Rapid IDP Assessment Report

Kordofan Region, Sudan

Samaritan's Purse®
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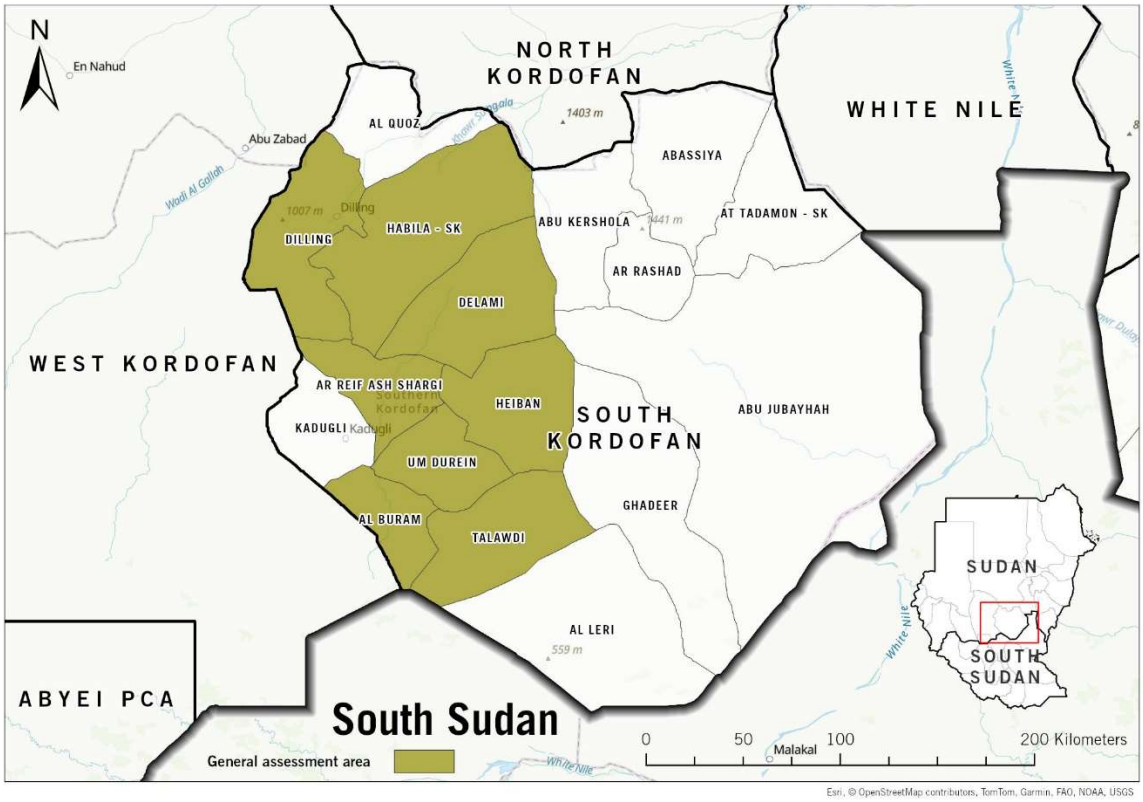
Kordofan Region, Sudan



Summary

Following the outbreak of war in Sudan on April 15th, 2023, internally displaced people (IDPs) fleeing fighting between the Rapid Support Forces (RSF) and the Sudanese Armed Forces (SAF) began flooding into areas of relative security in Sudan's Kordofan region.[1] Local authorities have reported 582,210 new IDPs in those areas, while OCHA recently put the number at 602,000.[2] With large numbers of IDPs continuing to flee into the region, the IDP population there may now significantly exceed those totals and could potentially be as high as one million.

In order to verify reports of widespread malnutrition and severe food insecurity among IDPs in Sudan's Kordofan region, Samaritan's Purse carried out a Rapid IDP Assessment in March, 2024. Between March 25th and March 29th, 2024, 33 enumerators on two survey teams carried out the assessment in six identified IDP settlements. During data collection, the teams completed a total of 1,076 household surveys. The goal of the assessment was to quickly evaluate levels of malnutrition and food insecurity in the IDP population and to better understand current health, shelter, and water/sanitation/hygiene (WASH) conditions in IDP settlements.

Assessment results confirm IDPs are facing extremely high levels of malnutrition and food insecurity, as well as barriers to healthcare access, inadequate shelter and poor WASH conditions. IDP food security has also been undermined by crop failure in the region. Data from a recent post-harvest assessment in the region covered by the Rapid IDP Assessment indicates average household sorghum output (the region's primary food source) there dropped by 45% since last year. With IDPs continuing to enter the region in large numbers, this substantial drop in local production is likely to lead to even more extreme food insecurity during the upcoming lean season[3], creating a significant risk of famine. Immediate, large-scale emergency food assistance is urgently needed to avoid potentially catastrophic outcomes in the coming months.

[1] Kordofan is a region in Central/Southern Sudan that encompasses Sudan's South Kordofan, West Kordofan and North Kordofan States. Although fighting has taken place in greater Kordofan, parts of the region have remained relatively secure – providing a refuge for IDPs.
[2] The OCHA estimate includes IDPs who have fled into secure areas of the Kordofan region, along with a significantly smaller number IDPs in similar areas in Sudan's Blue Nile State.
[3] The lean season is a period lasting from approximately May through September each year when household food stocks are typically lowest and levels of hunger are typically highest.

Key Findings

Demographics

- **IDP households are large and disproportionately female-headed**: The average IDP household size is 7.4 and the majority (57.5%) are female-headed. This is more than double the average proportion of female-headed households in the region.

Nutrition

- **Rates of malnutrition are very high:** The proxy GAM (Global Acute Malnutrition) rate was 17.5% for children 6-59 months and 39.9% for pregnant and lactating women. This is higher than the MUAC (Mid-Upper Arm Circumference) based 6-59-month proxy-GAM rate registered in any nutrition assessment in the region since 2011, and falls within a range consistent with an IPC (Integrated Food Security Phase Classification) of 4 to 5 (Emergency to Catastrophe).[4]
- **Most children have lost a significant amount of weight since displacement:** 64.9% of IDPs reported their 6-59 month old children have lost a significant amount of weight since moving to the IDP camps. Nearly all (97.2%) reported their children have experienced at least some weight loss while in the camps.

Food security

- **IDPs have extremely limited food stocks**: Nearly all IDPs interviewed (97.4%) reported having less than one week of food stocks available, and 81.7% reported having no food stocks available at all
- **Households with urgent food needs face abnormally high market prices:** 98.3% of households confirmed their most pressing need is food. Just 0.8% indicated their most pressing need is cash. This, combined with abnormally high sorghum prices (247% above their seasonal average in some areas) driven by low supply from a poor harvest demonstrate cash distributions are not a viable response option.
- **Wild foods have become the primary food source for most IDPs**: Just 34% of IDPs reported their main food source was farming, markets or food aid. Most (66%) are coping with scarcity by relying on wild foods and other nontraditional sources to survive.
- **Severe hunger has become widespread:** 34.3% of IDPs are experiencing severe hunger and 97.4% are experiencing either moderate or severe hunger (according to the Household Hunger Scale). This is the highest proportion of severe hunger recorded in any assessment in the region since 2011.

