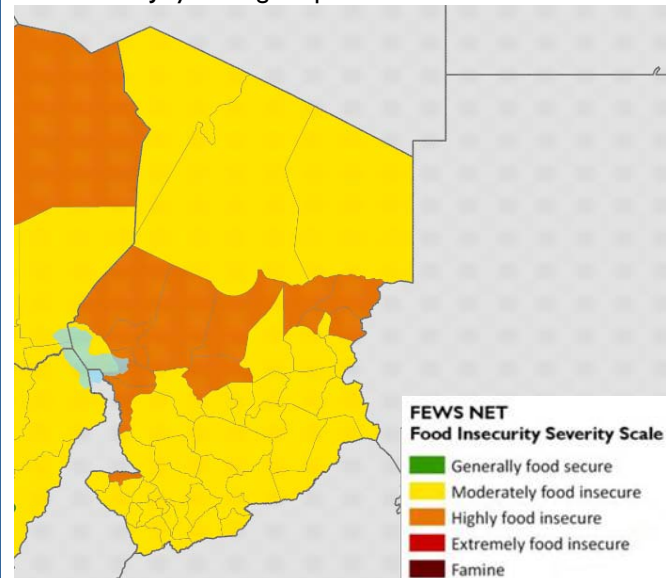


## CHAD Food Security Update

July 2009

- Start-of-season conditions for the 2009/10 growing season for rainfed crops in southern Chad are beginning to raise concerns, with ensuing dry spells causing seedlings to wither and early crops planted at the end of April to fail. The erratic conditions marking the beginning of the rainy season in the southern part of the country are limiting replanting opportunities for medium-cycle grain crops.
- Adding to what has been an especially harsh hunger season in livestock-raising areas, the belated start of the rains is slowing return migration by migratory herds to major grazing areas in the northern reaches of the country's farm belt. There are reports of heavy losses of livestock, particularly in transhumant pastoralist and agropastoral livelihood zones. Access to dairy products and grain crops through purchases and in-kind trading in these areas is extremely limited.
- Prices for staple grain crops are still running relatively high compared with the five-year average for the same time of year in the face of what are believed to be mediocre start-of-season conditions for rainfed crops. Poor and average households in transhumant pastoralist and agropastoral areas around the nation's capital, areas hard hit by the flooding in Mayo Kebbi, and host communities in the conflict area along the nation's border with Sudan could be facing a deterioration in their food access.
- The food pipeline operated by humanitarian organizations for refugees and IDPs has enough supplies to meet the needs of these at-risk groups up until November of this year. The level of the national food security reserve is currently at 20,000 MT, or at 57 percent of its strategic level (35,000 MT).

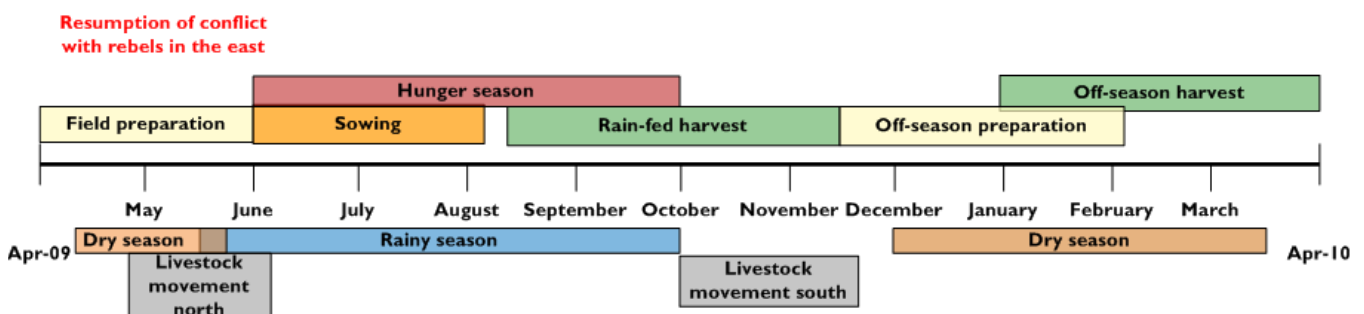
**Figure I.** Assessment of the most likely food security scenario for July through September 2009



See [www.fews.net/FoodInsecurityScale](http://www.fews.net/FoodInsecurityScale) for more information on the FEWS NET food insecurity severity scale.

