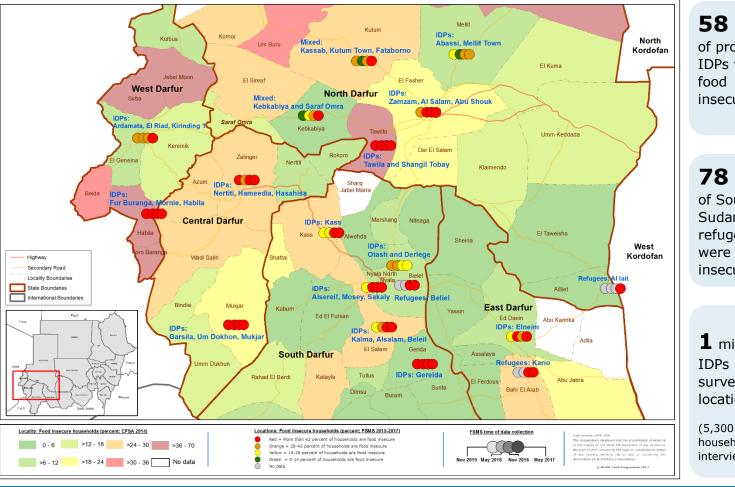
# **Darfur Food Security Monitoring**

May 2017, Sudan





**58** % of protracted IDPs were insecure

**78** % of South Sudanese ? refugees were food insecure

1 million IDPs in surveyed locations

households interviewed)

# **HIGHLIGHTS**



In a sign of deterioration, the proportion of food insecure! households among surveyed protracted<sup>2</sup> IDPs in Darfur increased from 43 to 58 percent from May 2016 to May 2017.

Surveyed South Sudanese refugees continued to experience worse food insecurity: 78 percent of households were food insecure. These communities exhibit some of the worst food insecurity in Sudan.



Sorghum prices in Darfur are higher than the country average and three-year average except for Central Darfur. The price of a local food basket3 in May 2017 was 67 percent higher than in May 2016.

The deterioration was unexpected, given that the 2016/17 agricultural season was better than the one before. WFP and its partners are investigating the drivers of vulnerability. Long-standing food security constraints remain in the population: high food prices, high transportation costs, displacement, marginal livelihoods and limited access to livelihoods. The Food Security Monitoring System (FSMS) analyses household information from IDP and refugee locations across Sudan. Thousands of household interviews are conducted, twice a year: at the start of the lean season in May and at the harvest season in November. The FSMS uses Emergency Security Assessment (EFSA) approach and findings are statistically representative at the cluster level (groups of locations). See last two pages for details.

<sup>&</sup>lt;sup>1</sup> See the methodology section on the last page for a precise definition of the food security indicator employed by the Darfur FSMS.

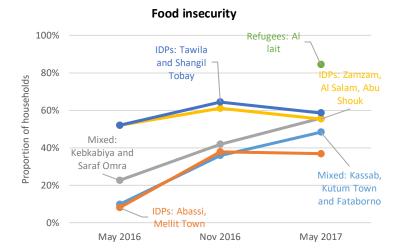
<sup>&</sup>lt;sup>2</sup> The Darfur FSMS focuses on long-term displaced IDPs (displaced for longer than two years) and refugees. The food security situation among newly displaced persons (including those from Jebel Marra) is monitored separately, through rapid needs assessments and emergency food security assessments. <sup>3</sup> The price of a local food basket (LFB) consisting of sorghum, onions, vegetable oil, milk, cow meat, goat meat, dry tomatoes, and sugar was used as a benchmark against which to compare household total expenditure (a proxy for income). See last page for details.

