

## South Sudan Food Security Outlook and July Food Security Update

June-August 2007

### Executive summary

- Many households are currently food insecure as a result of typical seasonal food shortages during the May to August hunger season, when the availability of non-crop food sources is low and stocks from the last harvest have been largely depleted. About 1,000,000 people are moderately food insecure in areas where structural food shortages are severe, but are coping by consuming their last stocks of sorghum and wild foods. Current food shortages are being addressed by government-subsidized grain and food aid. Planting is ongoing in both bimodal and unimodal areas.
- In the most-likely scenario, current levels of food insecurity will continue until the main harvest in September. Households will continue to cope normally, although at least 40,000 MT of food aid will be necessary in July and August. The most-likely scenario from September onwards will depend on the performance of the June to September cropping season.
- In a worst-case scenario, high levels of population returns will occur, triggered by the planned November population census. However, a significant level of returnees is unlikely until October due to restricted transportation during the rainy season. Conflict related to the Lords Resistance Army (LRA) and other armed groups and armed intertribal cattle raiding could also disrupt market access, reduce crop yields and restrict access to pastoral grazing land in Western/Eastern Equatoria and Bahr El Jabal (also know as Central Equatoria) states and pastoral areas. The number of food insecure people would increase to 1,700,000 in this scenario.
- Key indicators to monitor during the June to August season include the dynamics of current cattle raiding and LRA conflicts; the price of and access to grain in all areas where households face a structurally severe hunger season; and crop and rainfall performance. Additionally, increasing disarmament and peace-building activities in areas affected by cattle raiding could significantly reduce raiding incidences.

### Current food security situation

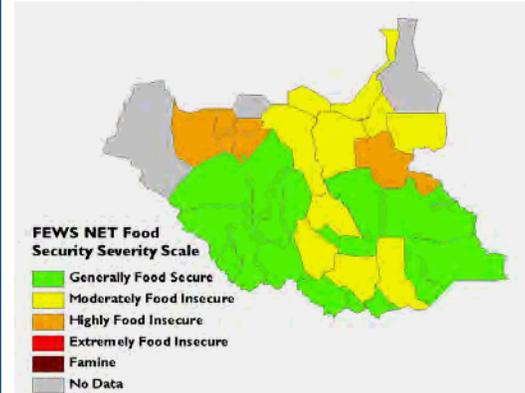
Many households are currently food insecure in southern Sudan as a

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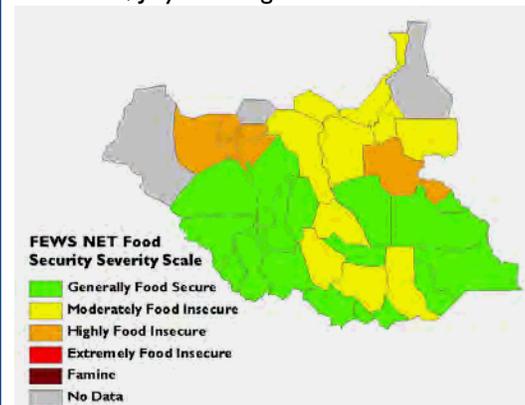
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**Figure 1.** Current estimated food security conditions, June 2007



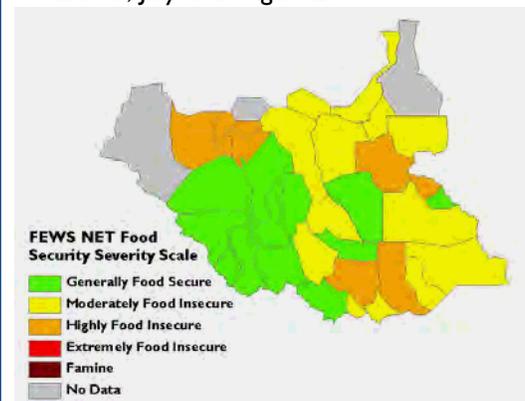
Source: FEWS NET

**Figure 2.** Most-likely estimated food security conditions, July and August 2007



Source: FEWS NET

**Figure 3.** Worst-case estimated food security conditions, July and August 2007



Source: FEWS NET

result of the seasonally restricted food access during the May to August hunger season. Structural food deficits are normally severe in the Western and Eastern Flood Plains livelihood zones, while most households have sufficient access to food in the Greenbelt and parts of the Hills and Mountains zones (Figure 1). Food security in other zones falls between these two extremes. The structural food shortages this year are within the normal range, and are expected to end starting in September when the main crop harvest is due. Planting began in April in bimodal areas, where the first harvest is expected in July or August. In unimodal areas, planting began normally in June, and harvests are expected from September onwards.

