availability of newly harvested crops is helping to replenish depleted household food stocks and complement food availability especially in the remaining pockets of food insecure locations where very little harvest has hitherto occurred. Consequently, food stocks are gradually showing promising signs of recovery in the Upper East and Northern Regions as 23% of the sentinel sites reported empty granaries of cereal in September down from 52% in August 2010. In turn, the proportion of sentinel sites which consumed 3 meals per day increased from only 10% in August to 63% in September 2010. Most marginal agricultural households have seen a significant improvement in their access to food through their own harvest while others have increased their daily food consumption through access to the increasingly available on-farm labour opportunities. However, farming households in the Upper West Region still lag behind the other two regions in terms of food stock replenishment, with 57% of sites reporting depleted stocks. As a result of this unseasonably slow improvement in stocks and continuing market dependence in this region, the prices of most cereals are currently higher than their level for September 2009.

With the resumption of some schools in September, high expenditure on school fees put pressure on the purchasing power of poor households. Thus, some of the newly harvested crops are being sold at relatively low prices to meet these needs, reducing the reserves of those households and undermining the prospects of earning better incomes at higher prices. The outlook on yields of long-cycle crops such as millet and sorghum is generally favourable, but an excess or a deficit in precipitation at the grain filling stage could reduce yields. It is likely that localized food insecurity will persist in the Central Gonja, West Gonja, parts of Bawku municipality, West Mamprusi and Lawra Districts where the start of the season was delayed for over one month

The two food security scenarios - food secure and moderate to severe food insecurity – highlighted in the August 2010 bulletin remains relevant to prognosis on the level of crop production at the end of the current season. With a major harvest of maize and yams already undertaken in the scenario one (food secure) localities, increasing market supply from the above average harvest has bolstered household food access and consumption in Bunkprugu-Yunyoo, East Mamprusi, Gusheigu, Karaga, Yendi, Zabzugu-Tatale, Saboba, Savelugu, Nanumba North, Nanumba South, and Kpandai Districts of the Northern Region. The failure of long cycle millet and sorghum as a result of irregular moisture distribution during the grain filling stage of these crops could transform this outlook and the general food security situation of these localities.

With scenario two (moderate to severe food insecurity), the outlook for major harvest of maize, millet and sorghum in districts that experienced a late start to the growing season remains unclear and the cessation of rains before the 20th of October could result in significant cereal production shortages. Household food stocks in these localities are starting to be replenished, with food insecurity slowly easing up among poor farming households as a result some initial crop harvest.

2.1 Northern Region

Following the commencement of the major cereal harvest in most districts in the region, food availability has significantly improved as a wide range of staple foods are now available for household consumption. The onset of the harvest is also enabling households to address the gaps in household income by selling groundnuts, beans and some maize to meet their immediate expenses on school fees and health care. In the eastern corridor of the region comprising Kpandai, Nanumba North and Nanumba South, Gusheigu, Karaga, Zabzugu-Tatale, Yendi and Bunkprugu-Yunyoo Districts, most households have recovered from the food shortages that characterized the "lean season" with greater reliance on food available from their own production. The market supply of maize and tubers has increased due to the good harvest in these major producing areas. Consequently, the proportion of sentinel sites with depleted food stocks declined from 60% in August to 29% in September 2010. However, as a result of late planting in some parts of the region, household food security continues to be constrained by limited replenishment of food stocks, leaving these households to continue their reliance on few meals a day. In 64% of sentinel sites, households consumed 3 meals per day which reflects an appreciation from the previous month when 50% consumed 3 meals.

The Goat-to-maize terms of trade appreciated to 89.6 kg in September from 71kg as a result of a decrease in the price of maize grain. Similarly, the labour to maize terms of trade also appreciated slightly to 7.8 kg in September from 6.5 kg in August. Improving terms of trade against cereal have the potential to improve food access for households which are currently dependent on the market for their food needs.

