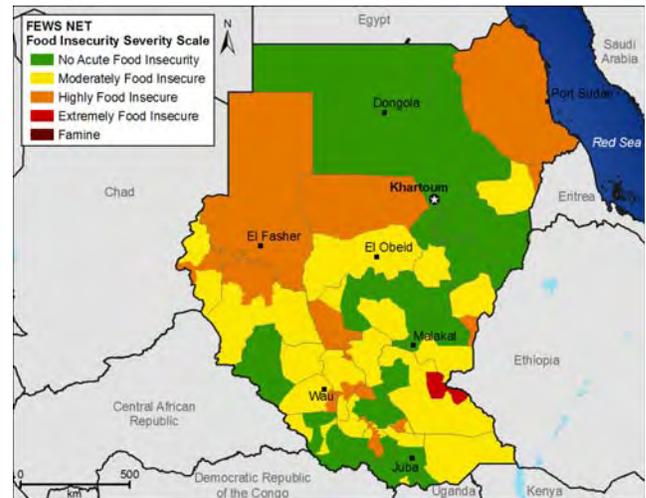


## Sudan Food Security Outlook

July to December 2010

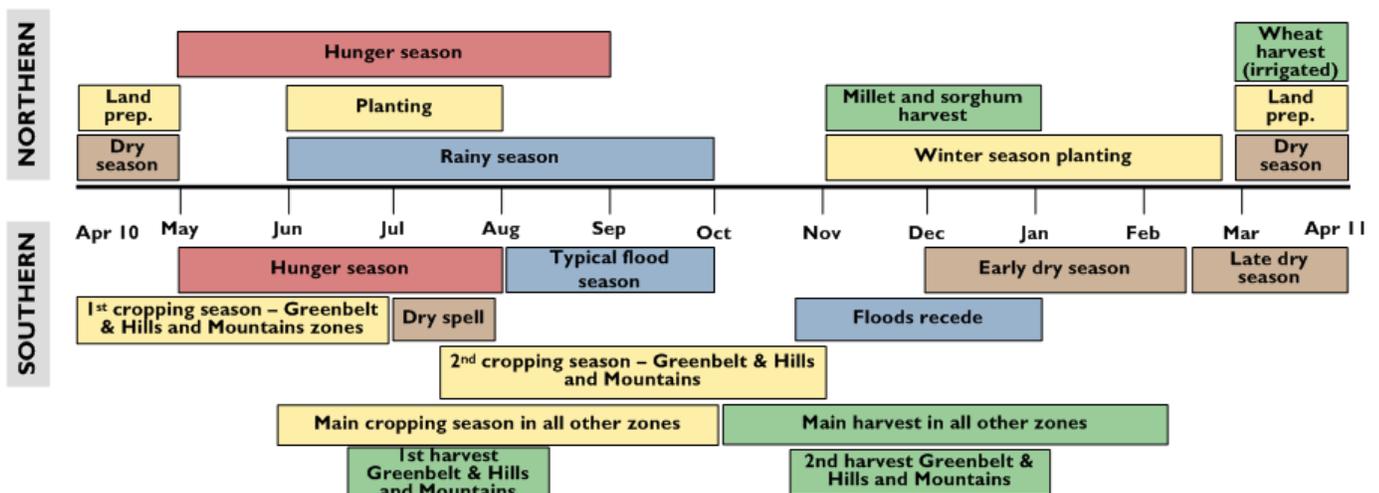
- In Northern Sudan, there are currently over five million food insecure people. Of this population, four million people are located in the Darfur region, including more than two million internally displaced persons (IDPs). Other food insecure populations are located in Red Sea, Kassala, Blue and White Nile, and North and South Kordofan states. Food insecurity is mainly driven by insecurity/conflict in Darfur, limited livelihood strategies in the environmentally degraded areas of eastern Sudan, and the poor 2009/2010 harvest.
- In Southern Sudan, the food insecure population is mainly concentrated in Jonglei, Warrap, Northern Bahr el Ghazal, and Eastern Equatoria states. Most food insecure conditions at this time are associated with lean season shortages, exacerbated by insecurity and displacements.
- Food security conditions in Northern Sudan are likely to deteriorate during July to September, the peak lean season, and to improve during October to December with the harvest. In Southern Sudan, food security conditions are expected to deteriorate during the peak hunger season of July/August. Conditions are likely to improve beginning in August in Eastern, Central, and Western Equatoria states. In all other states, conditions are likely to improve during September and October when early cycle crops mature for consumption, but not for displaced households, who are not likely to cultivate this cropping season. Crop performance to date is mixed, especially in Eastern Equatoria State.