Agriculture

- **Most IDPs missed the 2023/2024 harvest:** 79.7% of households did not harvest any crops during the 2023/2024 agricultural season, primarily due to displacement.

[4] Although the MUAC-based proxy-GAM rate of 6-59 month-old children alone is not enough to determine the IPC level of the IDP population, the rate found during the Rapid IDP Assessment is above the reference threshold of ≥15% for IPC 4/5 when MUAC-based proxy-GAM is used as one of the factors for phase classification.

- **The region to which the IDPs have fled has experienced significant crop failure**: Data from a recent post-harvest assessment of the region covered by the Rapid IDP Assessment indicates average sorghum production per household there fell by 45% since last year.

Water, Sanitation and Hygiene (WASH)

- **Sanitation and hygiene facilities in IDP settlements are extremely limited:** 84.5% of respondents reported using no sanitation facilities, with 95.2% having no access to handwashing facilities.
- **IDPs have to travel long distances to reach water sources**: Of those surveyed, 91.7% are using an improved water source, but 41.8% have to walk more than one hour to access that source.

Shelter

- **Most IDPs have inadequate shelter:** 80.2% of respondents are living in an emergency shelter.

Non-food items (NFIs)

- **Most IDPs lack even basic NFIs**: Just 22.6% of IDPs reported had plastic tarps and 8.3% had mosquito nets. 32.7% had none of the NFIs (Non-food items) listed in the survey.

Health

- **IDPs have to travel long distances to seek medical treatment:** 81.5% of households are able to access a clinic when they get sick, but 42% report the nearest clinic is more than one hour away.
- **IDPs report a range of illnesses are common in IDP settlements:** The most common sicknesses IDPs reported experiencing in the camps were diarrhea (82.6%), malaria (80.1%), and Acute Respiratory Infection (51.1%).

Introduction

Since the war in Sudan started between the Rapid Support Forces (RSF) and the Sudanese Armed Forces (SAF) on April 15th, 2023, millions of people have been displaced inside Sudan or have become refugees in neighboring countries. While fighting has spread across much of the country, parts of Sudan's Kordofan region have remained relatively secure. As a result, large numbers of internally displaced people (IDPs) have fled there seeking refuge from fighting in other parts of the country. Local authorities have reported 582,210 new IDPs in those areas, while OCHA recently put the number at 602,000.[5] With large numbers of IDPs continuing to flee into the region, the IDP population there may now significantly exceed those totals and could potentially be as high as one million.

Most IDPs entering the region have fled their homes with limited food stocks and few assets, placing them at high risk of extreme food insecurity and malnutrition. The challenges IDPs face have been compounded by widespread crop failure in the region to which they have been displaced. Data from a recent post-harvest assessment in the region covered by the Rapid IDP Assessment indicates average sorghum[6] production per household fell by 45% since last year. Since households there rely almost universally on farming to meet their consumption needs, the decline in output has created a significant risk of widespread hunger in the region during the upcoming May – September lean season. Diminished production also means lower sorghum supply in local markets and additional upward pressure on already high sorghum prices which will further exacerbate food insecurity among both IDP and host-community populations in the region.

The decline in agricultural output in the areas of the Kordofan region covered by the Rapid IDP Assessment mirrors the decline across much of the rest of the country. According to a recent Food and Agriculture Organization (FAO) report, sorghum production from the 2023/2024 season is estimated to be 42% lower than during the 2022/2023 season. FAO estimates overall cereal production in Sudan fell by 46% over the same period.[7] The drop in output has been driven primarily by conflict-related disruptions and inconsistent rainfall. Although the harvest has not been uniformly poor in all areas of Sudan, localized surpluses are unlikely to provide relief to food insecurity in other parts of the country as fighting continues to prevent movement of food from areas of surplus to areas of deficit.[8]

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[5] The OCHA estimate includes IDPs who have fled into secure areas of the Kordofan region, along with a significantly smaller number IDPs in similar areas in Sudan's Blue Nile State. Source: UN OCHA Sudan [@UNOCHA_Sudan]. (2024, April 1). *The humanitarian situation of 602K IDPs, in addition to the host community members* [Post]. X. https://twitter.com/UNOCHA_Sudan/status/1774781674649215068

[6] Sorghum is the primary staple crop in the region and accounts for the majority of annual cereal consumption for most households.

[7] "Special Report: 2023 FAO Crop Food Supply Assessment Mission (CFSAM) To the Republic of the Sudan", Food and Agriculture Organization (FAO). 19 March, 2024. https://www.fao.org/3/cd0053en/cd0053en.pdf

[8] "Sudan – Food Security Outlook, February – September 2024". FEWS NET. https://fews.net/east-africa/sudan

As a consequence of insecurity, high staple food prices and diminished agricultural output across much of the country, FEWS NET reports that Emergency (IPC Phase 4) levels of food insecurity are likely to expand significantly across many parts of Sudan – including in the Kordofan region. Its projections indicate most of that region will be at Emergency (IPC Phase 4) levels of food insecurity between June and September of 2024.[9] Analysis from FEWS NET and other organizations also warn of possible Famine (IPC Phase 5) in parts of Sudan, including among IDP populations across the country.[10,11]

In response to concerning reports of extreme food insecurity and malnutrition among the IDP populations in Sudan's Kordofan region, Samaritan's Purse carried out a Rapid IDP Assessment there in March, 2024. The goal of the assessment was to quickly evaluate levels of malnutrition and food insecurity in the IDP population and to better understand current health, shelter, and water/sanitation/hygiene (WASH) conditions in IDP settlements. Between March 25th and March 29th, 33 enumerators on two survey teams to completed 1,076 household surveys across six identified IDP settlements. The following report summarizes the assessment's findings.

Methodology

Sample Design and Sample Selection

The Rapid IDP Assessment was carried out using a stratified two-stage sampling design. A target sample size of at least 1,000 surveys was set to ensure a margin of error of no more than 3.8% with an assumed design effect of 1.5. Sampling was carried out by first identifying six major IDP settlement sites and then dividing the overall sample size between those sites in approximate proportion to their share of the region's estimated IDP population.[12] The IDP settlement sites were already divided into blocks of somewhat similar size. To complete sample selection within those sites, assessment teams first randomly selected a subset of those blocks.[13] In each selected block, they then identified all available households before randomly selecting a subset of those households to interview according to the sample size required

[9] Most of the Kordofan region is projected to be classified at an Emergency (IPC Phase 4) classification over the June – September period. See Appendix for more detail.
[10] "Sudan – Food Security Outlook, February – September 2024". FEWS NET. https://fews.net/east-africa/sudan
[11] "From Catastrophe to Famine: Immediate action need in Sudan to contain mass starvation", Clingendael – Netherlands Institute of International Relations. February. 2024. https://www.clingendael.org/sites/default/files/2024-02/PB_Sudan_famine.pdf
[12] IDP settlement sites were identified through consultation with the Sudan Relief and Rehabilitation Agency (SRRA). Division of the overall sample size target between the three sites in the Central Region (one site each in Thobo, Umdorein and Dellami Counties) was based on county-level IDP totals from SRRA records. The overall target sample size allocated for the three IDP settlement sites in the Western Jebals region was based on its share of the overall IDP population according to SRRA records. Since no breakdown of the estimated IDP population in each of those individual IDP settlement sites was available, however, the total sample size allocated for the Western Jebals region was divided evenly among the three sites.
[13] This type of random sub-selection within sites was used since the IDP settlement sites were generally so large that direct simple random sampling or systematic random sampling would have been impractical.

for the selected block. Since the overall target sample size was allocated between IDP settlement sites in proportion to the area's share of the estimated overall IDP population, and since blocks of roughly similar size were randomly selected within each site, the sample design was approximately self-weighting. In total, the team of 33 enumerators completed surveys with 1,076 IDP households across the six sites.