Source: FEWS NET Chad

### Seasonal calendar and timeline of critical events



Source: FEWS NET Chad

## Overview of the current food situation

The 2009/10 growing season for rainfed crops got off to a poor start in most parts of the country, limiting replanting opportunities for medium-cycle grain crops and keeping grain prices above the nominal five-year average. While the humanitarian pipeline is able to ensure the distribution of full food rations to refugees and IDPs up until November, the national food security reserve designed to assist the native population can meet only 57 percent of established food aid needs between now and the end of the hunger season, in September. According to FEWS NET observers, the assumptions of rainfall deficits in the Sahel and a poor distribution of rainfall in the south serving as basis for the food security outlook for July through December are being borne out.

The belated start of this year's rains is slowing the growth of new plant cover and forestalling any improvement in the condition of livestock. Thus far, any new plant cover in agropastoral areas is still inconsequential and is virtually nonexistent in transhumant pastoralist areas, and watering holes are few and far between. Cattle, the animal species most sensitive to any type of stress, are already dying by the hundreds in the Barh-El-Gazal and Chari Baguirmi regions of the country from a combination of starvation and thirst. Despite government distributions of animal feed, whose availability is outstripped by livestock needs, there are continuing reports of animal deaths in hard hit villages such as Moussoro in the Bahr-El-Gazal region and Dourbali in the Chari Baguirmi region.

Market supplies are running low with the steady depletion of on-farm and trader inventories and breakdowns in communications with certain assembly markets due to the periodic closing of roads connecting these markets to major consumer market centers monitored by FEWS NET. High prices and the likelihood of further hikes in prices during the hunger season are curtailing grain access for high-risk groups such as low-income households in areas affected by last year's floods, native households in conflict areas, and pastoral and agropastoral households in areas with structural crop production deficits. This high-risk group also includes most poor urban households reliant on local markets for their food supplies.

Ongoing farming activities include planting and, in some cases, replanting and weeding, depending on the amount of rainfall in each area since the rainy season got underway in April and May. However, most gauging stations are reporting rainfall deficits, which are affecting the planting and sprouting of crops. Though it is still premature to make any predictions with respect to the general progress of the 2009/10 growing season, the somewhat belated or poor start of the rainy season in certain parts of southern Chad could be a harbinger of ensuing periods of drought in September, before crops have fully matured. In the short term, the tightening of market supplies of early-maturing crops and the steady rise in food prices during the hunger season will affect living conditions. However, there is still some hope that the rains will pick up in mid-July, reviving crops planted in the last dekad of May and the beginning of June and allowing for the planting and/or replanting of fields prepared for the sowing of crops back in May, though the rains appear to be late in reaching certain parts of the Sudanian zone such as Mayo Kebbi, Baguirmi, Lac-Iro, etc.