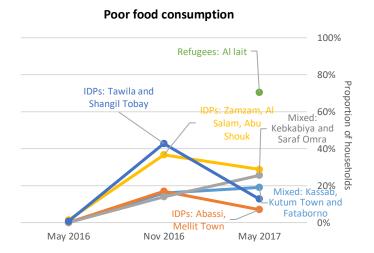
North Darfur FSMS, May 2017

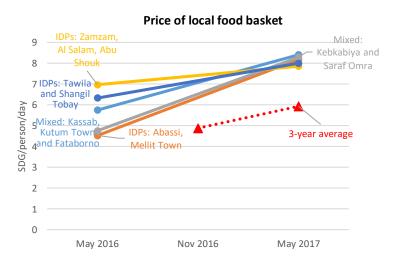
In North Darfur, food security deteriorated among sampled households compared to May 2016. The deterioration among protracted IDPs was substantial, with the proportion of food insecure households increasing from 33 to 52 percent. Food insecurity levels were particularly high among South Sudanese refugees in Al Lait. A reference for comparison for this population did not exist as the population was introduced into the food security monitoring system in the May 2017 round. However, that 84 percent of the population was food insecure is worrying. Among the IDPs, food security was worst in Shangil Tobay, Zamzam, Al Salam, and Abu Shouk. Substantial deterioration of food security was observed among IDPs in mixed communities of Kebkabiya, Saraf Omra, Kassab, Kutum Town and Fataborno, compared with May 2016. The deterioration in food security was due in part to poor economic access to food, increased prices of essential food commodities and consecutive seasonal of below-average crop production, limiting access to both food and income opportunities of the IDPs.

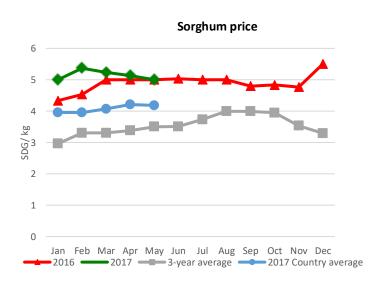
In a significant deterioration, the proportion of protracted IDP households with poor food consumption<sup>4</sup> increased from o percent in May 2016 to 19 percent in May 2017. Food consumption among the South Sudanese was alarming: Seventy percent of refugee households reported poor food consumption. There was a high likelihood these households were seriously deficient in their intake of macro- and micro-nutrients<sup>5</sup>.

Sorghum prices in El Fasher market were above the country average and the three-year average, mainly due to significantly below-average state level cereal production in the most recent season, resulting from sporadic and erratic rainfalls in 2016. The price of sorghum was expected to remain to high during the second and third quarter of 2017.









<sup>&</sup>lt;sup>4</sup> See methodology section on the last page for details and precise definition.

<sup>&</sup>lt;sup>5</sup> As always when serious food insecurity flags are raised, WFP will work with its partners to investigate the local situation, confirm findings, and intervene with food assistance solutions as necessary.



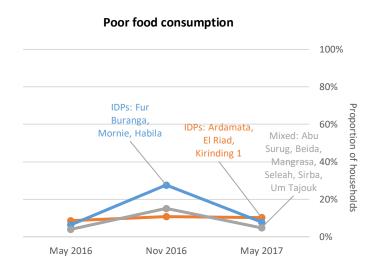
West Darfur FSMS, May 2017

In West Darfur, food security deteriorated among protracted IDP households compared to May 2016. Approximately 66 percent of protracted IDPs were found to be food insecure, compared to 43 percent in May 2016. In previous rounds of monitoring, a substantial difference in food insecurity levels were observed between more urban IDPs (in Geneina town: Ardamata, El Riad, Kirinding 1) and more rural IDPs (in Mornie, Habila and Fur Buranga). However, in May 2017, the level of food insecurity increased among sampled urban IDPs, nearly closing the gap. Household food consumption among protracted IDPs in West Darfur remained similar compared to the same time last year (May 2016).

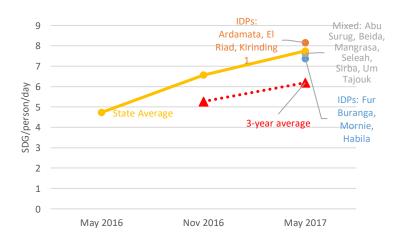
West and Central Darfur were particularly affected by increased transportation costs due to its long distance from Khartoum. Weak economic access to food was an important factor behind the food security deterioration, driven by high commodity prices and an increase in transportation costs and taxes. In addition, below average cereal production across West Darfur (confirmed in the 2017 state level post harvest assessment) affected the prices of the locally produced foods in the local food basket.