A separate team of trained nutrition staff completed MUAC screenings in each site. Although the MUAC-screening team visited the same IDP settlement sites as the rest of the assessment team, they did not use the same selection process. Instead of sampling house to house, the MUAC-screening team set up screening locations in each IDP settlement site and then mobilized pregnant and lactating women (PLWs) and families with 6-59 month old children to come for nutrition screening. Feedback from the MUAC-screening teams indicates a high percentage of all 6-59 month old children and PLWs from the areas surrounding those sites were screened.

Data Quality Assurance

All of the enumerators on the main assessment team were experienced in survey data collection and were trained on how to administer the household questionnaire before the assessment started. All surveys were completed on tablets using electronic forms with built-in data validation checks to help minimize error. Survey data was reviewed after it was uploaded. If any errors were found, appropriate data cleaning measures were completed before analysis. The MUAC-screening team was also made up entirely of nutrition staff with previous experience conducting MUAC screenings. In order to ensure uniformity in the screening process, the team completed all measurements using standardized MUAC tapes.

Limitations

Since no comprehensive list of all IDP settlements in the region was available, assessed settlements could not be randomly selected. Instead, six IDP settlement sites were purposively selected based on accessibility and known presence of large IDP populations. Since the condition of IDPs was expected to be similar across IDP settlements in the region, any potential bias introduced by purposive first-stage selection is likely to have been small.

While the assessment's sample was designed to be approximately self-weighting, the realized sample may have deviated from being self-weighting to a limited degree. This could have happened, for example, if the actual share of the populations of the IDP settlements differed somewhat from the figures provided by local authorities. Deviation could also have occurred if the blocks within the selected IDP settlements, which were expected to be approximately equal in size, had sizes that actually varied significantly. Since such deviations are expected to have been small, any potential bias introduced should be minimal.

Responses to most of the assessment questions were self-reported. As with any self-reported survey data, this introduces the possibility of misreporting. Such misreporting can be a result of recall bias, which occurs when respondents find it difficult to accurately remember information from the past. In order to mitigate the risk of such bias, the assessment questionnaire focused on collecting relatively simple, easy to report information focused on present conditions – or past conditions with short recall periods.

Assessment Findings

Demographics

IDP respondents in the assessment had an average age of 40.7 years old and 80.9% were female. The average household (HH) size among the assessed population was 7.4. Figure 1 below provides a breakdown of IDP HHs structure in terms of the average number of HH members by age and sex.

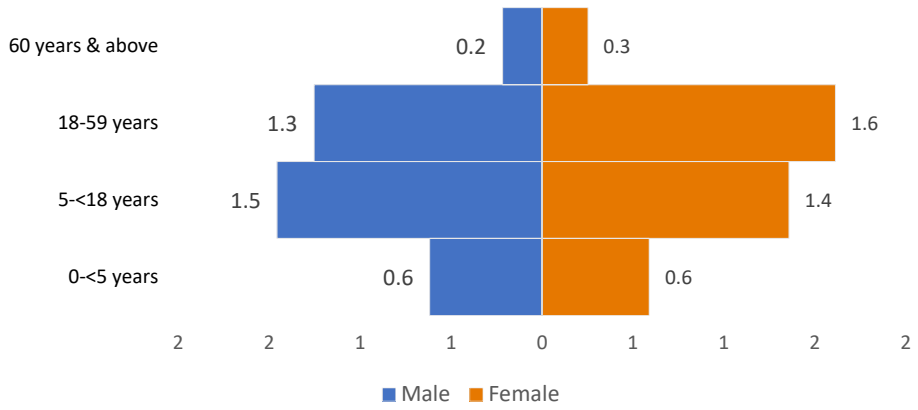


Figure 1: Average number of HH members by age and sex

More than half of the IDP HHs (57.5%) were female-headed, which is more than double the average proportion in the region. Previous assessments have consistently shown that female-headed HHs in the region have significantly fewer economic resources, significantly lower agricultural output and significantly worse food security outcomes (on average) than male-headed HHs – indicating an elevated level of vulnerability in the assessed IDP population. Just over three quarters of IDP HHs (75.6%) also had at least one member who was an orphan (27.8% of HHs), who was disabled (31.6% of HHs) or who was a pregnant/lactating woman (54.2% of HHs).

Food Security

Food Sources

Assessment results indicate IDP HHs are already facing disturbingly high levels of food insecurity – a situation which is only likely to get worse over the upcoming lean season. During the assessment, IDP respondents were asked to identify their main source of food since moving to their current IDP settlement. As figure 2 below shows, two-thirds of respondents selected 'Other' as their main food source. Consultation with the assessment team confirms that most of those who selected 'Other' are relying on gathering wild foods as their primary food source. Heavy reliance on gathering wild foods to meet consumption needs is a severe coping strategy. Its widespread practice in IDP settlements indicates a high

level of food insecurity among the IDP population there (see photos below for examples of wild foods IDP HHs have resorted to eating to cope with food insecurity).[14]

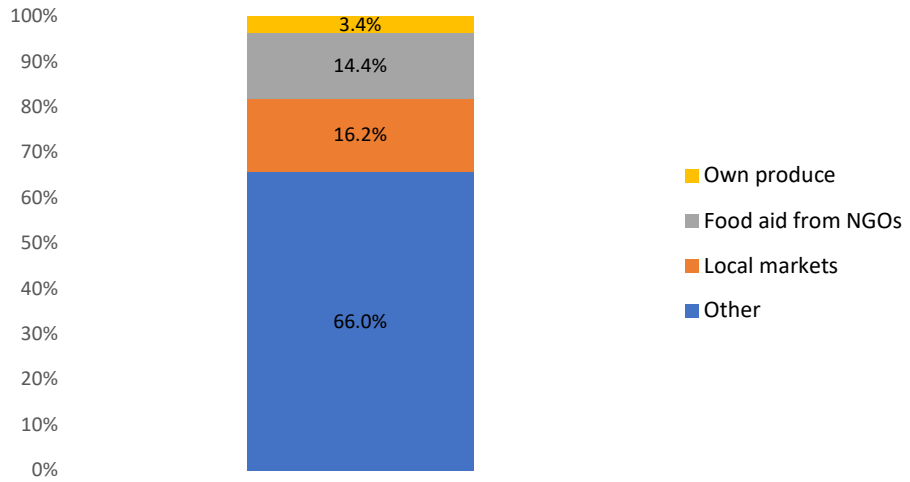


Figure 2: Main food source since arriving in the IDP camp ('Other' refers primarily to gathering wild foods)

Left: Seeds from wild Lalob (balanites aegyptiaca) tree gathered by an IDP household.
Right: Lalob tree seeds being boiled before being eaten.