## Eastern and southern receiving areas for refugees and IDPs

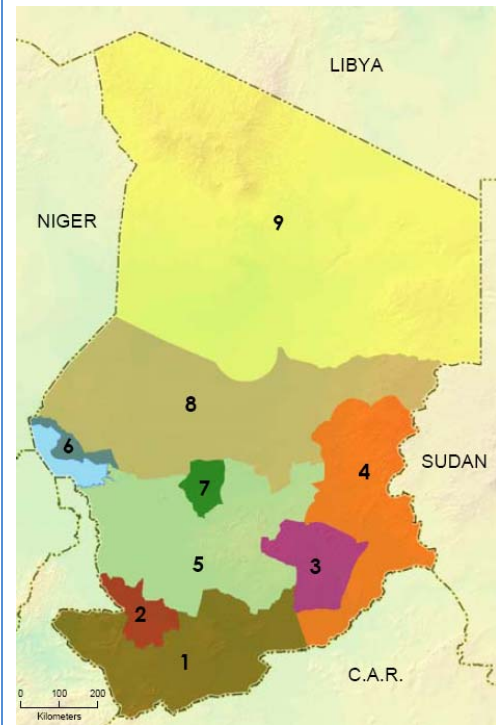
In general, the food situation in conflict areas is not a source of concern. The volume of pre-positioned food supplies as of June 28<sup>th</sup> is sufficient to meet 92 percent of the needs of Sudanese refugees and IDPs in eastern Chad until the month of November. General distributions of provisions in June provided some 253,900 Sudanese refugees with full food rations. Over 200,000 IDPs and returnees in various camps and villages have received anywhere from 45 to 60 days worth of seed protection rations. The International Committee of the Red Cross distributed 500 western hoes and 390 donkey-drawn weeders to residents of 26 villages in Dar Sila in an endeavor to strengthen their production capacity. A total of 3,488 households benefited from these distributions, 64 percent of which were families of returnees and the other 36 percent village residents. However, stubborn civil security problems, particularly acts of banditry, in eastern Chad, and market disruptions associated with the erratic start of the 2009/10 rainy season are affecting the smooth flow of trade and driving up prices for local grain crops, which is curtailing the food access of poor households in native communities whose livelihood depends on the growing of rainfed grain crops.

Closures of inland roads in the southeastern part of the country led to the opening of a temporary humanitarian corridor from Bangui, in the Central African Republic, for the pre-positioning of 265 metric tons of food supplies for Central African refugees in the Daha area to meet the food needs of this group of refugees for two months of the rainy season.

### Flood-stricken areas

The effects of last year's floods in villages in the livelihood zone dependent on the growing of rice as a cash crop, where poor households account for 70 percent of the population, are creating troubling levels of food insecurity across the Mayo Kebbi area. Poor and average households, particularly in the Fianga area hard hit by the latest 2008/09 floods, are currently at the mercy of high food prices on local markets. The erratic start of this growing season could dash any hopes of taking advantage of early (groundnut and corn) crops generally harvested at the end of July or the beginning of August to ease hardships during the hunger season. Furthermore, there is a growing tendency on the part of traders to engage in speculation in the face of erratic supplies, a sustained demand for food crops for the duration of the farming season, and a pessimistic harvest forecast for the current growing season for rainfed crops. To cope with food security problems, at-risk households are stepping up survival strategies such as tending cattle, gathering wild roots and other wild plant foods, hunting, etc., with certain poor households already resorting to comparatively harsh strategies such as cutting back the quality and quantity of their food intake, selling productive assets, and borrowing at usurious interest rates. Poor and average households affected by the latest floods in this area are still facing high levels of food insecurity.

**Figure 2: Livelihood zone map of Chad**



Source: FEWS NET Chad

### Agropastoral livelihood zones surrounding the city of N'Djamena

The household food situation in these areas is steadily deteriorating under the combined effects of various aggravating factors. Prices for staple grain crops in N'Djamena are still running well above the five-year average. Environmental protection measures and government cost-cutting measures are limiting income generation from sales of woody forest products and employment in public works programs. At the same time, these agropastoral areas are in the throes of a severe livestock crisis in which a lack of pasture and water is responsible for the loss of hundreds of head of cattle in certain villages in the vicinity of the capital. The Government response is to assist especially hard hit villages through distributions of animal feed, particularly cottonseed and cotton cakes. However, the availability of these products is nowhere close to meeting the needs of the area's emaciated cattle population. Moreover, even with the stepping up of other survival strategies (employment as paid laborers, craft-making, small-scale trading), poor and average households in these areas are still having difficulty meeting their food needs.

In addition, coercive government measures designed to protect the environment are curtailing access to fuelwood, the main source of cooking fuel for poor and average households in the nation's capital. As a result, the price of fuelwood has more than tripled, as has the cost of a normal cooked meal, which is affecting proper food use. At the same time, the poor performance of livestock is limiting milk production, which generally helps boost the nutritional value of the local household diet at this time of year.