**Figure 1.** Current estimated food security outcomes, July 2010



Source: FEWS NET  
For more information on FEWS NET's Food Insecurity Severity Scale, please see: [www.fews.net/FoodInsecurityScale](http://www.fews.net/FoodInsecurityScale).

### Seasonal calendar and critical events



Source: FEWS NET

## Most likely food security scenario (July-December 2010)

### Northern Sudan

In Northern Sudan, approximately five million people are moderately (45 percent of the food insecure population) or highly (55 percent) food insecure, due to the impacts of more than six years of conflict in Darfur, the poor 2009/2010 rainy season, chronic poverty, and environmental degradation along the semi-desert belt in the north and east.

Food insecurity is concentrated in Darfur, with about four million moderately and highly food insecure people. The rest of the food insecure population is located in the Red Sea and parts of Kassala states, with about 150,000–200,000 and 90,000–100,000 moderately to highly food insecure people, respectively; and parts of South Kordofan, Blue Nile, North Kordofan, and White Nile states, with about 500,000–700,000 moderately food insecure people. These levels of food insecurity are expected to continue until the October harvest. However, the over two million IDPs and mixed communities (IDPs and host) in Darfur, rural poor households in Red Sea State, households in Hamshkorieb locality in Kassala State, and populations affected by insecurity in Abeyi locality in South Kordofan State will remain moderately to highly food insecure even after the harvest.

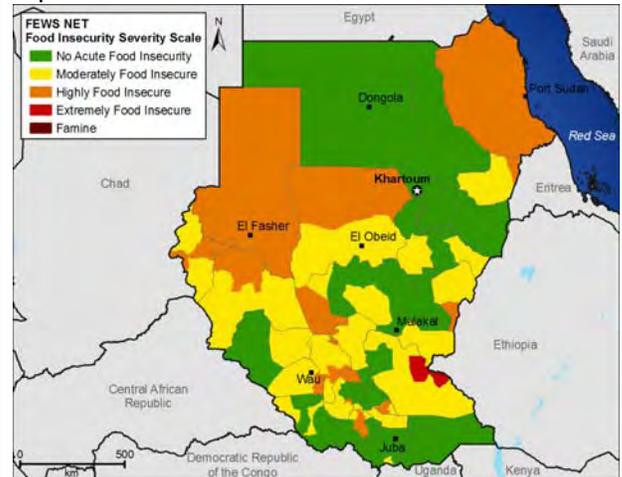
### Darfur region (North, South, and West Darfur states)

Food insecurity in Darfur is due to persistent insecurity, exacerbated by the poor 2009/2010 harvest and escalated fighting since the beginning of the year. These conflicts mainly involve fighting between Government of Sudan (GoS) and Darfur rebel groups, internal fighting among rebel factions in Jabal Mara, and tribal fighting among Rezeigat and Messeriya Arab rivals. Fighting in Darfur has resulted in about 600 and 221 deaths in May and June 2010, respectively, and displaced 60,000–70,000 people over the past four months.