[14] Gathering wild foods is assigned the highest coping strategy severity weight (4) in the Coping Strategies Index (CSI): https://pdf.usaid.gov/pdf_docs/Pnads360.pdf

Left: IDPs eating wild Doum palm (hyphaene thebaica) fruit.
Right: Child removing the hard outer layer of a wild Doum palm fruit.

Women gathering wild 'runner plants' for household consumption

Food Stocks

As figure 3 shows, IDP food stocks are extremely limited. More than three-quarters (81.7%) reported they had no available food stocks and nearly all (97.4%) reported their current food stocks would last one week or less. This lack of food reserves is a primary reason why most IDP HHs have resorted to gathering wild foods as their main food source.

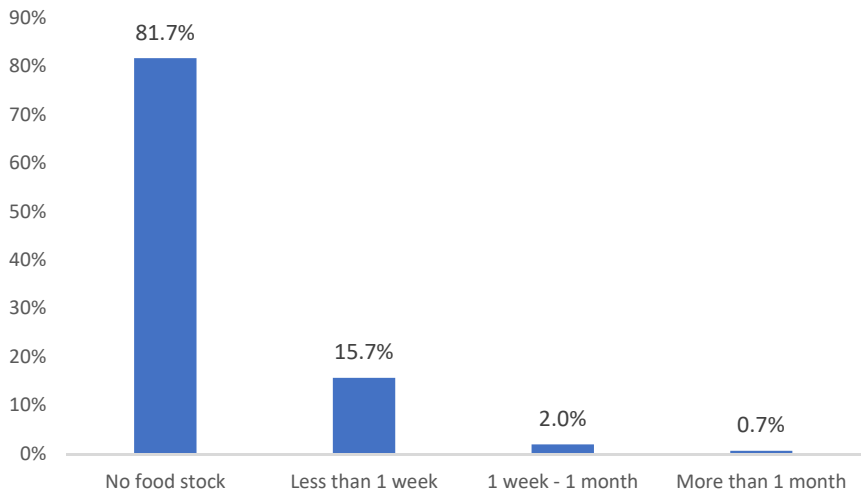


Figure 3: Reported duration of current household food stocks

Household Hunger Scale (HHS)

The assessment used the Household Hunger Scale (HHS) to evaluate the scope and severity of hunger among IDP households in the region. As figure 4 below shows, more than one-third (34.3%) of IDP HHs were classified as experiencing severe hunger based on their HHS scores. This rate of severe hunger is higher than the rate of severe hunger found in any region-wide assessment completed in the area since 2011.

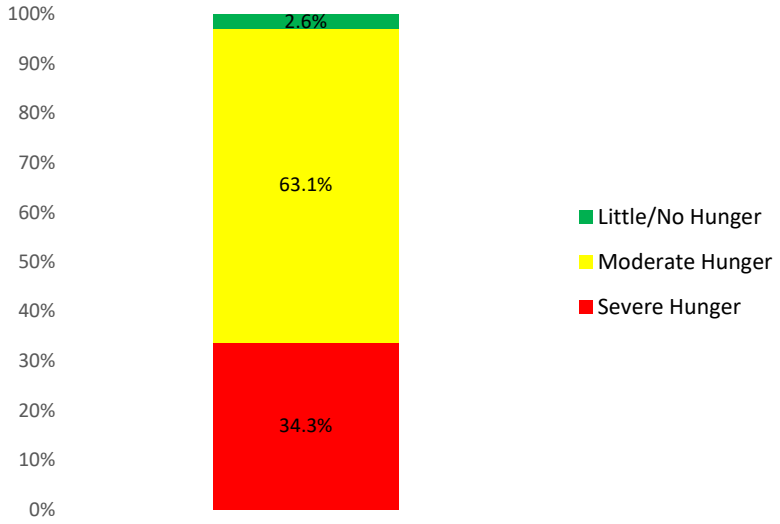


Figure 4: Household Hunger Scale (HHS) classification of IDP HHs

Among assessed IDP HHs, 19.1% had HHS scores within the reference range for IPC 4 (Emergency) classification (HHS score of 4) and 15.2% had HHS scores within the reference range for IPC 5 (Catastrophe) classification (HHS scores ≥ 5). In addition, nearly all (97.4%) IDP HHs had HHS scores that fell within the reference range for IPC 3+ (Crisis to Catastrophe) classification (HHS scores ≥ 2).[15] Although IPC cannot be determined using HHS data alone, the results point to widespread food insecurity among the region's IDP population which will likely worsen during the upcoming lean season. Without a significant infusion of emergency food aid in the region, IDP food security is likely to continue deteriorating. If that happens, already high rates of severe hunger will increase even further – raising the risk of famine in the region.

Obstacles to Food Security

During the assessment, IDP HHs were asked to identify the biggest obstacle they faced to providing food for their families. Figure 5 below summarizes the results. Nearly half (45.9%) of IDP HHs reported lack of assets was the biggest obstacle they faced. If IDP HHs had assets (e.g. livestock), they could sell them to purchase food to replenish depleted HH food stocks. Since IDPs typically leave most of their assets behind when they flee, however, most are unable to use market purchases to fill the consumption gaps they face during displacement.

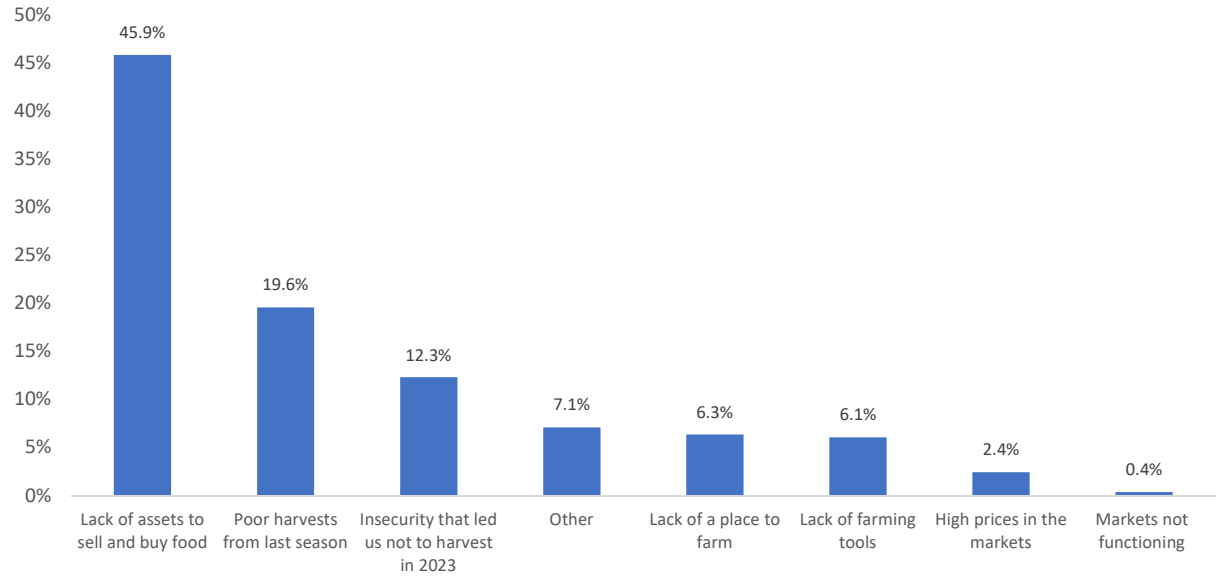


Figure 5: What is the biggest obstacle to providing food for your family?

