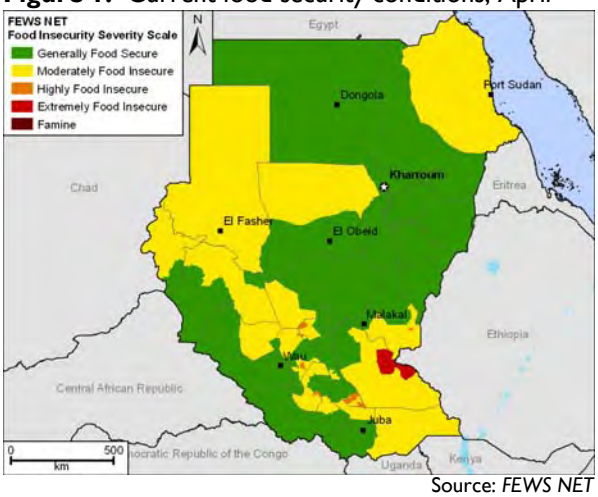
SUDAN Food Security Outlook — April to September 2010

- There are currently about 6.8 million food insecure people in Sudan, including 2.3 million internally displaced people (IDPs). In northern Sudan, the food insecure population of 5 million is concentrated in Darfur, Red Sea state, and parts of Blue Nile, Kassala, and Southern Kordofan states. In southern Sudan, the food insecure population of 1.8 million is concentrated in Jonglei State, Northern Bahr El Gazal State, Warrap State, Lakes State, and parts of Upper Nile and Eastern Equatoria states.

- From April to June, food security conditions will deteriorate in the south. The lean season has begun three months earlier than normal and is expected to peak in June. Food insecurity is driven by poor 2009 harvests, reduced access to critical dry season foods (fish and wild foods), and higher than average food prices. However, following the green harvest, conditions will improve slightly from July to September in some areas.

Figure 1. Current food security conditions, April



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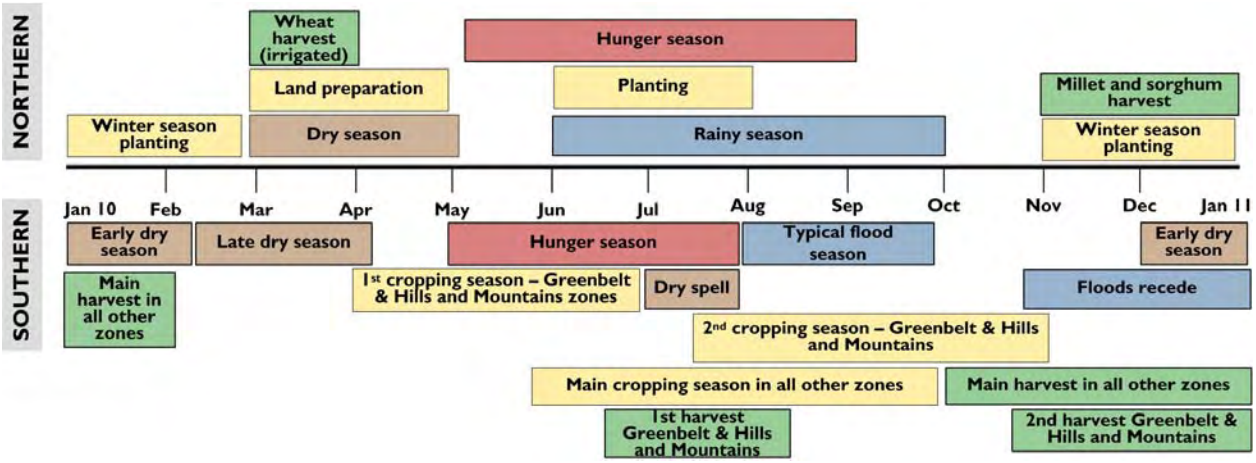
- Food security conditions are expected to deteriorate from April to September in the north. The lean season, which started earlier than normal, is expected to peak between July and September. Factors contributing to its intensity are the poor 2009/2010 harvest, continued conflict in Darfur, high food prices, and reduced cash crop production. The rainy season (June–September) disrupts access to markets and further reduces grain supplies. In Darfur, although the high cereal prices, reduction in food aid rations, and relative calmness of the security situation are expected to trigger expansion of the area planted during the next rainy season, IDPs will continue to have limited access to cultivation.