### Structurally deficit areas (Kanem and West Batha)

At-risk households, which account for 40 percent of the population of the Kanem and West Batha regions plagued by structural grain deficits, have completely depleted their food stores. The expected improvement in the performance of livestock at this time of year, easing food security problems in transhumant pastoralist and agropastoral areas, has not materialized. The animal population is in the throes of an unusually harsh hunger season, further exacerbated by the later

than usual onset of the rains, limiting any new plant growth in these areas. Current food access for both the human and the animal populations of these areas is extremely insecure.

Grain access problems due to rising prices and the depreciation in the value of animal products, which serve as a source of both food and cash income in both these regions, are undermining the food situation of poor and average area households, which could be facing increasingly high levels of food security. These two regions already have the country’s highest rates of chronic malnutrition.

**Progress of the growing season**

The progress of the 2009/10 growing season has been affected by poor start-of-season conditions, with grain crops planted early in the season, in the last dekad of April, subsequently withering in the course of ensuing dry spells in May, with the sole exception of lowland crops able to withstand the effects of water stress.

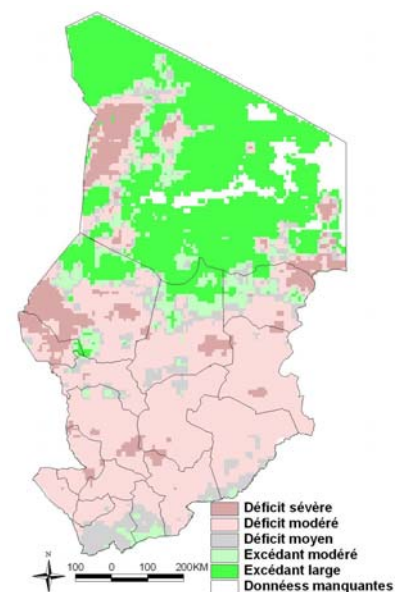
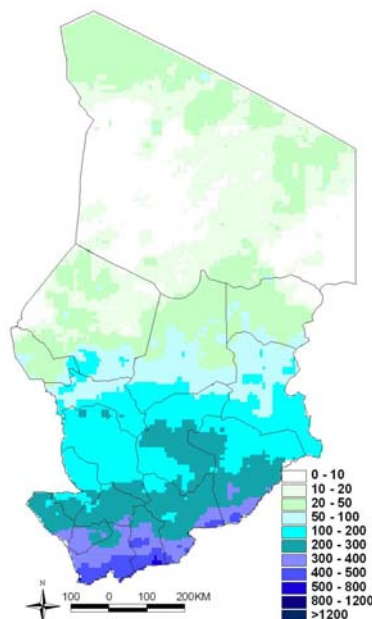
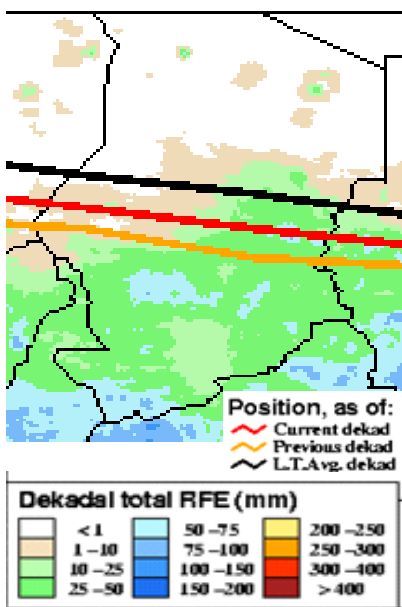
The ten-day forecast by the National Weather Service attached to the Department of Water Resources and Meteorology (DREM) puts the position of the Intertropical Front (ITF) between 16 and 18 degrees north latitude during the second dekad of July (Figure 3a). With the ITF in this position, normally, most farming areas should be getting heavy rainfall and plants

**Figure 3a.** Satellite image of the position of the ITF and cumulative RFE as of the 1st dekad of July 2009

**Figure 3b.** Season-long cumulative satellite rainfall estimate (RFE) for the period from the 1st dekad of April to the 1st dekad of July 2009