Of the four million food insecure people in Darfur, more than two million are IDPs, with the remainder comprising mixed and resident communities affected by the ongoing conflict and the poor harvest. Recent assessments and monitoring in Darfur point to deteriorating food security conditions for IDPs and mixed communities over the last several months, with a shift from moderate to high food insecurity for these populations, as projected in the FEWS NET April Outlook. The proportion of highly food insecure households among the IDPs in South Darfur has increased from 4 percent in the first quarter of 2010 to 19 percent in the second quarter, while the proportion of highly food insecure households among the mixed communities in South Darfur has increased from 27 percent in the first quarter of 2010 to 48 percent in the second quarter. Thus, in the second quarter, about 78 percent of the IDPs in South Darfur are either moderately or highly food insecure. In North Darfur State, 57 percent of IDPs are food insecure (14 percent highly food insecure and 43 percent moderately food insecure), 49 percent of mixed communities are food insecure (2 percent highly food insecure and 47 percent moderately food insecure), and 66 percent of resident communities in North Darfur are food insecure (13 percent highly food insecure and 53 percent moderately food insecure). In West Darfur, 40, 33, and 19 percent of IDPs, mixed communities, and resident communities are moderately food insecure, respectively.

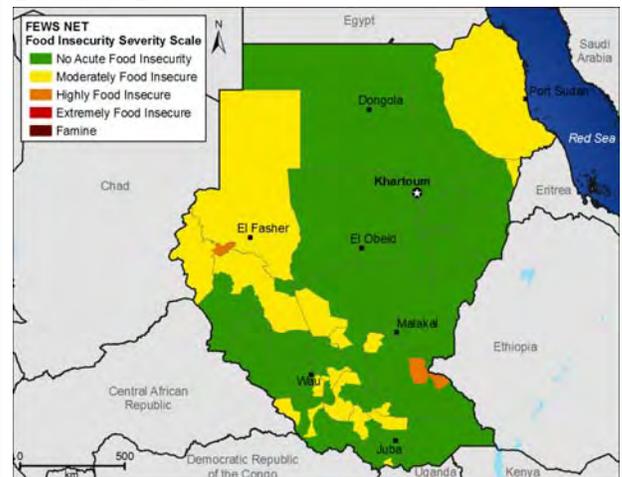
High food prices have also constrained food access in Darfur. According to recent WFP food security monitoring, the cost of the minimum food basket has increased by 38 percent, 35 percent, and 14 percent during the second quarter of 2010

**Figure 2.** Most-likely food security scenario, July-September 2010



Source: FEWS NET Sudan

**Figure 3.** Most-likely food security scenario, October-December 2010



Source: FEWS NET Sudan

compared to the first quarter in North Darfur, South Darfur, and West Darfur, respectively, while the bulk (65-70 percent) of household income is spent on food items. Food aid contributes over half of the grain supplied on markets. The comparatively low cost of the minimum food basket in West Darfur is believed to be due to grain flows from Chad to West Darfur.

During the July to December Outlook period, IDPs in Darfur are unlikely to return to their homesteads, in spite of peace talks in Doha between the GoS and some Darfur rebel groups, and will continue to receive food aid. However, the food aid ration will be reduced to 50 percent of the standard ration (the ration was reduced to 72 percent in 2009, and to 62 percent in the first half of 2010). This is expected to take place during the lean season, when prices peak and food stocks are drawn to a minimum, thus reducing household food availability. The reduction of the ration is also likely to reduce supply and push prices further upward over the lean season.

The June-September rainy season is projected to be normal to above normal, although June rainfall was below normal, and there are growing concerns over dryness in the first dekad of July in South Kordofan, Gadaref, southern parts of North Darfur, and White Nile states. However, rainfall has increased in the second dekad of July, with flooding and damage reported in Kassala, North Darfur, Senar, and South Kordofan states. In Kassala State, floods killed 15 people, wounded 11 people, and destroyed about 400 houses. Normal to above-normal rains over the rest of the season would improve access to water, pasture, and milk, although above-normal rains are likely to increase risk of floods and seasonal susceptibility to water-borne diseases (e.g. malaria and diarrhea) associated with high malnutrition during the rainy season.