Seasonal calendar and critical events



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Current food security conditions

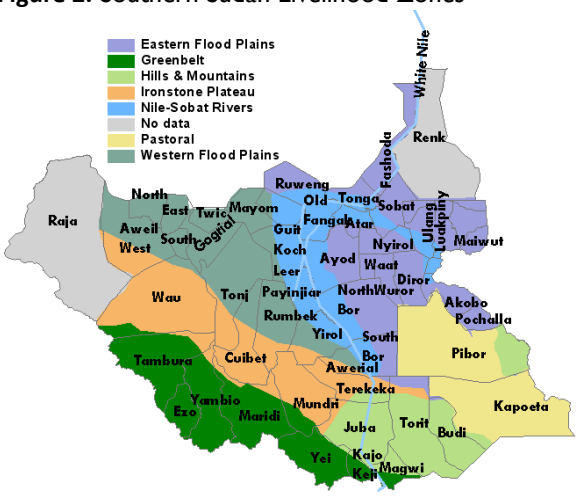
In **northern Sudan**, there are an estimated 5 million food insecure people, with an IDP population of 2 million. Moderate levels of food insecurity in **Darfur region** (**North, West, and South Darfur states**) are due to ongoing civil insecurity in the region, limited access to cultivation by IDPs, a poor 2009 harvest due to erratic and below-average rainfall, crop destruction by animals, and local pest infestations (e.g., grasshoppers). Harvests in 2009/2010 produced 25 percent, 68 percent, and 70 percent of annual cereal needs in North, West, and South Darfur states, respectively. Cereal production deficits in localized areas are typical, and grain deficits are normally addressed by the provision of supplies from adjacent surplus production areas. However, widespread poor production, such as the 2009/2010 harvests, has an enormous impact in terms of the volume available for market disposal. The food insecure population is relying on either food aid (seasonal support) from WFP or atypically heavy reliance on coping strategies such as sales of livestock, firewood, and grass to buy food from the markets, in addition to income from daily wage labor.

Moderate food insecurity in the marginal rural areas of **Red Sea and parts of Kassala states** (Hamshkoreib, Talkuk, Delta Shamal and Delta Janob) is due to chronic issues of environmental degradation and limited livelihood strategies, exacerbated by low crop production this year (65 percent of the five-year average), limited water availability, and reduced purchasing power due to limited income opportunities and high grain prices. To curb grain price increases, local authorities imposed restrictive measures to ban cereal outflows to neighboring countries (Ethiopia and Eritrea). Without these bans, cereal prices would have sharply increased by now. FAO is pledging animal fodder distribution in the area to save the animals of the poor households in the area. Approximately 150,000 – 200,000 rural poor people are moderately food insecure in the Red Sea state, while an estimated 90,000-100,000 rural poor people are moderately food insecure in Kassala State.

Food insecurity is also moderate in **South Kordofan state** (the southern parts of Kadugli, Abyei, Talodi, Tima and Alsunut, and Abu Gunuk), and **Blue Nile state** (Damazine, Bau, and Kurmuk), due to poor production (especially the traditional rain-fed sorghum and millet) during the last season. In South Kordofan, millet production was estimated to be 70 percent lower than last year, a typical year. In parts of **North Kordofan** (Jebrat Elsheikh and Sowdari), moderate food insecurity is due to poor rainfall, which affected the availability of pasture (for animals) and drinking water (for animals and human), and to environmental degradation in the marginal semi-desert areas.

In **southern Sudan**, approximately 1.8 million people are currently moderately or highly food insecure. During 2009, more than 390,000 people were displaced due to ongoing conflicts in many areas, and an estimated 270,000-300,000 people still have not returned to their homes.

Figure 2. Southern Sudan Livelihood Zones



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Food insecurity in **Northern Bahr El Gazal** (northern parts of the Western Flood Plains Zone – Figure 2) is a result of poor 2009 crop harvests and reduced fish and wild food access, which have exacerbated chronic food insecurity. Similar factors apply to **northern parts of Warrap State** (Gogrial and Tonj), which has also been affected by escalated conflicts, cattle raiding, and displacements since December 2009. An estimated 10,000 people (approximately 10 percent of the population in the area) are currently moderately food insecure in Gogrial, and 15,000-20,000 people (10 percent of the population in the area) are moderately food insecure in Tonj East/Tonj South. This includes both the IDP population in the area and the host population, which is supporting IDPs with food and shelter.