Sorghum prices in El Geneina market had increased substantially since the last quarter of 2016 and increased beyond the three-year average and country average. The increasing trend of the sorghum price had contributed to driving up the price of the local food basket.

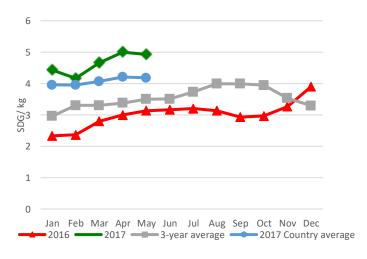
#### Food insecurity 100% IDPs: Fur Buranga, Mornie, Habila 80% Proportion of households 60% Mixed: Abu Surug, Beida, 40% Mangrasa, IDPs: Seleah, Sirba, Ardamata, El 20% Um Tajouk Riad, Kirinding 1 0% May 2016 Nov 2016 May 2017



#### Price of local food basket



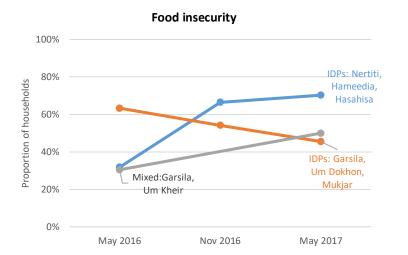
#### Sorghum price

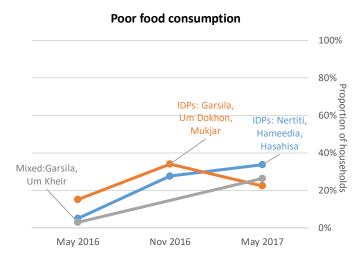


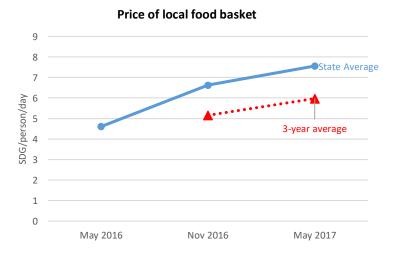
Food security results were mixed among IDPs in Central Darfur: The situation worsened in the Nertiti, Hameedia and Hasahisa cluster, where 70 percent of households were food insecure in May 2017 compared to 32 percent in May 2016. The area had been impacted by displacement from Jebel Marra during this period. In the Garsila, Um Dukhon and Mukjar cluster, the proportion of food insecure households improved from 63 to 46 percent from May 2016 to May 2017. The food insecurity level among IDPs in mixed communities deteriorated by 20 percentage points.

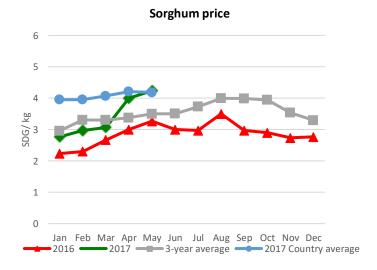
The proportion of households with poor food consumption increased compared to May 2016 for both IDP clusters and the cluster for mixed communities. The change was relatively small in the Garsila, Um Dukhon and Mukjar cluster.

Sorghum prices in Zalingei market remained stable during the first quarter of 2017. Prices of sorghum in Central Darfur (considered one of the main cereal production areas in Darfur region) were below the country average and three-year average during much of the first quarter. However, after a price spike in April, Zalingei prices were at the same level as the national average. The state average price of the local food basket showed a hike, due to high general inflation in Sudan.









South Darfur FSMS, May 2017

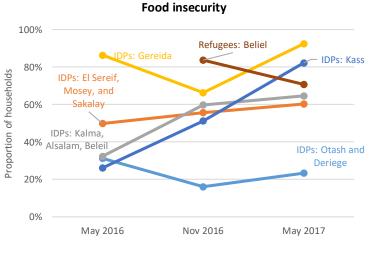
The food security situation deteriorated in four of the five IDP clusters as compared to May 2016. Overall, the proportion of food insecure IDPs in South Darfur increased from 46 to 63 percent during this period. Among the reasons for the deterioration was poor economic access due to increasing prices, in addition to the poor harvest, especially in the localities of South and North of Nyala, Kass and Beleil (according to the 2017 state level post harvest assessment), which resulted in IDP households being more reliant on markets and fewer job opportunities.