Above-normal rains would also block roads, increase transport costs, and delay supplies of essential commodities (e.g. sugar, fuel) from Central Sudan, pushing prices further up during the rainy season. However, cereal prices are likely to decline during the harvest time (October-December). Livestock prices are likely to remain high or further increase due to high demand for export during the pilgrimage period.

Continued conflict between the GoS and the Justice and Equality Movement (JEM), among rebel factions in Jebel Mara, and among Rezeigat and Messriya Arab rivals is also likely to hamper access to affected populations by humanitarian agencies, reduce access to markets, and limit normal coping strategies such as wild foods collection and seasonal labor migration.

Consequently, between July and September, food security conditions are expected to deteriorate due to continued high cereal prices, the reduction of the food aid ration at the peak of the lean season, the potential impacts of above-average rains, and the expectation of continued conflict. The majority of the four million food insecure people in Darfur have been surviving on food aid and the income generated from daily unskilled labor and the collection of firewood and grass. During the lean season, some households may resort to negative coping strategies, e.g. unsustainable charcoal/firewood collection and removing children from school, in order to cope with the sharp increase of food prices and the reduction of the food aid ration. WFP and partner NGOs are currently implementing a blanket supplementary feeding program in Darfur for about 500,000 children under five. From July to September, households are expected to remain moderately to highly food insecure. Moderately food insecure households will meet basic food needs through a combination of coping strategies and reliance on food assistance. Highly food insecure households will not meet basic needs, in spite of food assistance, because of the severity of food deficits, sharp increases in food prices, limited purchasing power, lack of asset-based livelihood strategies, and ongoing insecurity.

Food security conditions are expected to improve in Darfur from highly food insecure to mostly moderately food insecure beginning in October with the harvest. IDPs and mixed communities with limited access to cultivation will continue to require food assistance during this time. These populations are expected to remain moderately to highly food insecure. In spite of the projected harvest, neither IDPs nor residents will be able to recover the assets lost by the conflict and drought of the past two years. Furthermore, labor-based activities such as brick-making and seasonal unskilled labor in towns will not generate enough cash to cover basic food and non-food needs of the IDPs. The expected reduction of cereal prices after the harvest in October will reduce the need for food aid, but the IDPs in camps with limited access to cultivation will not be able to meet all of their food needs from the market.

#### **Red Sea and Kassala states**

There are about 150,000–200,000 and 90,000–100,000 moderately to highly food insecure people in the Red Sea and parts of Kassala states, respectively. High food insecurity is predominant in the Red Sea State and moderate to high food

insecurity is prevalent in parts of Kassala State (Hamashkoreib, Talkuk, Delta Shamal, and Delta Janub). Food insecurity in these states is due to two to three consecutive poor rainy seasons and low 2009/2010 crop production, limited/marginal livelihood strategies in the environmentally degraded areas, and weak purchasing power. Many people in these areas rely on artisanal gold mining in remote mountains as a coping strategy.

The consecutive poor rainy seasons have reduced livestock holdings due to water and pasture shortages and reduced food and cash income from share cropping. Normally, share cropping provides about 35-45 percent of annual cash income and 20-30 percent of the annual food income for a typical poor household in these areas. This year, it only provided 10-15 percent of food income and 15-20 percent of cash income. However, cereal prices are 55 percent above the five-year average and 25 percent above the same period last year.

With the onset of the rains in June/July, more labor opportunities will be available in the mechanized farming areas of Gedaref and Kassala States. However, this will have a limited impact on food security outcomes from July to September, as only male members of the households will migrate to work in share cropping. The major impact of share cropping will occur in October, when poor households receive food or cash from sales of the shared crop. Thus, from October to December, food security in the Red Sea and parts of Kassala states is likely to improve from highly food insecure to moderately food insecure. For labor-dependent households in Kassala and Portsudan towns, food insecurity is likely to remain high until October, when prices of main staple foods decline during the harvest time. In addition, labor to staple food terms of trade are likely to improve during this period. Seasonal malnutrition rates tend to increase during the peak hunger season and are expected to be high during the July–September period. Current school feeding/food for work interventions, livestock recovery, limited nutrition programs, and seed and tool distributions have been insufficient to address the current high food insecurity situation in the area.