Extreme and high levels of food insecurity in **Akobo and Wuror Counties in Jonglei** (Eastern Flood Plains Zone), respectively, are caused by ongoing conflict since early 2009, compounded by poor 2009 crop harvests, reduced fish and wild food access, and constrained market access for grain. A recent Save the Children/MedAir nutrition survey indicates very high levels of acute malnutrition among children in Akobo County (which has a population of 136,000), especially Akobo town. Using 2006 WHO growth standards, both the GAM prevalence (47.5 percent) and the SAM prevalence (15.5 percent) are significantly above the emergency thresholds of 15 percent and 4 percent, respectively. More than 25 percent

of children had a MUAC of less than 125mm. Although high levels of acute malnutrition are common in this area (Summer 2005: GAM 28.3 percent, SAM 4.9 percent [NCHS]) and mortality rates are below emergency thresholds, these rates are of significant concern, especially three to four months in advance of the peak of the lean season. The current high malnutrition rates in Akobo may be strongly linked to multiple factors, in addition to the significant food deficits, including poor hygiene and sanitation practices, and lack of access to water and sanitation.

High levels of food insecurity in Cuibet, Rumbek, Wullu, Yirol and Awerial in **Lakes State** (southern part of Western Flood Plains Zone) are caused by tribal/inter-ethnic hostilities and competition over resources, such as animals belonging to agro-pastoralists grazing on agriculturalists' crops. Food insecurity in **Eastern Equatoria** areas of Budi, Kapoeta and Torit (Hills and Mountains and Pastoral zones) is due to two consecutive poor cropping seasons. Conditions in **Budi County** are exacerbated by poor access to markets due to difficult terrain and conflict between the Budi population and neighboring Kapoeta pastoralists. Food insecurity in **Western Equatoria** areas of Mvolo, Mundri, and Western Bahr El Gazal's - Kuajina area of Jur County (Ironstone Plateau Zone) is due to livelihood conflicts between farmers and agro-pastoralists.

Most likely food security conditions (April – September 2010)

Food security conditions are expected to deteriorate from April to September in the north. The lean season, which started earlier than normal, is expected to peak from July to September, and is driven by the impacts of the poor 2009/2010 harvest, chronic food insecurity, continued conflict in Darfur, high food prices, and reduced cash crop production. The rainy season (June–September) is expected to disrupt access to markets and further reduce grain supplies. In southern Sudan, food insecurity is expected to increase between now and the end of August, and then begin to decline in September following maturation and onset of consumption of early maturing maize and sorghum crops.

Food insecurity conditions during April–September (Figures 3 and 4) are based on the following assumptions:

- In the north, conflict between farmers and pastoral communities and among pastoral groups is likely to increase from June to September, while in the south, conflict is likely to decline during cultivation (June–September).
- In the absence of a weather forecast, timely/average rainfall in 2010 in the north is assumed. The June–October rainfall during the main cultivation season will generate labour opportunities, although rains will block roads, reduce access to markets, and increase malaria morbidity.
- In the south, a normal to above-normal rainy season for south Sudan is expected from June – August 2010.
- The current level of WFP general food distributions (GFD) will continue in the north. Food aid has been