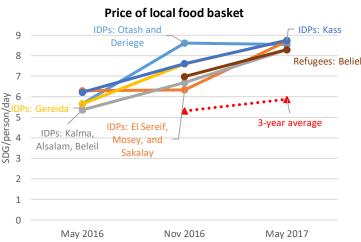
Food insecurity was especially prevalent among IDPs in Kass and Gereida, with above 80 percent of households being food insecure. The deterioration in Kass camp was noteworthy: The proportion of food insecure households increase by 56 percentage points compared with May 2016.

Food security improved among IDPs in the Otash and Deriege cluster compared to same period last year. The improvement may be partially a result of the recent implementation of cash-based food assistance, which allows households to have more food choices. In addition, both camps in the cluster are part of Nyala town with greater access to job opportunities.

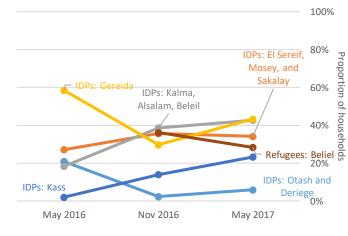
South Sudanese refugees in Beliel showed an improvement in food security indicators in May 2017 compared to November 2016. Still, the level of vulnerability remained high, with more than 70 percent of the population being food insecure in May 2017. That could be partly attributed to improvements in the registration of new refugees, allowing for more timely access to food assistance and other services.

Sorghum prices were high compared to the country average and the three-year average. The increasing trend of the sorghum price had contributed to driving up the price of the local food basket. The average price of the local food basket in South Darfur was six percent more expensive than in any other Darfur state.

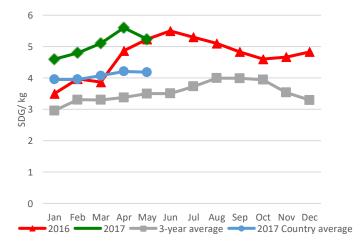




## **Poor food consumption**



# Sorghum price

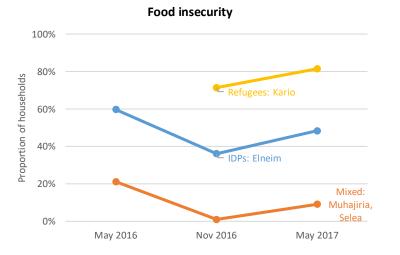


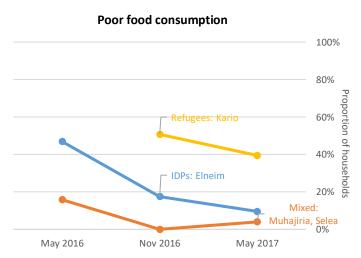
East Darfur FSMS, May 2017

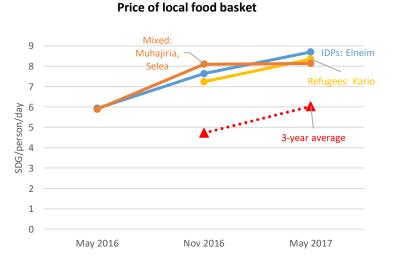
Analysis of the household data for the protracted IDPs in East Darfur shows that the prevalence of food insecurity remained relatively stable, from 58 percent in May 2016 to 52 percent in May 2017. In contrast, among the South Sudanese refugees, over 80 percent of the sampled households were found to be food insecure in May 2017 (compared to 71 percent in November 2016). The recent relocation of refugees from Khor Omer to Kario camp, and the resulting livelihood disruptions, likely contributed to the elevated vulnerability.