To cope with food insecurity during the lean season, rural poor households are expected to intensify livestock sales in order to buy food. Extremely poor households will sell the few productive goats they have and resort to unsustainable strategies such as sales of firewood/charcoal and artisanal gold mining.

### Southern Sudan

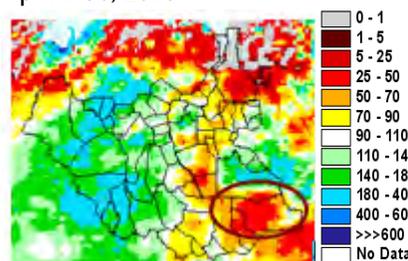
In Southern Sudan, current food security conditions range between moderately and highly food insecure with the exception of Akobo County (Figure 1), which is extremely food insecure. Generally, areas of high food insecurity are characterized by households that have been displaced by inter-tribal and cattle raiding insecurity since the start of this year.

About 150,000-160,000 people are estimated to have been displaced to date in 2010. The displaced households still risk food shortages despite negative coping strategies and ongoing food assistance. Moderate food insecure conditions at this time are associated with the lean season shortages, exacerbated by insecurity and displacements. Moderately food insecure households are currently meeting their needs through employment of coping strategies and external assistance.

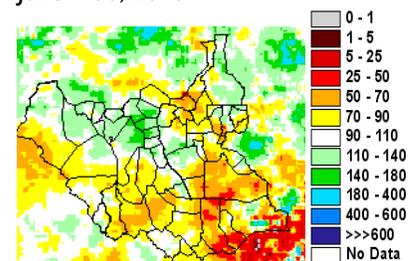
Food security conditions are expected to improve during July–August in the first season cropping areas of Western, Central, and Eastern Equatoria (Greenbelt and Hills and Mountains livelihood zones), where crops are currently maturing. In these areas, rainfall started in March–May, but was erratic and below normal during April, especially in Eastern Equatoria State (Figure 4a), necessitating replanting in many parts during May. Erratic rains in April also delayed the return of livestock from long-distance grazing areas, especially in Kapoeta County. In June, there were significant pockets of below-normal rainfall across Southern Sudan (Figure 4b). Due to replanting in Eastern Equatoria, it is likely that most households will harvest in August instead of July.

Rainfall in the June–September/November cropping areas started in May–June, which is generally considered timely. However, there has been an increase in rainfall since July, resulting in earlier than normal flooding (by one month) in some

**Figure 4a.** Percent of normal rainfall, April 1-30, 2010



**Figure 4b.** Percent of normal rainfall, June 1-30, 2010



Source: NOAA - CPC

areas, especially in the central parts of Jonglei, namely Waat and Walgak areas. This has displaced an unconfirmed number of people. An assessment planned to the affected areas remains highly constrained by poor access due to ongoing heavy rains. It is important to note that although flooding is a typical feature in most areas located in the northern half of Southern Sudan, flooding during June-July is considered early and often has a serious negative impact on crop performance, as crops are usually found at early stages of growth. Flooding that starts at the end of August usually has less negative impact on crops because they typically will have passed the critical maturation stage at that point. Floods also have a positive impact on fish, wild foods, and pasture performance during the early dry season (November–January). Given the varied impacts of flooding, depending on timing, and the latest Sudan Meteorological Authority forecast indicating an increased probability of flooding until the end of July, increased monitoring remains a high priority. Meanwhile a rapid crop assessment is scheduled to take place in late August across Southern Sudan. This will help establish the status of current crop conditions and extent of flooding in both the April–July and June–September cropping season areas.