2.2 Upper East Region

Above average harvest of cereals and in September in Garu-Tempane, Kassena East, Talensi and Bawku Municipal is enabling households to replenish their food stocks and improve consumption of a wide variety of food groups. September harvest is widely expected to replenish household food stocks which were depleted during the lengthy “lean season”. With the main harvest of millet, sorghum and some maize expected in October across the region, food stocks will be bolstered, thus stabilizing the food security situation of most households in the region. The 62% of sentinel sites reporting quarter-full granaries of cereal most likely reflects this stock replenishment process while 22% of sites reported at least half-full granaries of cereal.

Currently, household food security conditions are marked by increased food access from households' own production, revival of agricultural income-earning opportunities as more avenues for wage earning becomes available in harvesting of the new grains. Thus, food consumption has seen a remarkable increase in the region, as 63% of reporting sentinel sites consumed 3 meals per day, up from 21% in August 2010. Market supplies and household food access will further be boosted after the major harvest of sorghum and millet in September and October, with a downward trend in prices of food commodities widely expected in the three regions. However, for those households which have not already harvested any grains, the food security situation remains fragile.

Whilst the labour-to-goat terms of trade at 8 kg remained unchanged from the previous month, goat-to-maize terms of trade increased to 63kg from 54kg in August 2010.

2.3 Upper West Region

The food security situation in the region remains precarious largely because poor households have seen very little replenishment of their food stocks from the initial harvest so far during this season. As a consequence of the delay in the start of this current season, most food deficit households currently have depleted food reserves, leaving them with continuing market dependence for their food needs and reliance on unstable income sources to purchase food. The harvest in September brought only meager replenishment of sorghum, maize and cowpea and pockets of household food insecurity remains a threat to poor households.

In 57% of sentinel sites, cereal stocks remain empty, but this represents a substantial decline from August when 80% of sites had empty granaries. Similarly, 57% of sentinel sites still rely mostly on 2 meals per day, indicating that the region has endured an extended lean season this year. Food deficit households will continue their recovery in October with the harvest of more cereals, legumes, and tubers which could substantially reduce their market dependence and reliance on unstable sources of income to purchase food. Goat-to-maize terms of trade are 88 kg whilst labour-to-maize terms of trade are 8.7, bringing both back to their July 2010 level.

3.0 Price trends and marketing activities

3.1 Northern Region

The supply of tubers, cowpea and maize has increased in both rural and urban markets following the recent harvest, resulting in a decrease in prices. Maize and sorghum prices are 11% and 22% lower than their level for September 2009, but 14% and 30% higher than the five-year average respectively. With maize prices now 20% lower than at the peak of the lean season in June, further price decline is expected after the main harvest in October and November. Millet prices have stabilized at GH¢ 64 per 100 kg since June 2010 and in spite of the fact that this price is 15% lower than that of September 2009, it is higher than the fiver year average by 12 percentage points (Figure 2 and ANNEX).