[15] "Technical Manual Version 3.1: The IPC Acute Insecurity Reference Table (Tool 3)", Integrated Food Security Phase Classification (IPC), 2021. https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/manual/IPC_Technical_Manual_3_Final.pdf

Food Prices

Abnormally high staple food prices in the Kordofan region of Sudan compound the food security challenges IDPs there are already facing. As figure 6 below shows, the average retail price of sorghum (USD/kg) in Kadugli (the capital of South Kordofan State) in February 2024 was 183% higher than in February, 2023 (before the start of the war in Sudan) and 247% higher than the pre-war average for the same month. Similarly, the average retail price of sorghum in El-Obeid (the capital of North Kordofan State) in February 2024 was 76% higher than in February 2023 and 104% higher than the pre-war average for the same month.[16]

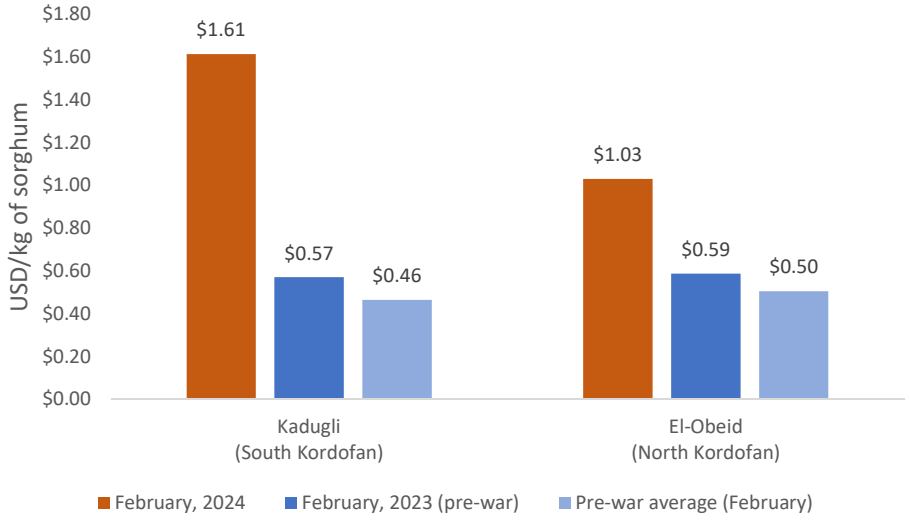


Figure 6: Average current vs. pre-war sorghum prices in North and South Kordofan

High prices in the assessed region have been largely driven by crop failure. Data from a post-harvest assessment recently completed in that area indicates average household sorghum output during the 2023/2024 harvest fell by 45% compared to the previous season.[17] This dramatic decline in output was driven primarily by inconsistent rainfall and widespread damage from locust swarms during the 2023/2024 agricultural season.

Results for the area covered by the Rapid IDP Assessment mirror the situation across much of the rest of Sudan. Food and Agriculture Organization (FAO) estimates suggest overall cereal production in Sudan fell by 46% between the 2022/2023 and 2023/2024 agricultural seasons and that sorghum production fell

[16] The pre-war average for Kadugli is based on a 5-year average (2019-2023). The pre-war average for El-Obeid is based on a 4-year average (209,2021-2023) as no price data was available for El-Obeid for February, 2020. Data source: "Food Price Monitoring and Analysis (FPMA) Tool", Food and Agriculture Organization of the United Nations (FAO), https://fpma.fao.org/giews/fpmat4/#/dashboard/tool/domestic

[17] The estimate is based on two independent, representative samples in the region – one from February/March, 2023 and another from February/March 2024. The change in mean reported sorghum output per household between the 2022/2023 and 2023/2024 harvest datasets was -187.1 kg (95% CI [-266.2 kg, -107.9 kg]).

by 42% over the same period. This substantial drop in output was driven primarily by conflict-related disruptions to agricultural activities and erratic rainfall in key production areas.[18]

Although agricultural output was not uniformly poor across all of Sudan, the ongoing conflict has imposed significant barriers to moving supply from areas of surplus to areas deficit.[19] As a result, already high prices for staple food items in the areas of the Kordofan region covered by the Rapid IDP Assessment are likely to continue increasing over the upcoming lean season as existing supplies are exhausted. Given these supply constraints and the upward pressure on prices they will continue to create, provision of cash/vouchers is unlikely to be a viable means of addressing food insecurity among IDPs in the assessed region.

Most Pressing Needs

When asked to identify their HH's most pressing need, IDP HHs almost universally selected food. As figure 7 below shows, 98.3% of all respondents reported that food was their most pressing need. This underscores the troubling levels of food insecurity IDP HHs currently face and highlights the need for immediate and wide-scale provision of emergency food assistance to help fill consumption gaps.

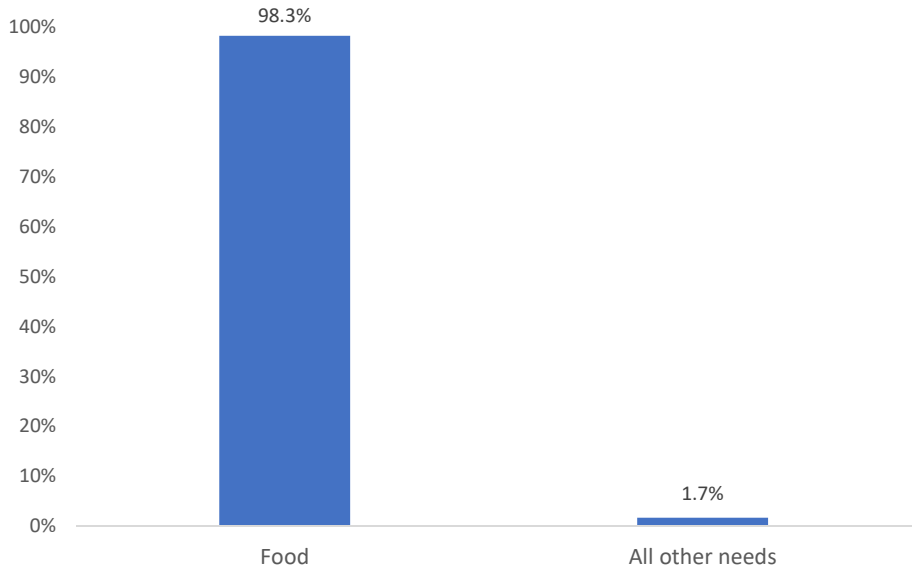


Figure 7: Most pressing need reported by IDP HHs

[18] "Special Report: 2023 FAO Crop Food Supply Assessment Mission (CFSAM) To the Republic of the Sudan", Food and Agriculture Organization (FAO). 19 March, 2024. https://www.fao.org/3/cd0053en/cd0053en.pdf
[19] "Sudan – Food Security Outlook, February – September 2024". FEWS NET. https://fews.net/east-africa/sudan