#### **Northern Bahr El Gazal, Warrap, and Lakes states**

In all of the Northern Bahr El Gazal State counties, Warrap State counties of Twic, Gogrial, and Tonj South counties, and Lakes State (Awerial and Cuibet counties), moderate food insecurity is a combination of chronic food insecurity partially caused by 21 years of conflict which ended in 2005, typical lean season food shortages, and last year's poor harvest. Last year's yields lasted for three months (until January) instead of 5-6 months (April). This compromised the ability of affected households to save grain stocks normally reserved for consumption during June-July at the peak of cultivation. Current food shortages are also exacerbated by the lack of January–April carryover wild food stocks typically stored for consumption during cultivation. The lack of wild food carryover stocks was caused by poor rainfall performance during January-April. As a result, poor households (livestock and labor poor) remain highly food insecure as they lack sufficient income to purchase key staple grains such as sorghum from markets.

For most poor households, food security conditions in these areas are expected to improve in October when the harvest peaks. However, food security conditions are not expected to improve for the approximately 70,000 people displaced by insecurity and cattle raiding since January in Twic, Mayom, Rumbek, Wullu, Gogrial, Cuibet, Tonj, and Awerial counties. Displacement has disrupted normal food access and gathering mechanisms, resulting in food shortages for these households since January. Displaced households are not likely to cultivate for the June-September cropping season as they remain displaced, and they will therefore not have any crop harvests to rely on when food security improves for the rest of the population during October.

In areas of Awerial County (Dor, Bunagok, Alel, and Magok payams), earlier than normal flooding started during May-June and has led to destruction of crops. Early flooding in this area implies severe crop losses and delayed access to fishing and water plants from July to November. This will cause severe food shortages and high food insecurity for affected households until floods begin receding in November–December.

Flood-affected households will rely on kinship support and food aid until the end of September, after which they will rely on crop harvests. Some are likely to engage more in petty trade to purchase grain, especially now that essential food commodities such as sorghum have been exempted from tax. Food assistance is likely to increase, especially during July–August, and then rapidly decline after September when crop harvests take place. Despite the above responses, most affected households will still face inadequate food intake, especially during July–August. Conditions are only expected to improve after September. However, improvements for households in the flooded areas of Awerial Payam will result from increased availability of fish and water plants during November–December, rather than crop harvests.

#### **Eastern Flood Plains (Akobo, Wuror, Nyirol, Bor counties) and Pastoral livelihood zones (Pibor County)**

In the Eastern Flood Plains areas of Akobo, Wuror, Nyirol, and Bor counties, and the neighboring pastoral zone area of Lokongole in Pibor County, poor 2009 rains reduced land under cultivation, resulting in reduced crop harvests by over 50 percent. This was exacerbated by reductions in fish and wild foods into June–July. The reductions were significant, resulting in no carryover stocks of grain, dried fish, and wild foods into the ongoing cultivation season. Escalated conflict and cattle raiding also displaced 50,000-100,000 people in Jonglei State last year. Close to 40,000 of these people fled their homes to Akobo County. These households missed last year's cultivation. Poor 2009 food production, combined with displacement and poor water and sanitation problems, resulted in high malnutrition among children, especially among the displaced population in Akobo during this year's dry season (January–April).

Food shortages are expected to persist up to the October harvest. Most of the displaced population, especially in Akobo Town, returned home during May–June. An additional estimated 5,000 people have arrived in Akobo from Wanding in Nasir/Luakpiny County. Despite returning to their homes, it is unlikely that displaced households will cultivate for the June–September crop season, as they returned too late to prepare land, and available labor will be divided between re-building their homes, clearing land, and other essential activities. Failure or reduced cultivation due to displacement will cause affected households to continue facing high food shortages even during the immediate post-harvest season (October–December), thus delaying their recovery.

Insecurity and cattle raiding at the end of June between Pibor County (Lekongole payam residents) and Wuror County killed 15 people, injured 15 others, and displaced 6,000 people. An estimated 35,000–40,000 people are still displaced and are concentrated in Bor, Pibor, and Akobo counties. Conflicts are likely to continue and could result in reduced cultivation, thus constraining access to food during October–December, and increased or earlier than normal seasonal movements in search of fish and wild foods, including game hunting. Wild foods will not fully mitigate the food shortages, especially for displaced and newly resettled households in Akobo County and those recently displaced in Pibor County.