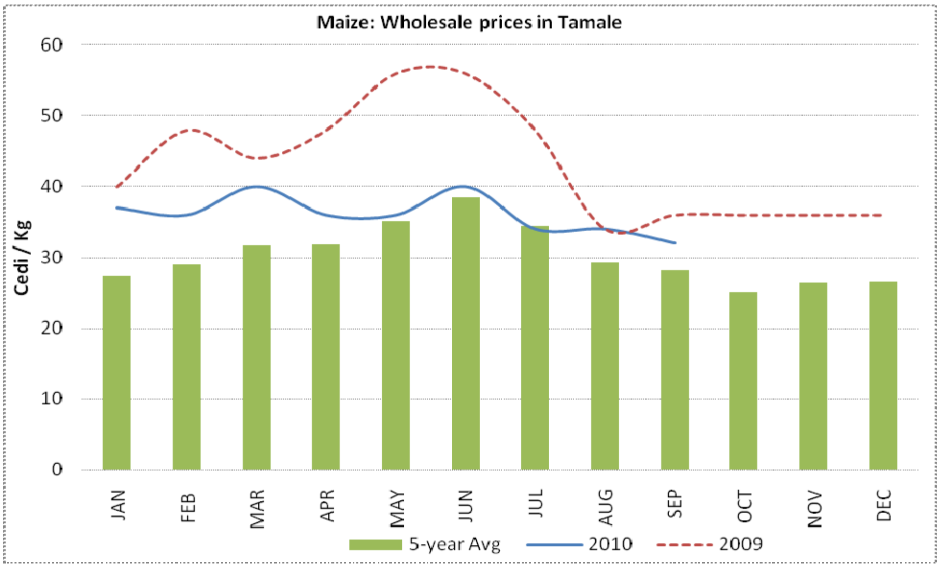

Figure 2. Prices of maize in Tamale
Source: MoFA/SRID

3.2 Upper East Region

Maize prices experienced a 14 percentage point decrease between June and August, but remained stable between August and September 2010. Currently, maize price is 14.2% lower than its level for September 2009 and 12.5 % higher than the 5-year average. Millet prices have remained largely stable since the beginning of this year, but are currently 9.1% lower than their level for September 2009 and 13.6% higher than the five-year average. In the case of sorghum, current prices are 11.8% lower than their level for September 2009, but 15.6% higher than the five-year average (Figure 3 and ANNEX)

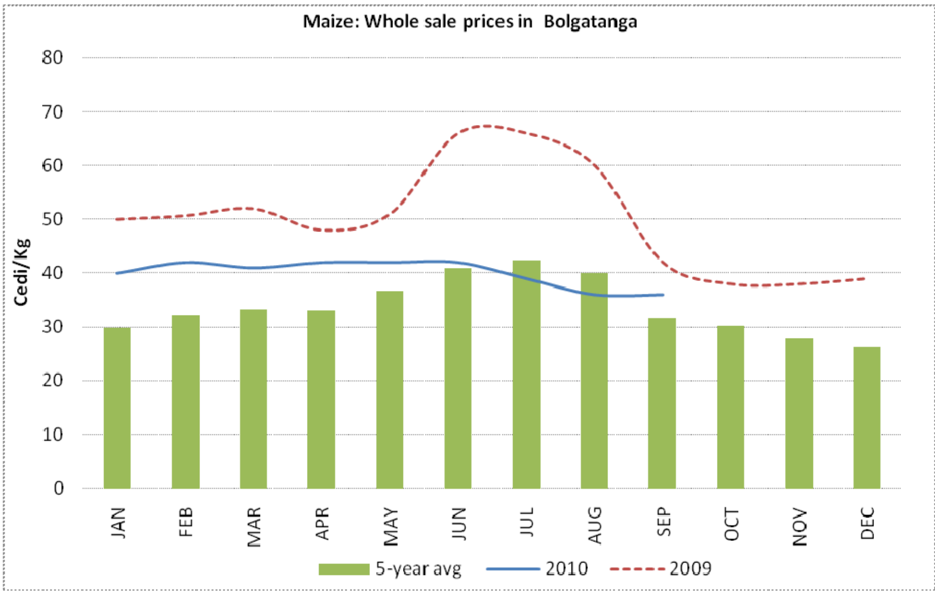

Figure 3. Prices of maize in Bolgatanga
Source: MoFA/SRID

3.3 Upper West Region

In the Upper West Region, where the supply of maize, millet and sorghum is relatively low because most of the cereals have not yet been harvested, prices of all major cereals remain high relative to the previous year and the five-year average. The price of millet is currently 33% higher than its level for 2009 and 32% higher than the five-year average.