Nutrition

Malnutrition Rates among 6-59 Month-Old Children

During the assessment, enumerators with nutrition program experience completed a mass-MUAC screening of 6-59 month-old children and pregnant and lactating women (PLWs). Table 1 below summarizes the results. Among the 1,741 children screened, the proxy Global Acute Malnutrition (GAM) rate was 17.5% and the proxy Severe Acute Malnutrition (SAM) rate was 2.6%. This proxy-GAM rate was higher than the MUAC-based proxy-GAM rate found among 6-59 month-old children in any other nutrition assessment in the region since 2011. This includes the proxy-GAM rate found among 6-59 month-old children in another rapid assessment conducted in the same region during the 2012 lean season after a failed harvest and similar waves of mass-displacement that followed the outbreak of an earlier conflict there.[20]

At 17.5%, the 6-59 month old proxy-GAM rate found in the current Rapid IDP Assessment is consistent with an IPC classification of 4-5 (Critical – Extremely Critical) based on the IPC's reference threshold of ≥15% for GAM based on MUAC.[21] Since IPC classification cannot be determined based on proxy-GAM rates alone, these results can only be treated as indicative. The fact that the proxy-GAM rate among IDP children fell above this reference threshold, however, is a cause for significant concern.[22]

Table 1: MUAC-based proxy SAM/MAM/GAM rates for 6-59 month old children (n=1741)

	Overall	Male	Female
Proxy-GAM rate (MUAC <125 mm and/or oedema)	17.5%	16.4%	18.7%
Proxy-MAM rate (MUAC <125 mm and ≥ 115 mm)	14.9%	14.1%	15.6%
Proxy-SAM rate (MUAC <115 mm and/or oedema)	2.6%	2.3%	3.1%

[20] The MUAC-based proxy-GAM rate found among 6-59 month-old children in the 2012 assessment was 14.9%. Source: "Rapid Food Security and Nutrition Assessment: South Kordofan", Enough Project. October, 2012. https://enoughproject.org/files/SK%20Rapid%20Assessment%20Report.pdf

[21] "Technical Manual Version 3.1: The IPC Acute Insecurity Reference Table (Tool 3)", Integrated Food Security Phase Classification (IPC), 2021. https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/manual/IPC_Technical_Manual_3_Final.pdf

[22] The proxy-GAM rate also fell above the 'very high' threshold for wasting according to cutoffs endorsed by the World Health Organization (WHO) based on de Onis, M., et al. (2018) (see: https://www.who.int/data/nutrition/nlis/info/malnutrition-in-children). Those cutoffs are based on Weight-for-Height Z-scores (WHZ) rather than MUAC measurements. As explained in the following section, however, the WHZ-based GAM rate among IDP children would likely be significantly higher than the MUAC-based proxy-GAM rate found in the current assessment if such data were collected.

Data for calculating GAM rates based on Weight-for-Height Z-scores (WHZ) was not collected during the current Rapid IDP Assessment, however in past SMART nutrition surveys in the region, the WHZ-based GAM rates recorded for 6-59 month old children have been more than double MUAC-based proxy GAM rates found in the same surveys.[23] If the same relationship between WHZ and MUAC-based GAM rates holds for the assessed IDP population, the current WHZ-based GAM rate for 6-59 month old IDP children would exceed 30%.

IDP children undergoing malnutrition screening.

Weight Loss among Children Since Displacement

In addition to taking MUAC measurements, the current Rapid IDP Assessment also indirectly evaluated malnutrition in children under the age of 5 years old (U5) by asking parents how their children's weight had changed since moving to the IDP settlement. As figure 8 below shows, nearly two-thirds of parents (64.9%) reported their U5 children had lost a significant amount of weight since moving to the IDP settlement and 97.2% reported they had lost at least some weight. These findings are consistent with

[23] A 2017 SMART nutrition survey conducted in the SPLM/A-N controlled region of SKS found a MUAC-based proxy-GAM rate among 6-59 month old children of 8.4% and a corresponding WHZ GAM rate of 23.9%. Another SMART nutrition survey conducted in the same region in 2021 found a MUAC-based proxy-GAM rate among 6-59 month old children of 3.8% and a corresponding WHZ GAM rate of 11.0%.

results from the current assessment showing a high proxy-GAM rate among 6-59 month-old children, as well as extremely limited food stocks and very high rates of severe hunger among IDP HHs.

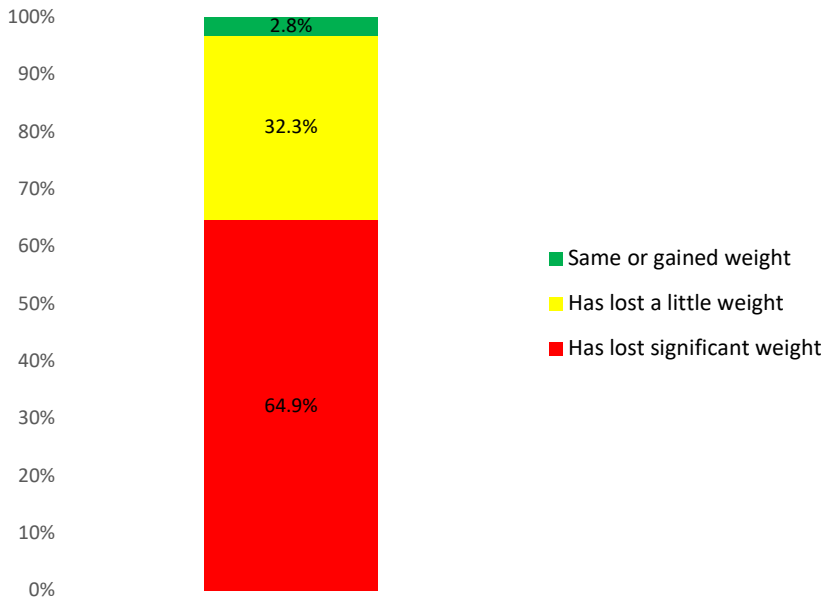


Figure 8: Reported weight change of U5 children since moving to the IDP settlement/camp

Malnutrition Rates among Pregnant and Lactating Women (PLWs)

While screening 6-59 month old children for malnutrition, the assessment team also screened pregnant and lactating women (PLWs) in the IDP settlements/camps. As table 2 below shows, the proxy-GAM rate found among the 393 PLWs screened was 39.9% (using a MUAC cutoff of <230 mm).[24]

Table 2: MUAC-based PLW proxy-GAM/MAM/SAM rates, using the MUAC cutoffs indicated (n=393)

Category	Rate
Proxy-GAM (MUAC < 230 mm)	39.9%
Proxy-MAM (MUAC 210 - <230 mm)	32.3%
Proxy-SAM (MUAC < 210 mm)	7.6%

[24] The MUAC cutoff of <230 mm for determining acute malnutrition among PLWs is based on South Sudan CMAM guidelines: "Community Management of Acute Malnutrition: CMAM Guidelines", Republic of South Sudan, Ministry of Health. December 2017, https://www.nutritioncluster.net/sites/nutritioncluster.com/files/2020-04/CMAM%20guidelines%20south%20sudan%202017.pdf

Mother undergoing malnutrition screening.