Floods have affected areas of Waat and Walgak since mid-July. The floods have displaced an unknown number of households. Crops are also flooded, with negative implications on crop performance. Chances are high that crops could be destroyed at early stages of growth in the affected areas. This would imply a poor or failed harvest, seriously threatening the hoped-for recovery of households that already face substantial food shortages due to last year's poor production, 2010 dry season fish and wild food shortfalls, and typical lean season shortages.

#### Greenbelt and Ironstone livelihood zones

In the Greenbelt and Ironstone Zones, pockets of food insecurity persist in areas where displaced populations are concentrated, namely Nagero County (Namutina payam) and Yambio County (Source Yubu and Yambio Town). Smaller pockets of displaced population are scattered in the town centers of Nzara, Ezo, Ibba, Maridi, and Mvolo. Furthermore, an estimated 40,000–50,000 people have been displaced by Lords Resistance Army attacks involving burning, abductions, and killings, since the beginning of this year, particularly during March–June. Displaced households lost food stocks, resulting in food insecurity since March. Households in the Greenbelt zone are pure agriculturalists, and loss of crop stocks often has a severe impact on immediate food access because ownership of other assets such as livestock is low. These households also missed cultivating for the April–July cropping season, exposing them to continued food insecurity during August–December. Continued LRA attacks and displacement that discourage return, are also likely to prevent cultivation for the second season (August–December). The displaced households cope through kin support, petty trade, wild food, and labor exchange labor for food. This is supplemented by food aid. Taking all coping strategies and food assistance into account, displaced households are likely to remain moderately food insecure during July–December.

**Table 1.** Less likely events over the next six months that could change the above scenarios.

Area	Event	Impact on food security outcomes
North, South and West Darfur States	Comprehensive peace agreement (July – December)	Accelerate return of IDPs. Improve access to cultivation by IDPs. Shift of program intervention in Darfur from emergency to early recovery. Improve access by humanitarian community to affected populations curtailed by the conflict.
North, South and West Darfur States	Increase of food aid ration during lean season	Reduce food deficit among the IDPs. Reduce food prices in the market and hence improve terms of trade in favour of labour and livestock. Reduce involvement of IDPs in unsustainable/risky activities and

		coping strategies such as firewood/grass/charcoal collection
All concentrations of displaced populations in southern Sudan	All or most displaced people return home and cultivate	Cultivation in July- November and crop harvests in October-December depending on area could significantly improve food security.
	Cessation of LRA attacks cattle raiding and inter tribal/ethnic conflicts	Improved food production and food access in Western Equatoria (Greenbelt) and improved security elsewhere.