Figure 3. Most likely scenario, April–June, 2010

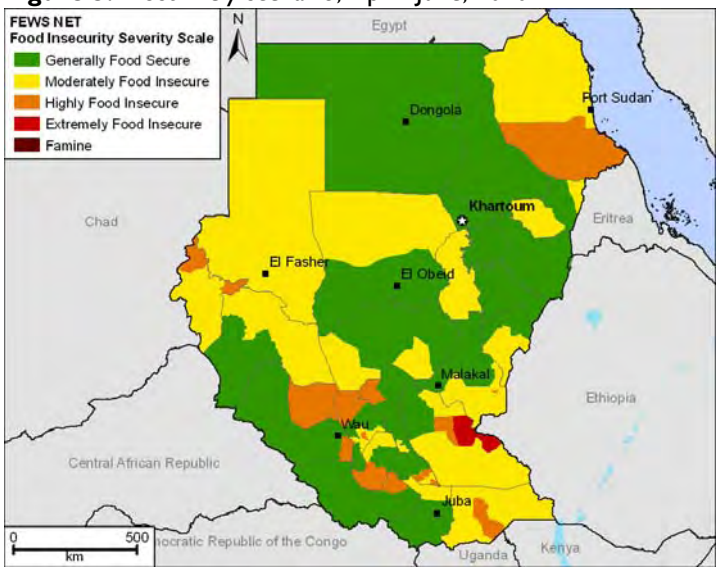
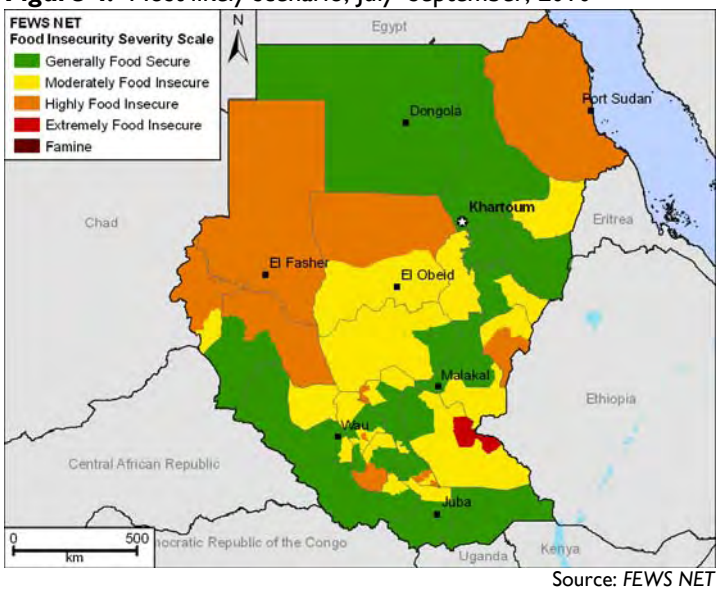


Figure 4. Most likely scenario, July–September, 2010



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pre-positioned in areas likely to be blocked by rains.

- High cereal prices (sorghum/millet) in the north and south are likely to increase during April – September.
- Livestock to cereal terms of trade in the north and south will deteriorate during the lean season due to high cereal prices.
- Access to wild foods and seasonal migration for agricultural labour in conflict-affected areas (e.g., Darfur) will be limited from April to September.
- IDPs in the north and south are not expected to return to their homes during the Outlook period.

Conflict and drought-affected populations in Darfur

Food insecurity in Darfur (North, South, and West Darfur states) is driven by conflict, drought, poor 2009/2010 harvests, environmental degradation of both vegetation and underground water around the main camps in Darfur, and geographic remoteness. In addition, the two million IDPs have limited or no access to cultivation and are highly dependent on food aid. In response to the poor harvest in the region, WFP started seasonal support to drought-affected populations in January/February instead of April/May as in normal years. Nonetheless, cereal prices have continued to rise and are likely to continue increasing over the next few months, peaking in August.

Insecurity continues to limit access to seasonal livestock migration and migration for labour (prior to the conflict in Darfur, migration was an important livelihood strategy and occasional coping strategy), and access to cultivation. Continued insecurity will also reduce access to firewood and grass collection (important sources of income for the rural poor and IDPs). In normal years, women are free/safe to move from deficit areas to good production areas and to vegetable production areas for labour, cash and in-kind payment, and to collect wild foods. Under the prevailing security conditions (since the current conflict started in 2003/04) in Darfur, this movement is nearly impossible. Although there are efforts to bring peace, stability, law and order to Darfur, these efforts will have little impact on the food security situation within the outlook period.

The onset of the rains in June is likely to provide stable labor opportunities on farms and improve access to milk for pastoral communities. However, food deficits will remain at the household level due to the large-scale food deficits from last year's poor harvest and the limited access to cultivation due to insecurity. Food security is therefore likely to deteriorate for most poor households and roughly half of the middle-income households during the lean season (April – September), with the peak in July- September. GAM rates are also expected to increase during April - September, especially in north Darfur, as dietary diversity is expected to be poorer than usual. There is a high risk that the poor households will lose their productive assets during the outlook period, which will increase their vulnerability in the future. The main areas of concern include Jebel Mara, Kulbus, Selea, Sirba, For Baranga, Zalingi, Wadi Salih and Habila localities in **West Darfur State**; East Jebel Mara, Nyala, Shearia, Adila and Ed Daen localities in **South Darfur State**; and Kebkabiya, Malha, Mellit, Um Keddada, Kuttum, Um Baru, and El Fasher localities in **North Darfur State**.