Agriculture

Agricultural Activity During the 2023/2024 Season

In the assessed areas of Sudan's Kordofan region, most HHs engage in farming as their primary livelihood strategy, with HH agricultural output providing the majority of the food HH members consume throughout the year. Recent IDPs, however, have often missed the previous planting season and may have limited ability to acquire agricultural inputs for the next planting season. As figure 9 shows, more than three quarters (79.7%) of IDP HHs did not harvest any crops during the 2023/2024 agricultural season, which is one of the primary reasons why IDP HHs have extremely limited food stocks.

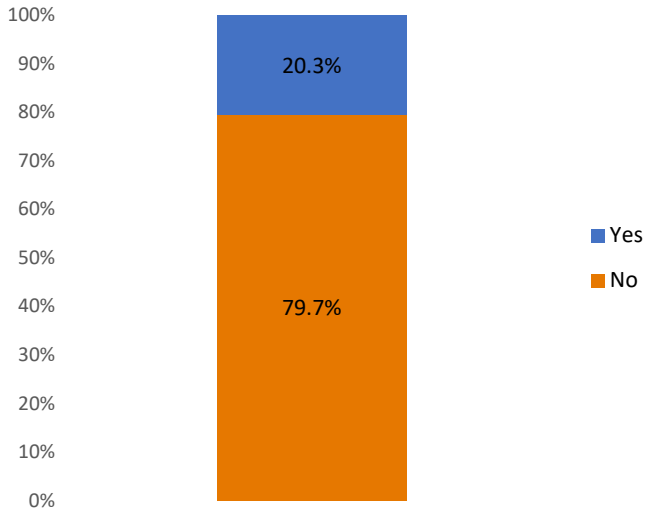


Figure 9: In the last cropping season (2023), did you harvest any crop?

Figure 10 below outlines the main reason IDP HHs gave for not harvesting any crops during the 2023/2024 season. The most commonly-cited reason (41.4%) for not harvesting was that HHs fled the area where they planted due to insecurity. An additional 21.8% reported they did not harvest because they had not planted. This may also be an indirect result of insecurity, or may indicate many IDPs came from areas of Sudan where they did not practice farming as their primary livelihood activity. A significant proportion of HHs also cited locust invasions as the primary reason for failing to harvest – a fact which helps explain the significant decline in sorghum output observed in the region over the past year.

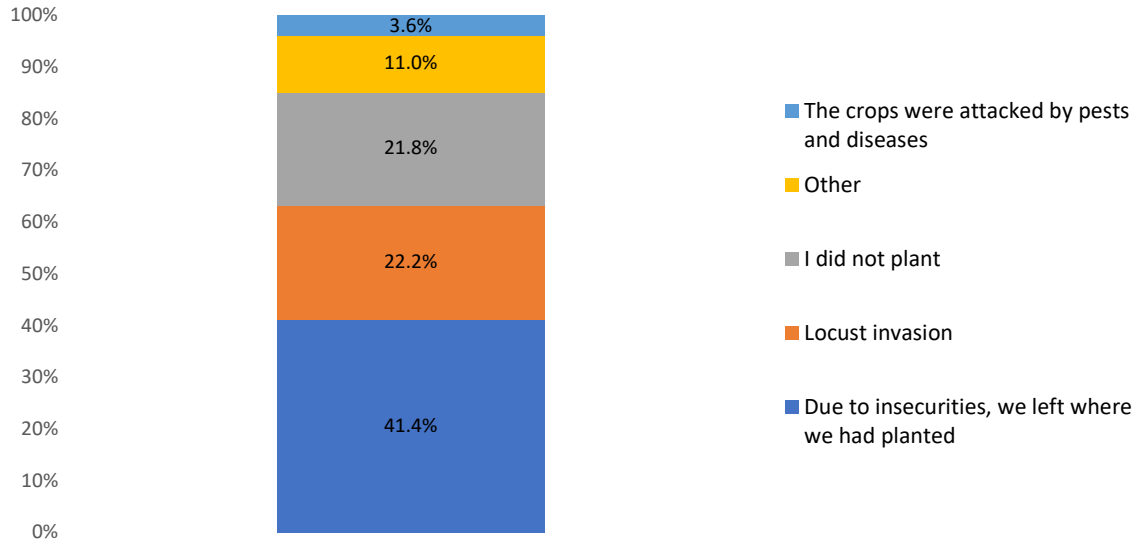


Figure 10: Main reason for not harvesting crops in the 2023/2024 harvest (among those who did not harvest)

Planned Agricultural Activity During the 2024/2025 Season

Although most IDP HHs failed to harvest any crops during the 2023/2024 agricultural season, the majority (71.6%) indicate they plan to plant during the 2024/2025 agricultural season. Among those who reported they did not plan to plant during the 2024/2025 agricultural season, the most commonly-cited reasons were lack of seeds, lack of farming tools and lack of access to farmland (see figure 11 below). These results suggest many IDP HHs will farm during 2024/2025 season, but that their success may depend in part on receipt of agricultural support. New IDPs who arrive after the 2024/2025 planting season, however, will be not have any agricultural output to help meet HH consumption needs next year.