An estimated 1,000,000 people are currently food insecure. These households are coping by consuming their last stocks of sorghum stored specifically to be consumed during the current cultivation season, wild foods and livestock products, supplemented by government-subsidized grain and food aid. Although the specific amount of grain being subsidized by the government is unclear, it is expected to be significantly alleviating hunger-season food shortages as it did last year.

**Figure 4.** Livelihood zones in southern Sudan



### Most-likely food security scenario

In the most-likely scenario, households will cope with the normal hunger season, given last year's good food production, normal availability of wild foods and the stable conditions during the first half of 2007. Food shortages will be alleviated by government-subsidized grain and ongoing food aid interventions. Only limited localized conflict will occur. Additionally, significant population returns will not occur; large-scale returns of people from northern Sudan were expected in early 2007, but this is now unlikely with the onset of the June to September rainy season.

As a result, typical hunger-season conditions are expected to continue until September. The approximately 1 million people currently food insecure will continue to have restricted access through the end of August, including people that have returned this year. At least 40,000 MT of food aid will be needed to address food shortages.

The current food insecurity is the result of structural problems stemming from the past 20 years of civil war. While food aid and government subsidies will help the population get through the year, only long-term stability and recovery from the war will bring significant improvements in the food security situation. Opportunities to address the structural problems beyond food aid include improving market access and road infrastructure, significant increases in health care, water and sanitation infrastructure and continued peace-building and disarmament efforts.

### Worst-case food security scenario

**Table I.** Scenario indicators and triggers

#### Most-likely food security scenario

- Typical hunger season conditions will persist, but affected households will cope by relying on government-subsidized grain and food aid
- Minimal population returns from northern Sudan
- Low levels of conflict and civil insecurity in most areas, but continued attacks by LRA and other armed groups in Western and Eastern Equatoria and Bahr El Jabal states
- Localized cattle raiding conflicts in pastoral areas

#### Worst-case food security scenario

- Large population influxes of up to 500,000 people (highly unlikely)
- Breakdown of the Ugandan peace process
- High food prices or lack of access to grain markets during the hunger season
- Escalated or widespread cattle-raiding conflicts, particularly in the eastern half of southern Sudan

In a worst-case scenario, large-scale population returns from northern Sudan will occur, although this is highly unlikely until after October 2007 given the difficult transportation during the rainy season. Additionally, localized conflicts will cause food security to deteriorate. Conflict related to the LRA and other armed groups in Western/Eastern Equatoria and Bahr El Jabal states is a particular concern, as the peace negotiations between the Government of Uganda and the Lord's Resistance Army rebel group are progressing slowly and are sometimes disrupted. Such attacks have resulted in the loss of assets and restricted movement, trade flows and labor migration since the beginning of the year. Although movement has also decreased normally with the onset of the rainy season, persistent LRA attacks could disrupt ongoing cultivation and reduce crop yields, which are critical to improving food security between August and December in affected areas.

Armed cattle-raiding conflicts that have recently escalated in the pastoral areas of Eastern Equatoria and Jonglei states could also negatively impact food security if they become widespread. Increased cattle-raiding activities would reduce access to local trade and exchange mechanisms and restrict access to traditional dry-season grazing areas.

Limited access to government-subsidized grain or extremely high prices due to exploitation by dishonest traders could also occur in a worst-case scenario.

As a result of the restricted food access due to these conditions, the number of food insecure people would increase to 1,700,000 through August, implying that increased food assistance would be required. This would overwhelm existing food availability and transportation capacity, especially due to bad road conditions caused by the ongoing rains. However, this scenario is not likely to occur between now and August.