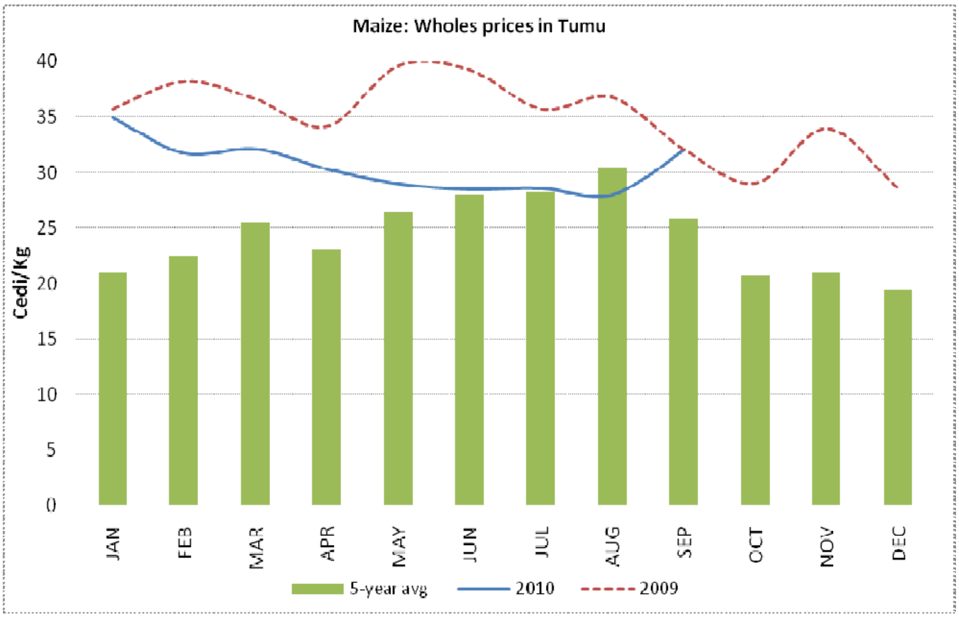

Figure 4. Prices of maize in Tumu
Source: MoFA/SRID

For sorghum, September prices were 11% higher than their level for 2009, but 28.9% higher than the five-year average. However, maize prices are currently at the same level as that of September 2009 and 23% higher than the five year average (Figure 4 and ANNEX). Concerns that late planted maize, millet and sorghum may not reach maturity before the stoppage of the rains in October are increasing traders' speculations in the region and driving up prices. The significant increase in prices of some cereals (in both Wa and Tumu) since June substantiates the prospects for a below average cereal harvest as a result of widespread late planting in the region. Most traders may be keeping large quantities of these cereals from the market with the hope of making higher profits in the future as most of the early harvest available to farming households is being kept off the market for consumption. However, the harvest of more cereals in October and November will increase the market supply of these commodities and likely ease up prices.

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 (20) 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 Ghana[1] (August 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	59	10.2% (4.7% - 20.5%)	13.1%	5.1% (1.7% - 13.9%)	3.3%	13.9%	3.1%
Upper East	250	20.6% (4.3%, 59.7%)	27%	7.6% (1.9%, 15.4%)	5.5%		
Northern	188	24.5% (18.9%, 31.1%)	21.8%	9.9% (7.4%, 16.6%)	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, and are currently high for the children in the northern region especially during this period of harvest of the start of harvesting from the farm level. The figures from the northern region were affected by the floods so the households in these communities have experienced reduced food availability.

5.0 Conclusions

***Availability*:** Household food stocks level have seen a significant recovery in the Northern and Upper East Regions following the recent harvest of cereals, legumes and tubers. The increased availability of these new stocks is helping to boost market supply and a reduction in prices of most food commodities. In the Upper West Region however, most marginal agricultural households have so far seen limited improvement in their foods stocks and the relatively low market supply has contributed to an increase in the prices of most cereals.
Access: Food security conditions in Northern and Upper East Regions are marked by increased food access from households' own production and a revival of agricultural income-earning opportunities as more avenues for wage earning becomes available in harvesting of new grains. With cereal prices continuing to increase in the Upper West Region, poor rural and urban market-dependent households may be facing serious constraints in access food.
Utilization: The quality of meals and the diversity of food groups consumed by rural households have generally improved as a result of the ongoing harvest.

[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