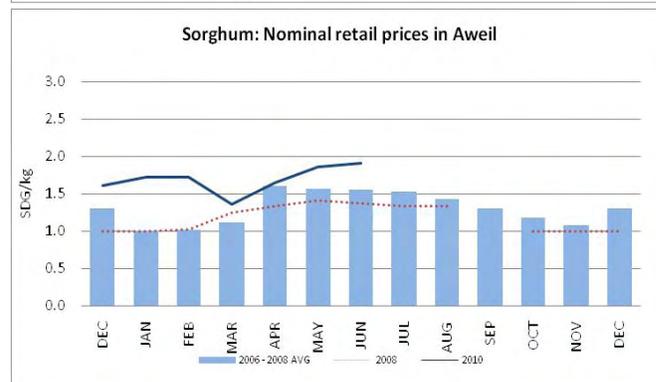
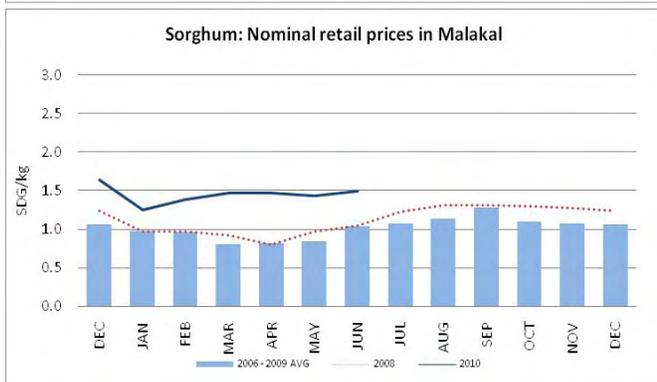
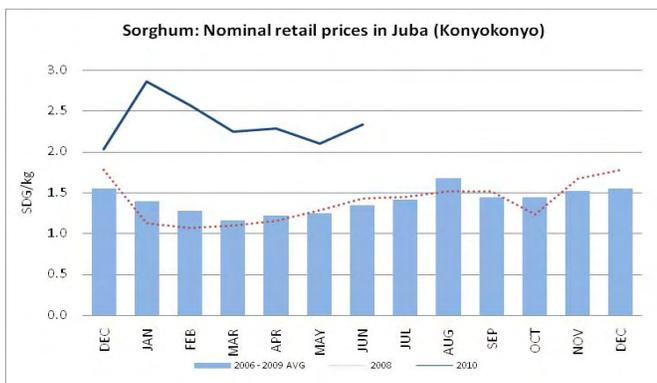
Monthly prices are supplied by the WFP VAM.

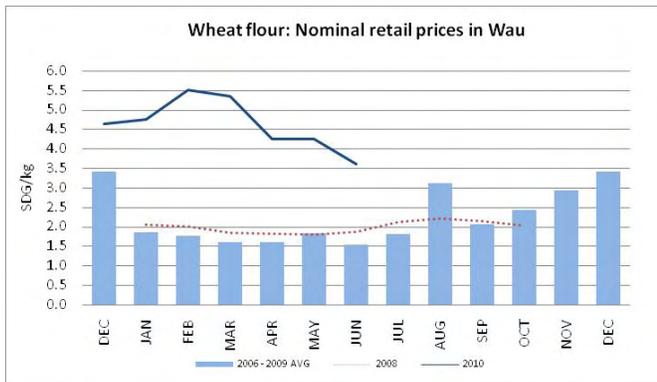
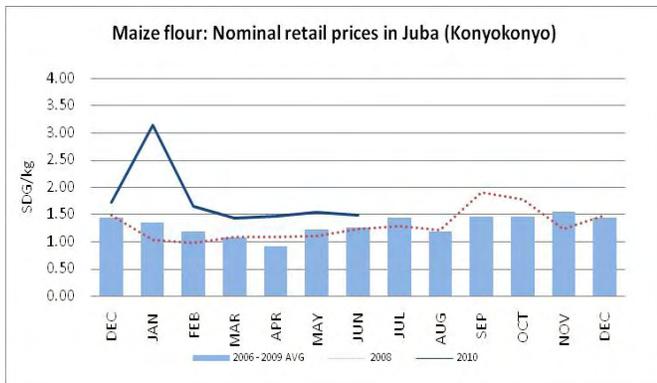
**Southern Sudan:** Sorghum and maize flour are important to all households in southern Sudan, while wheat flour and groundnuts are mostly purchased by urban households. Wau and Aweil are the main markets in and around chronically food insecure areas. Malakal is the main market of Renk, a key sorghum surplus producing area. Juba is the capital city market and is also a transshipment point between borderline food insecure and surplus areas. Kapoeta is located in a predominantly pastoral region representing the food security conditions in this area as well as the cross border trade between Sudan and Kenya.

**Northern Sudan:**

NOTE: The Southern Sudan units prices are now being collected in has changed from large bags (45 – 90 kg) to small bags (3.5 kg), meaning data is not exactly comparable between April and May 2009 when the change took effect. FEWS NET has converted all prices in per kilogram units for use in graphing.

**Southern Sudan**





Northern Sudan