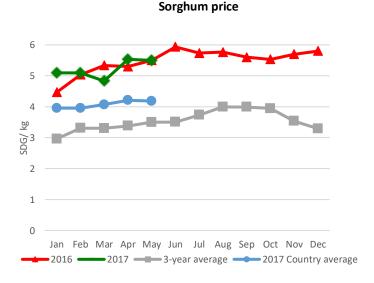
Household food consumption improved among sampled IDPs: The proportion of households with poor food consumption decreased from 47 percent in May 2016 compared to 10 percent in May 2017. Despite an improvement from November 2016, a large proportion of sampled refugee households – 39 percent – had poor food consumption in May 2017. The large food consumption deficit was primarily due to poor economic access to food and limited income opportunities.

Sorghum prices in Ed Dein market were above the country average and also higher than in most other markets in Darfur. The price was stable during the first quarter of 2017 but increased sharply in April. The informal cross-border trade with South Sudan could have contributed to local prices being 20-30 percent above the country average in the first quarter of 2017. This had a negative impact on the price of the local food basket, which was already the one of the highest in the Darfur region. The hike in the price of the local food basket was expected to affect the prevalence of food insecurity among displaced populations and the general population.









State	Cluster (locations)	Month	Food security			Food consumption score		
			Food insecure	Borderline	Food secure	Poor	Borderline	Acceptable
North Darfur	Mixed: Kassab, Kutum Town and Fataborno	May 2016	10%	48%	42%	0%	18%	82%
		Nov 2016	36%	41%	23%	16%	30%	55%
		May 2017	48%	37%	15%	19%	42%	39%
	IDPs: Abassi, Mellit Town	May 2016	8%	49%	43%	0%	14%	86%
		Nov 2016	38%	48%	14%	17%	32%	51%
		May 2017	37%	49%	14%	7%	36%	57%
	Mixed: Kebkabiya and Saraf Omra	May 2016	23%	44%	34%	0%	32%	68%
		Nov 2016	42%	36%	22%	14%	45%	41%
		May 2017	56%	35%	9%	26%	36%	39%
	IDPs: Zamzam, Al Salam, Abu Shouk	May 2016	52%	39%	9%	1%	64%	35%
		Nov 2016	61%	28%	11%	37%	32%	32%
		May 2017	55%	34%	10%	29%	36%	35%
	IDPs: Tawila and Shangil Tobay	May 2016	52% 64%	41% 26%	7% 10%	1% 43%	60% 29%	39% 28%
		Nov 2016	59%	32%	9%	13%	62%	25%
	Refugees: Allait	May 2017 May 2017	59% 84%	32% 11%	9% 4%	70%	20%	9%
West Darfur	Refugees: Al lait	May 2017	54%	34%	12%	6%	59%	35%
	IDPs: Fur Buranga, Mornie, Habila  IDPs: Ardamata, El Riad, Kirinding 1  Mixed: Abu Surug, Beida, Mangrasa, Seleah, Sirba, Um Taiouk	Nov 2016	64%	25%	11%	28%	45%	27%
		May 2017	72%	25%	3%	8%	45% 69%	23%
		May 2017 May 2016	32%	37%	31%	9%	32%	60%
		Nov 2016	42%	31%	27%	11%	42%	47%
		May 2017	65%	33%	1%	10%	62%	28%
		May 2016	33%	44%	23%	4%	41%	55%
		Nov 2016	49%	32%	19%	15%	45%	40%
		May 2017	41%	41%	17%	5%	47%	48%
Central Darfur	IDPs: Nertiti, Hameedia, Hasahisa	May 2017	32%	41%	27%	5%	59%	36%
		Nov 2016	66%	21%	13%	28%	57%	15%
		May 2017	70%	24%	6%	34%	50%	16%
	IDPs: Garsila, Um Dokhon, Mukjar	May 2016	63%	24%	13%	15%	60%	25%
		Nov 2016	54%	34%	12%	34%	33%	33%
		May 2017	46%	39%	16%	22%	32%	45%
	Mixed:Garsila, Um Kheir	May 2016	30%	31%	39%	3%	50%	47%
		May 2017	50%	33%	17%	26%	38%	36%
South Darfur	IDPs: Otash and Deriege	May 2016	31%	40%	29%	21%	16%	64%
		Nov 2016	16%	53%	31%	2%	24%	74%
		May 2017	23%	74%	3%	6%	19%	75%
	IDPs: El Sereif, Mosey, and Sakalay	May 2016	50%	31%	19%	27%	26%	47%
		Nov 2016	56%	33%	12%	36%	30%	34%
		May 2017	60%	31%	9%	34%	29%	37%
	IDPs: Kalma, Alsalam, Beleil	May 2016	32%	33%	35%	18%	21%	60%
		Nov 2016	60%	27%	13%	39%	30%	32%
		May 2017	65%	26%	9%	43%	31%	26%
	IDPs: Gereida	May 2016	86%	13%	1%	58%	30%	12%
		Nov 2016	66%	29%	5%	30%	41%	29%
		May 2017	92%	7%	0%	43%	52%	4%
	IDPs: Kass	May 2016	26%	56%	18%	2%	31%	68%
		Nov 2016	51%	39%	10%	14%	52%	34%
	Refugees: Beliel	May 2017	82%	15%	3%	23%	66%	11%
		Nov 2016	84%	15%	2%	36%	49%	15%
		May 2017	71%	25%	5%	28%	54%	17%
East Darfur	IDPs: Elneim	May 2016	60%	27%	13%	47%	17%	36%
		Nov 2016	36%	41%	23%	18%	30%	53%
		May 2017	48%	47%	5%	10%	42%	49%
	Mixed: Muhajiria, Selea	May 2016	21%	35%	44%	16%	11%	74%
		Nov 2016	1%	33%	66%	0%	2%	98%
	Refugees: Kario	May 2017	9%	36%	55%	4%	7%	89%
		Nov 2016	71%	22%	7%	51%	22%	27%
		May 2017	81%	18%	1%	39%	47%	13%