Red Sea State and parts of Kassala State

The lean season in the Red Sea and parts of Kassala states (Hamshkoreib, Talkok, Delta Shamal and Delta Janob localities) has started earlier (March/April) than usual (May/June) and will peak in July/August when cereal prices are at their highest and food stocks are exhausted. Although labor opportunities will be available in July/August, they will not compensate for food deficits. Poor pasture and water conditions are also likely to generate excess sales of animals that will cause depression of livestock prices, which in turn will lead to deterioration of livestock/cereal TOT.

Even with targeted GFD to the most vulnerable segment of the population during the peak huger season (June – September), moderate and high levels of food insecurity are expected in these areas from April to September, with the highest number of food insecure people during the peak hunger season (July-September). Approximately 150,000 – 200,000 and 90,000 – 100,000 food insecure people exist in the Red Sea State and Kassala states, respectively. Most of these food insecure people are the rural poor households with no/limited animal holdings and highly dependent on marginal income sources (firewood and grass collection). The existing high GAM and SAM rates in the Red Sea State are also likely to be exacerbated by the prevailing food insecurity conditions.

Parts of South Kordofan State and Blue Nile State

Food insecurity in these areas is driven by the poor harvest of 2009/10. Approximately 250,000 – 300,000 and 100,000 - 150,000 people will be affected in South Kordofan state and Blue Nile state, respectively, from April to September. The critical time in term of access to food in these areas is June – September when people are busy cultivating their own farms. Targeted food assistance during this period is needed to enable affected people to maximize their cultivation for the next rainy season (June – October 2010).

Northern Bahr El Gazal and northern parts of Warrap State (northern parts of the Western Flood Plains)

Due to poor rains, there was a below-normal harvest in highland areas where 60-70 percent of the population cultivated. Crop stocks lasted for three months until January, instead of the typical 5-6 months up to April, followed by reduced access to fish and wild foods. The lack of food stocks will exacerbate food shortages during April- June, leading to a more severe hunger season, which could severely constrain the cultivation capacity of poor households who lack sufficient income to purchase much needed grain. Above-normal food shortages could cause reduced food intake and subsequently exacerbate child malnutrition during April – June. The malnutrition is mostly caused by poor hygiene, water, sanitation, and associated diseases. Poor households with no livestock, productive labor, or income-earning opportunities will be most affected.

Though these households might cope by engaging in petty trade, sourcing cheaper grain from government stores, and relying on food aid and kin support, they are unlikely to meet food needs during April–June and most of July-September because of the heavy loss of assets and productive human labor during the many years of conflict. Food insecurity levels are expected to be high from April to June, and to remain high during July-September. The size of the food insecure population is expected to be approximately 10-15 percent of the population (900,000 in Warrap State and 700,000 people in Northern Bahr el Gazal. However, slight improvements are expected in all of these areas in September when consumption of early crops is expected to begin, with the exception of households displaced by cattle raiding and livelihood conflicts in Gogrial and Mayom counties, respectively. These households will remain highly food insecure during April – September due to loss of assets such as livestock and productive domestic tools. They may not cultivate/access their former lands and food aid may not be available to them due to expected pipeline break in August.

Southern parts of Lakes State – Wullu, Cuibet, Rumbek, Awerial and Yirol (southern part of Western Flood Plains)

Ongoing inter-ethnic conflicts in the southern parts of this zone have displaced over 40,000 people since last year, with the latest displacements in parts of Cuibet, Rumbek, and Yirol during January-March. Conditions are expected to deteriorate during April-June due to a combination of food shortages related to displacement, combined with hunger season shortages. Meanwhile, displaced households are likely to cope by relying on their hosts, food aid, wild foods (shea butter), or agricultural labor for kin as payment in kind for being hosted. Food aid provided will likely be shared with hosting households, thus reducing its positive impact. Displaced households will remain highly food insecure through April – September because hosts cannot sufficiently cater to the food needs of the IDPs. Most of the host population has been affected by last year's poor crop, wild foods, and fish performance. Some of the displaced households are unlikely to cultivate their own farms during the June-September cultivation season.