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## **SOUTH SUDAN Food Security Update**

**With inputs from OXFAM, NPA, HARD and SC-UK**

**July 2007**

Food insecurity caused by structural food deficits that typically occur from May to August in southern Sudan, particularly in the Western and Eastern Flood Plains, is approaching its peak but is expected to decline towards the end of August, when the early harvest of maize and sorghum crops starts. However, chances of the hunger season extending for a longer period in some areas are high, due to the likely destruction of crops by early flooding in July, especially in the Unity and Upper Nile states.

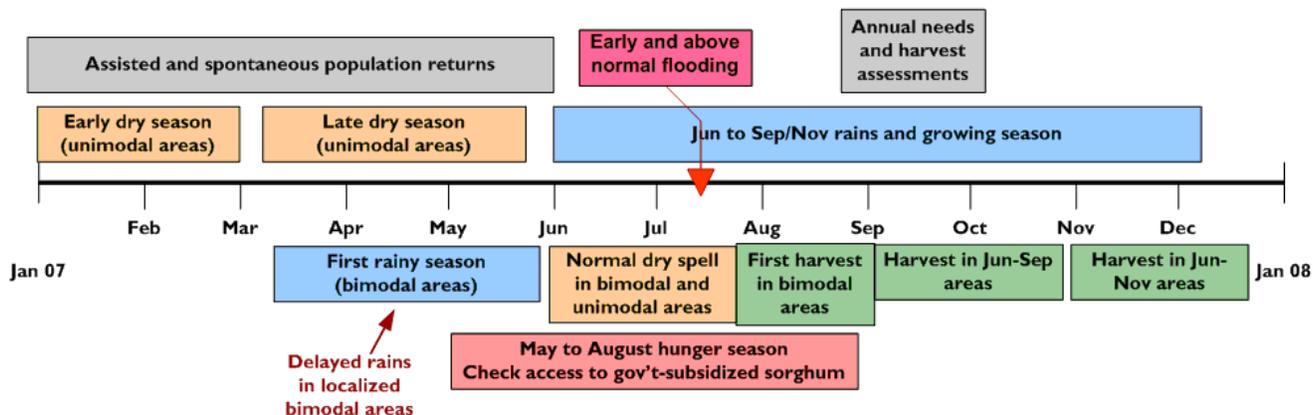
Rains in bimodal and unimodal areas continued in July, and increased rainfall in unimodal areas has increased river levels and caused localized flooding in lowlands near river areas, particularly in Unity and Upper Nile states located in the Nile-Sobat River and Eastern Flood Plains respectively. Floods in some areas have been caused by disruption of natural drainage channels. The floods have forced an unknown number of people to relocate. The Government of Southern Sudan, UN and NGOs are preparing to assess the magnitude of impact of these floods. Emergency food and non-food interventions have started in some areas.

In addition to a potential extension of the hunger season beyond August, other likely negative impacts of the early flooding include significant yield reductions or complete crop losses, reduced milk production by livestock due to the lack of access to suitable pasture and delayed fishing. Positive impacts also often occur when floods recede. These impacts can include significant increases in access to fish and water plants, abundant pastures and milk production and recessionary agriculture in some lowland areas.

Intensified monitoring of flood levels is an urgent priority from July to September, particularly in the Flood Plains and Nile-Sobat River zones, as the level of flooding will determine the performance of crops and the availability of other foods, which will influence food security during 2008.

Tensions persist between the Didinga in Budi County in the Hills and Mountains Livelihood Zone and Toposa pastoralists of the Pastoral Zone, following attacks and cattle raiding by the Toposa in May. The restoration of peace and civil security between the Didinga and Toposa is urgent to maintain food security in these areas.

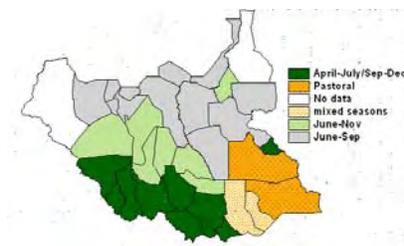
### Seasonal calendar and critical events



#### Critical factors to monitor from July to November 2007

1. Pasture/water conditions
2. Insecurity and livestock related conflicts
3. Status of north-south population returns
4. Impact of November population census on returns
5. Progress of rain, crops and harvest in March/April-July (Greenbelt/Hills & Mountains) and June-September/November cropping (Nile-Sobat, Eastern-Western Flood Plains) and part of Pastoral Zone.
6. Availability of government subsidized sorghum during May-August
7. Flood levels in Nile-Sobat and Flood zones