**Figure 3c.** Satellite image of 2009 cumulative RFE anomalies as of the 1st dekad of July, compared with the average

Source: ADDS/FEWSNET/USGS Regional



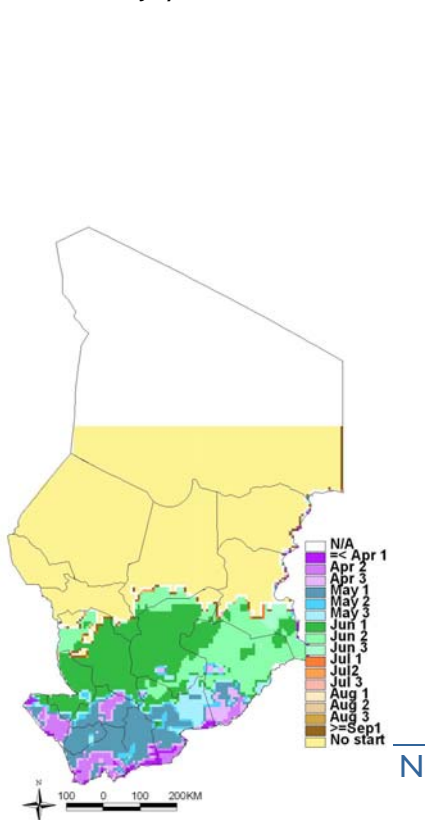
should not be experiencing any water stress. According to Figure 3a, as of the first dekad of July, the position of the ITF (marked in red) was south of its normal climatological position (marked in black) for this time of year. As a result, certain areas below the 13th parallel of north latitude got very little rainfall, or only between 10 and 25 mm of rain, except for southern Pendé, where rainfall amounts ranged from 50 to 75 mm. The July 10<sup>th</sup> report from the FEWS NET observer based in Goré described the status of crops as critical, as farmers continued to dry plant crops in the midst of ensuing dry spells in the first dekad of July. However, by July 13<sup>th</sup>, the FEWS NET observer in Goré was reporting an improvement in conditions over a two-day period of substantial rainfall (July 11<sup>th</sup> and 12th), helping to revive crops and allowing for the transplanting of sorghum crops and the planting of short-cycle (sesame and cowpea) crops.

A look at the cumulative satellite rainfall estimate (Figure 3b) shows season-long rainfall totals of from 100 to 500 mm across the entire farm belt for the 100-day period since the start-of-season. Figure 3c shows moderate rainfall deficits compared with the average throughout the country's farm belt, except in Barh Sara, Grande Sido, and Haraze-Mangueigne departments. In contrast, parts of the rice-farming livelihood zone and the far southern reaches of the country's agropastoral zone show severe rainfall deficits compared with the average.

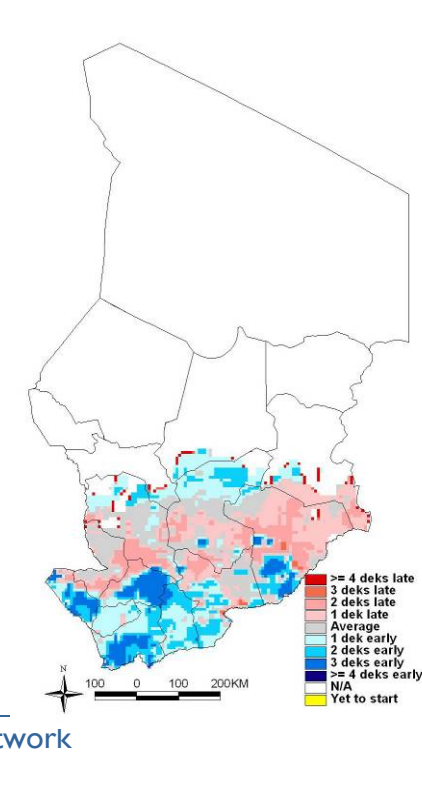
Figures 4a through 4c below show the progress of and poor conditions affecting the 2009/10 growing season. Figure 4a shows the dekad in which different areas got enough rainfall for farmers to begin planting crops. According to the map of this year's start-of-season anomalies compared with the median starting date (Figure 4b), the rainy season got off to an extremely early start in the far southern and southwestern reaches of the country. However, the aberrant conditions marking the beginning of the 2009/10 growing season for rainfed crops are underscored by a comparison of the start-of-season with actual planting dates, which fell somewhere in the last dekad of June in most farming areas, except in the Logone, Tandjilé, and Moyen Chari regions where crops were planted in the first two dekads of May, only to subsequently wither during the more than 10-day-long dry spells reported in these areas after the seedlings had already sprouted.