Jonglei state areas (Akobo, Wuror and Nyirol) and parts of Upper Nile State (Eastern Flood Plains Zone)

Inter-ethnic and cattle raiding conflicts last year displaced over 60,000 people, of which 40,000 are displaced in Akobo East, or about 30 percent of the total Akobo County population of 136,210. In Akobo, displacement has been compounded by the inability to cultivate, weakened kinship support, and/or the poor 2009 harvest. Most people are yet to return to their homes and are concentrated in small urban centres and rely on petty trade, food aid, and kin support. Poor households (those with few livestock) that are not displaced are experiencing earlier than normal food shortages. This is due to reduced cultivation caused by poor rains last year, a 40-50 percent reduction of desert date (a high energy wild food) and a 30-40 percent reduction in fish access, combined with high grain prices and market constraints (high transport costs and poor roads) and that will exacerbate food shortages during April – June.

With ongoing disarmament efforts, conflict is likely to decline during cultivation (June-September). Although some men and youth are returning to fish and clear land for cultivation, mainly in the affected Akobo areas, their families are unlikely to return immediately due to fear of renewed attacks.

Local traders in Jonglei State expect to supply grain to local markets, though they are constrained by lack of credit and high transportation costs (equivalent to 50 percent of the purchase price) due to poor road links to Malakal Town and Juba. Upcoming rains will also compound the limited grain supplies through restriction of road transport, access and other trader

activities. As such, grain prices are expected to soar, making it harder for an increasingly food insecure population to access food. Although some traders from Malakal and the north may attempt to preposition grain stocks to be sold during the rainy season before the next harvest, the combination of poor road/transport access to more rural areas and low purchasing power may still not alleviate food insecurity for the poor.

It is estimated that 120,000 – 160,000 poor households (30-40 percent of the population in the three counties of Nyirol, Wuror and Akobo), including the IDP population, will experience a 25 – 30 percent of annual food deficit during April–August 2010. Slight, gradual improvements in food security are expected in most areas (including Akobo) from July to September, due to consumption of early maturing crops. The provision of food aid to more than 160,000 people, during the start of cultivation and at the peak of hunger gap (June-July), will be critical, if households have to produce their own food and alleviate their food insecurity by September, when the first harvest of short term crops is expected.

IDPs in Western Equatoria (Mvolo and Mundri) and Western Bahr El Gazal (Jur County-Kuajina) in Ironstone Plateau
About 30-40,000 people are displaced in these three locations due to conflicts over land with the neighboring agro-pastoralists of Lakes and Warrap States. Displaced households, especially those in Mvolo and parts of Mundri, missed last year's cropping season and have been food insecure since last year. Those in Jur County were displaced towards the end of March 2010, and lost their harvest and some livestock during cattle raiding. Given that the April – July season starts around this time, it is unlikely that displaced households in Mvolo and Mundri will return home and cultivate. Although the initial GHA forecast was for normal to below-normal rains from March to May in southern Sudan, these rains are likely to be sufficient for seeds to germinate and to allow for crop establishment, which would positively affect the first season harvest and the ability of host communities in Mundri and Mvolo to support the displaced. A new and favourable June to August forecast is for normal to above-normal rainfall. This rainfall is expected to enable the further establishment, maturity, and yielding of crops.

Table 2. Events that could change the food security outlook

Geographic Focus Area	Possible events in the next 6 months that would change the most likely scenario in this area	Impacts on food security conditions	Likelihood of occurrence*	Key variables to monitor
Northern parts of Warrap State and Mayom County	Continued conflict through cultivation June-September season	Disruption of cultivation and reduced harvests	Unlikely	Conflict Land preparation Planting
Akobo and Wuror Counties in Jonglei	Continued conflict through cultivation June-September season	Disruption of cultivation and reduced harvests	Unlikely	Conflict, land preparation, planting
Displaced people (Mvolo, Tonj, Mundri, Awerial, Gogrial,)	Displaced people cultivate	Crop harvests would improve food availability and access	Unlikely	Land preparation and cultivation by displaced households
North, West and South Darfur State	Comprehensive peace agreement in Darfur (May – September)	Accelerate return and increase access to cultivation by IDPs	Unlikely	Number of returns, conflict and cultivation by IDPs

* Probability levels	Description
Unlikely	Could occur in the time period if conditions changed moderately
Very unlikely	Could occur in the time period if conditions changed significantly