#### Cropping seasons in southern Sudan



1. April-July and September-December season (Bimodal)
2. Pastoral – Limited single-season areas
3. June-September – single season (Unimodal)
4. June-November – single season (Unimodal)
5. Mixed seasons – Areas with two seasons in highlands and one season in lowlands

#### Southern Sudan Livelihood Zones



### Progress of seasonal rains

First-season rains in the bimodal areas of the Greenbelt and parts of the Hills and Mountains livelihood zones have been ongoing since March/April (Figure 1). Rainfall in bimodal areas since April has been normal to above normal (Figure 2), but rainfall quantities decreased in some areas in mid-June and early July (Figure 3). This decrease coincides with the typical June to July dry spell common in most areas of southern Sudan. Currently, there are no significant updates from bimodal areas on the impact of the dry spell on crops, although Norwegian People’s Aid (NPA) has confirmed that the June to July dry spell occurred in parts of Yei (Lainya) and KajoKeji counties.

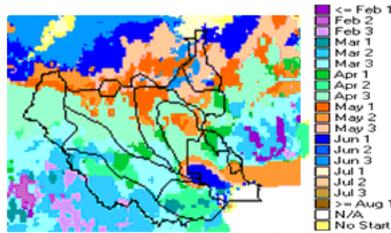
In unimodal areas, the performance of June to July rainfall has been mixed. In the western sector (Western Flood Plains and Ironstone Plateau zones), slightly below- to near-normal rains occurred, while above-normal rains occurred in the eastern sector’s Eastern Flood Plains, Nile Sobat and Pastoral zones (circled areas in Figure 3 and 4), causing earlier-than-normal flooding. The eastern sector received particularly more rainfall than last year (Figure 4).

**Western Flood Plains Zone**

The June to September rains began earlier than normal in some areas. This was the case in the southern parts of Lakes State (Yirol County), where earlier than normal flooding is now being reported (Figure 5). In areas not affected by flooding, early maturing crops of maize and sorghum, planted mostly in June, are now completing their second month of growth, as the hunger season peaks. The crops are expected to mature towards the end of August, and the May to August hunger season (which is often more acute in the northern parts of this zone) will come to an end as the crops begin to be consumed. Meanwhile, inter-clan clashes that first occurred in Lakes State's Rumbek County towards the end of May have recurred, and additional inter-clan clashes have occurred in Warrap's State's Akon County. The widespread disarmament

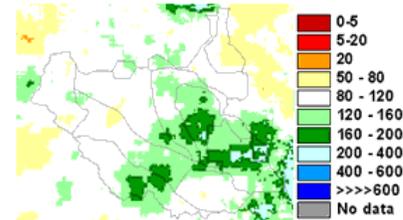
conducted in Lakes State last year was expected to bring an end to these conflicts, but has not been successful in doing so. This implies that future inter-clan conflicts are likely, which could affect cultivation in affected areas.