Now, all hopes rest on the crops planted and replanted early in June in many areas, despite the more than two-week lag in the western Mayo Kebbi, Baguirmi, and central Guéra regions and virtually all of Salamat compared with normal planting periods according to the map in Figure 4b. Moreover, as illustrated by Figure 4c, nor are the few seedlings able to withstand these early dry spells assured of continuing to thrive with most water satisfaction indexes at less than 50 percent. These soil water deficits and planting delays can adversely affect crop yields, particularly if no provisions are made to take into

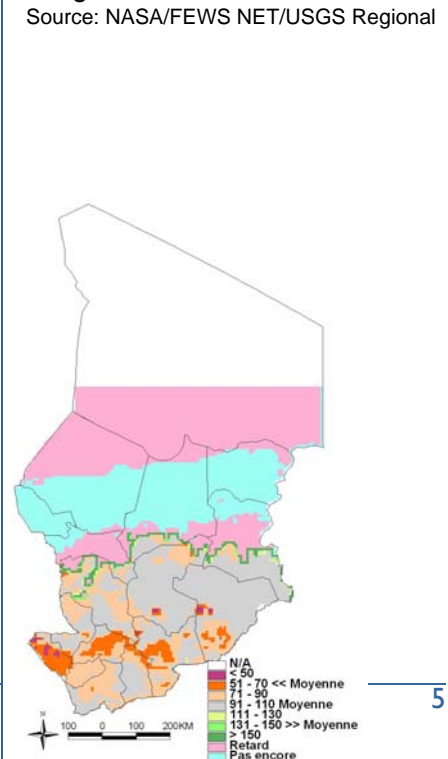
**Figure 4a.** Satellite image of starting dates for the 2009/10 season as of the 1<sup>st</sup> dekad of July



**Figure 4b.** Satellite image of 2009/10 start-of-season anomalies as of the 1st dekad of July, compared with the median



**Figure 4c.** Satellite image of water requirement satisfaction index (VWRSI) anomalies for millet as of the 1st dekad of July, compared with the average



Source: NASA/FEWS NET/USGS Regional

account the photoperiodicity of certain varieties of crops such as sorghum at this advanced stage of the growing season.

**Markets and trade**

With the condition of certain roads beginning to deteriorate and farmers in the southern part of the country busy with farmwork in the month of June, there has been a certain slowing of the flow of supplies from crop-producing areas to major markets. Moreover, the steady depletion of on-farm inventories and the speculative practices of certain traders in the face of the late start of the growing season for rainfed crops in southern farming areas are tightening current market supplies. As a result, June prices for staple grain crops on the country’s leading grain markets monitored by FEWS NET such as N’Djamena, Sarh, Moundou, and Abéché were well above the nominal five-year average for 2003/04-2007/08. Prices in Moundou and Sarh are also running well above nominal prices at the same time last year with the swollen population of these areas during crop maintenance periods.

June prices for pearl millet on all four markets ranged from 18 (Abéché) to 53 (Sarh) percent above the nominal five-year average. The price differential is even more striking in the case of sorghum, the substitute grain of choice for pearl millet consumed by poor and average households during the hunger season. The price of sorghum on the Abéché market, where it is relatively less popular, is 9 percent below the nominal five-year average, but sorghum prices on the other three markets are running above the nominal five-year average by anywhere from 39 percent in N’Djamena to as much as 82 percent in Moundou.