WFP conducts continuous food security monitoring of populations across Sudan affected by emergencies, focusing on internally displaced persons and refugees. The food security monitoring system (FSMS) covers the states of North Darfur, West Darfur, Central Darfur, South Darfur, East Darfur, South Kordofan, White Nile, Blue Nile and Kassala. For each round of monitoring, results are released in two reports, one for Darfur and one for the rest of the country.

### Sample

Data collection takes place two time per year, in May and November. The household data collection for this round of monitoring was conducted in May 2017, which constitutes the start of the harvest period. Field teams collected data from a set number of sentinel sites. The sentinel sites did not change across monitoring rounds. Some variation may occur between rounds as a result of access or operational constraints. For this round of monitoring, 48 locations were sampled in Darfur. A total of 5,310 households were interviewed. Within the fixed sentinel sites, sampled households were selected randomly. Results were aggregated to groups of camps and locations, called clusters, and statistics were reported at that level. The data from the 48 locations were aggregated to 21 clusters (as listed in the Data Table). The sample size was 300 for each cluster, with the exception of the cluster for Kass and the cluster for Garsila, Um Dokhon, and Mukjar with 200 household samples, and Al lait cluster with 100 sampled households.

#### **Indicators**

Food security was determined, as per WFP Emergency Food Security Assessment standards, by cross-tabulating two economic food access indicators with a household food consumption indicator (see below). For the first economic food access indicator, the price of a local food basket was used as a benchmark against which to compare household total expenditure (a proxy for income), to determine the ability of households to meet their food needs through food purchases. The local food basket consisted of sorghum, onions, vegetable oil, milk, cow meat, goat meat, dry tomatoes, and sugar in amounts sufficient to attain a nutritionally acceptable diet, while minimizing the cost. For the second economic access indicator, the proportion of total household expenditure spent on food was calculated, as a complementary indicator of economic strength and a proxy indicator for household food production (under the assumption that households with large food production would spend a smaller proportion of their expenditures on food purchases). Household food consumption data was collected and analyzed using standard WFP methodology: the variety and frequency of foods consumed over a 7-day period was recorded to calculate a household food consumption score. Weights were based on the nutritional density of the foods. Using standard thresholds, households were classified as having either poor, borderline or acceptable food consumption. See the WFP methodology paper for more details. WFP in Sudan is transitioning to WFP's standard Consolidated Approach to Reporting Indicators of Food Security (CARI).

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