**Figure 1.** Start of the cropping season, July 1 to 10, 2007



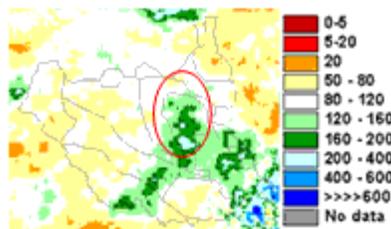
Source: NOAA/USGS; Graphics: FEWS NET

**Figure 2.** Rainfall as percent of normal, April 1 to July 10, 2007



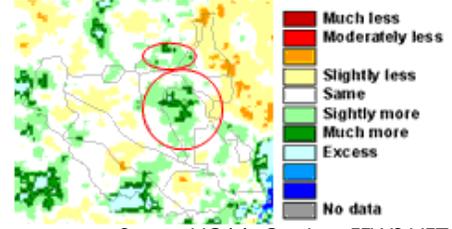
Source: NOAA; Graphics: FEWS NET

**Figure 3.** Rainfall as percent of normal, June 1 to July 10, 2007



Source: NOAA/USGS; Graphics: FEWS NET

**Figure 4.** Rainfall from June 1 to July 10, 2007 compared to 2006

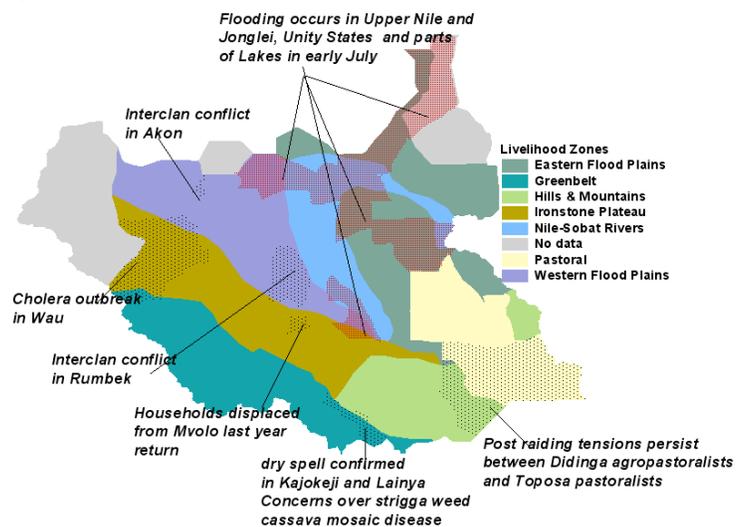


Source: NOAA; Graphics: FEWS NET

**Nile-Sobat Rivers Zone**

An early start of the June to September rainy season occurred in some parts of this zone. The immediate positive impact of the early start was early planting and the return of livestock from dry-season grazing in some areas. However, an anticipated negative impact of early and consistent rains is early flooding, which has now occurred in Unity State's Mayom County, Upper Nile (Shilluk) and parts of Bor County. Households are reported to be relocating to higher ground in some flood-affected areas. Early flooding in this zone often results in high crop losses and food shortages between October and December, but these negative impacts are often compensated by extra months of fishing between February and May, depending on flooding and water levels. The last occurrence of severe and extensive early flooding was in 1996 and in a few places in 1998.

**Figure 5.** Recent events in southern Sudan



Meanwhile, the Government of Southern Sudan, UN and NGOs are preparing to assess the magnitude of the impact in all flood-affected areas, including in the neighboring Eastern Flood Plains. Emergency food and non-food interventions have started in some parts of the zone.

### **Eastern Flood Plains**

As in the Nile-Sobat Zone, flooding has occurred in Jonglei State's Ayod, Akobo, Pulchol, Waat and Walgak counties, and Upper Nile State's Renk County. Floods in Renk are compounded by the obstruction of water channels by a road and swelling water levels due to heavy rains in Ethiopia. Here, floods have displaced people and destroyed houses.

### **Hills-Mountains and Pastoral Zones**

Tensions persist over armed attacks and inter-tribal cattle raiding in May conducted by the Toposa of the Pastoral Zone on Didinga agro-pastoralists in the Hills and Mountains Zone. The attacks killed more than 50 people, mostly women and children, who were cultivating their fields. The May raids are considered the worst in recent years, and have triggered the Southern Sudan Legislative Assembly (SSLA) to debate how to curb this problem. Didinga leaders and civilians have also presented proposals to respond to the problem, which include:

- Immediate disarmament of Toposa pastoralists,
- Investigation of the killings and compensation of relatives of victims,
- Respect of original borders established in 1927-1956,
- Establishment of effective security forces in affected areas,
- The return of administration of the Loruth (Natinga), Kakuratom (New Site) and Himaan (New Cush) areas to the Didinga community, and
- The withdrawal of animals belonging to Toposa pastoralists from Didinga territory (Budi County) areas of Himan (New Cush), Kakuratom (New Site), Loruth (Natinga), Ngauro (Lauro), Lotholia plains and Ngatuba before November 2007.

The Didinga leaders have also stated that the presence of Toposa animals in Didinga or Budi territory will be considered illegal if done without consultation with Didinga leaders. This demand for withdrawal of animals has serious implications on Toposa's access to grazing, which could in itself spark a new wave of conflict between the Didinga and Toposa. The demand for the return of specific areas to Didinga community control could also trigger long-running historical conflicts. The Didinga community believes that the Toposa attacks are motivated by the presence of precious minerals and good grazing and water grounds. It is critical that the Government of Southern Sudan prioritizes addressing the above concerns, as they have serious negative livelihood implications on both communities. In the event of escalated conflict, a lack of access to dry-season grazing and water, escalated livestock raiding and abandoned cultivation are some of the immediate negative effects that can be expected.