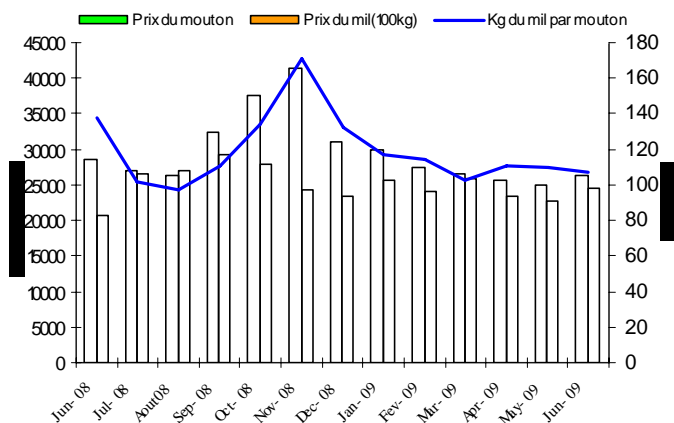
The high cost of these staple grain crops is severely curtailing food access, particularly for poor and average households across the country affected by structural food deficits and recurring shocks. Foreseeable responses include recourse to comparatively less expensive substitute grains or cutbacks in the quality of the normal household diet, which could affect the nutritional situation of this group of households in these areas.

Prices for an average sheep traded on the N’Djamena market edged upwards in June compared with prices for the first two months of the second quarter. However, this gain was offset by the rise in pearl millet prices on the same market during this same period. Thus, there was a slight deterioration in terms of trade in the second quarter of this year, during the months of May and June.

A comparison with June of last year shows a clear deterioration in terms of trade for pastoralists selling sheep. In fact, the sale of an average sheep in June of this year bought the equivalent of a mere 107 kg of pearl millet compared with 138 kg of this same grain a year ago, which comes to a loss of 31 kg of pearl millet per sheep. This is primarily affecting the food security of poor and average pastoralist and agropastoralist households in transhumant pastoralist and agropastoral areas.

The current performance of livestock is unusually poor, even in the midst of the hunger season in livestock-raising areas, depriving local households of a source of both income and nutritional supplementation in the form of animal products. In the face of recent restrictions imposed on the use of woody forest products such as charcoal, current household coping strategies revolve around stepping up craft-making activities and selling off animals as a way of thinning their herds. This group of households will have an increasingly hard time meeting their grain needs in light of high market prices and their relatively weak purchasing power. The troubling food outlook for this group of households in these areas requires special attention by the Action Committee for Food Security and Crisis Management. The hardships faced by these high-risk households could be eased by targeted grain sales at subsidized prices and distributions of animal feed.

**Figure 5 : Terms of trade for pearl millet/sheep on the N’Djamena market**



Source: SIM/FEWS NET Chad

In general, the nationwide food situation is raising a number of concerns. Despite a relatively well-stocked humanitarian pipeline and the on-site pre-positioning of enough food supplies to meet the food needs of refugees and IDPs in eastern Chad up until November, poor and average households in transhumant pastoralist areas, areas hard hit by the latest floods in Mayo Kebbi, and urban and peri-urban areas of the nation's capital are plagued by poor food access. These at-risk households require contingency programs in anticipation of a possible deterioration in their food situation. At roughly 20,000 MT, the current level of the national food security reserve is inadequate in the face of the magnitude of current needs, whose assessment by the Action Committee for Food Security and Crisis Management (CASAGC) is still pending. Government measures helping to promote a smooth flow of trade in food crops by relaxing control procedures and trade barriers could lessen the severity of current conditions.



Sorghum, millet, white maize, and local and imported rice are the most important food commodities. Millet is most heavily consumed in the eastern and northern regions of the country. Local rice is another basic food commodity, especially for poorer households. Imported rice and white maize are most commonly consumed in and around the capital. The Marché de Dembé in N'Djamena, the capital city, is the largest market for cereals. Moundou is an important consumer center for sorghum and the second largest market after the capital. The Abeché market is located in a northern production area. The Sarh market is both a local retail market and a cross-border market.

Monthly prices are supplied by FEWS NET enumerators, local government agencies, market information systems, UN agencies, NGOs, and other network and private sector partners.