### **Greenbelt Zone**

Recent updates from NPA in Kajokeji and Lainya (formerly in Yei County) indicate normal rainfall patterns in June and July in most areas. A dry spell occurred for one week in June, as is typical in the area. Early crops of groundnuts and maize will be harvested starting at the end of July and early August. Currently, the cassava crop is being affected by mosaic disease, while cereal crops such as maize are infested by strigga weed. Meanwhile, the second season has started, marked by the planting of sesame, cowpeas and cassava.

Cereal prices are normal in Kajokeji, which is attributed to food aid interventions, conducted by NPA, and resettlement food packages provided to Sudanese refugees returning from Uganda. However, the price of cereals and all other commodities

in Yei is complicated, following the introduction of the new Sudanese pound currency and the phasing-out of all other currencies, including the Ugandan shilling. Commodities are priced cheaper in Ugandan shillings, which is commonly preferred to the new Sudan pound. The Ugandan shilling has been used in many areas of this zone for the last 15 to 20 years. The phasing out of foreign currencies, including the Uganda shilling, and the ongoing introduction of the new Sudan pound is reported to have made commodities more expensive and has also made transactions more difficult. However, this is expected to improve once the phasing out of foreign currencies is completed.

Food security is expected to improve in August, when the harvest of maize, sorghum, cowpeas, sesame and groundnuts begins. It is likely that consumption of some of these crops is just beginning in southern parts of Maridi, Yambio and Tambura where early planting occurred.

### **Ironstone Plateau Zone**

An early start of the June to September cropping season characterized many parts of this zone, triggering slightly earlier-than-normal planting in some areas. The latest updates from HARD, a relief and development agency operating in the central parts of this zone (Wau and Jur counties), indicate that rains were normal in May and June, with isolated incidents of early flooding in lowlands or areas along rivers. As of early July, the floods had not affected crops. Due to early lowland flooding in June, farmers are expecting flooding to continue if the current good rainfall is maintained. As of early July, crops conditions were good.

Meanwhile, a cholera disease outbreak caused by a lack of safe water has occurred in parts of Wau County. Ninety cases and 10 deaths have been reported since the onset of the outbreak between July 5 and 15. The World Health Organization (WHO), Ministry of Health and UN-OCHA's emergency preparedness and response unit have airlifted medical supplies to affected areas to contain the outbreak. Current intervention efforts are focusing on managing the cholera cases, surveillance, social mobilization and health education. Medicins Sans Frontiers (MSF)-France is considering the possibility of opening a cholera treatment centre in Wau. WHO is currently training health workers on case management and strengthening the surveillance system.

Further north, in Aroyo (or Aweil Centre) County, reports by SC-UK suggest that crop conditions are poor compared to same time last year, especially in highland areas, possibly due to erratic rains in June and part of July. This is not unusual, as dry spells typically occur in June or July in most parts of southern Sudan. The amount of land under cultivation has increased because recently returned populations have also cultivated while their hosts have increased their farm sizes. Meanwhile, access to food remains the same as last month. Consumption of shea butter fruits and oil (locally known as lulu) has peaked. Shea butter production, which is now in its final stages, performed well this year. Sorghum and groundnuts are also being consumed and are available in local markets. However, sorghum and groundnuts prices have increased by 30 and 50 percent respectively, as the hunger season peaks and food stocks dwindle.

In Mvolo County in the extreme south of the Ironstone Plateau zone, the return and resettlement of households displaced early last year occurred during this first cropping season. Some households planted on time, while others prioritized reconstructing their houses that were destroyed during last year's conflict and ended up planting late. Because of this, crops are at different growth stages, and their condition is currently fair. However, there are concerns over the performance of crops that were planted late, should rainfall suddenly become erratic. Additional reports from NPA suggest that some households are still planting sesame and the short-term sorghum crops, but crops of groundnuts and maize planted early are likely to be harvested towards the end of July. These will supplement foods currently being consumed, which include sorghum obtained from relief interventions, shea butter fruit and oil, wild vegetables and termites.