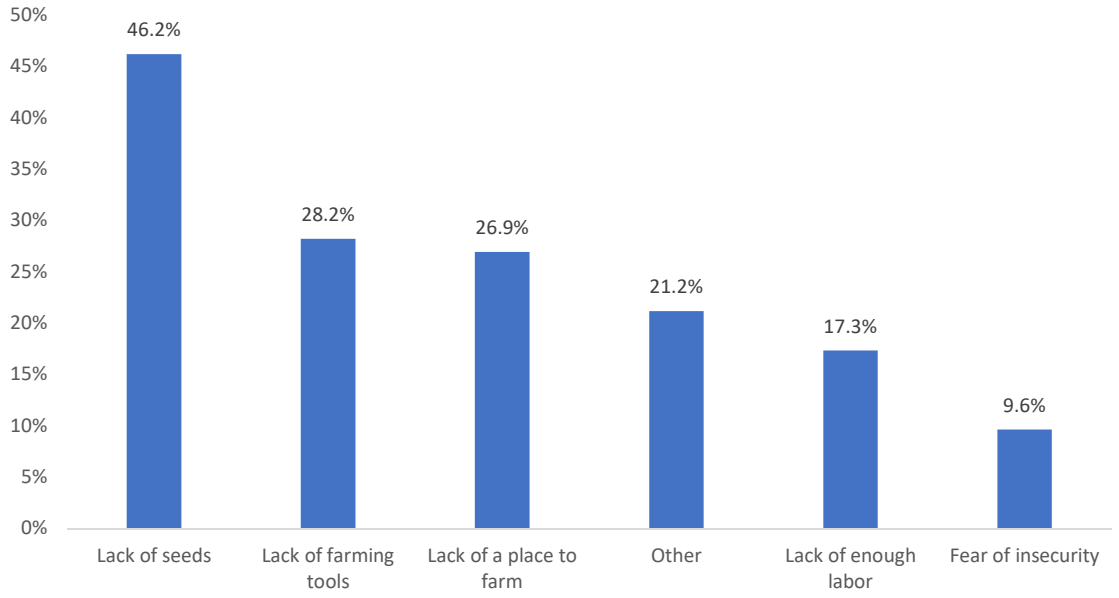


Figure 11: Reasons given for not planning to plant during the 2024/2025 planting season (Among those who do not plan to plant - respondents could give multiple reasons)

Water Sanitation and Hygiene (WASH)

Primary Water Sources

As table 3 below shows, the majority (86.3%) of IDP respondents reported using tube wells or boreholes as their primary water source. In total, 91.7% of IDP HHs reported using some form of improved water source (tube wells/boreholes, protected dug wells or tanker trucks[25]). It should be noted, however, that the Rapid IDP Assessment was conducted during the dry season when the availability of surface water sources is extremely limited. After the rainy season starts, seasonal streams will begin to appear in the region and more unprotected dug wells will recharge. When that happens, the proportion of IDP HHs collecting water from riskier unimproved sources will likely increase.

[25] Although 1.8% of respondents reported using a tanker truck as their primary water source, it is likely this is either an error or the respondents were referring to water drums transported by donkey-cart. Since this could not be verified, however, the figure has been left as-is.

Table 3: Primary water sources used by IDP respondents

Primary water source	Percentage
Tube wells or boreholes	86.5%
Unprotected dug well or spring	8.0%
Protected dug wells	3.6%
Tanker truck	1.8%
Surface water	0.1%

Although most IDP HHs currently use improved water sources, they have to travel long distances to collect water from them. As figure 12 below shows, 41.8% of IDP HHs reported it takes them more than one hour to travel to their water point, collect water and return home. Just one-third (33.3%) of IDP HHs reported a round-trip water collection time of 30 minutes or less.

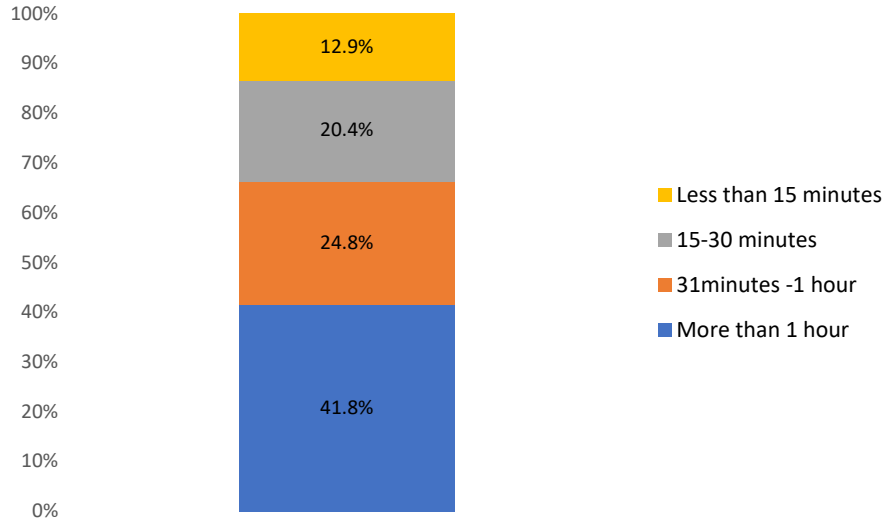


Figure 12: Time required to walk to main water source, collect water and return home

As a result of the long water collection times IDP HHs face, most (60.9%) fall into the 'Limited' category on the Joint Monitoring Program's (JMP's) service ladder for drinking water (see figure 13 below). This means most IDP HHs currently collect water from an improved source, but have a round-trip water collection time that exceeds 30 minutes. Just 30.9% of IDP HHs fall into the 'Basic' category on the JMP service later, meaning less than one-third currently use an improved water source and have a round-trip water collection time of 30 minutes or less. It should be noted though that once the rainy season begins, the share of IDP HHs in the 'Unimproved' or 'Surface water' categories on the JMP ladder (currently 8.3%) is likely to increase significantly – raising the risk of water-borne disease transmission.

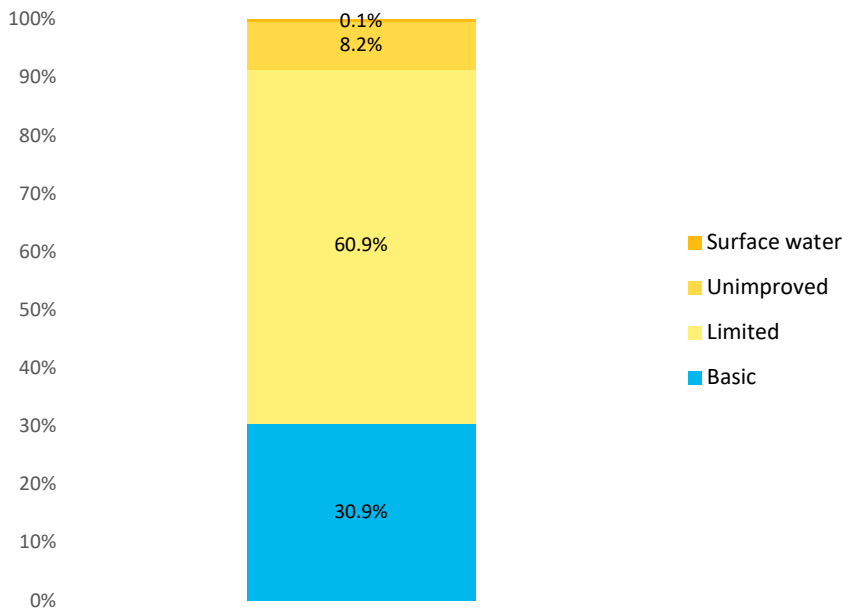


Figure 13: JMP Water Source Classification

Sanitation

The risks created by use of unimproved water sources are compounded by poor sanitation conditions. As figure 14 below shows, 84.5% of IDP HHs reported practicing open defecation. While this is not abnormal for the region, it is very high in absolute terms and is particularly problematic given how densely-populated the IDP settlements are. As a result, fecal-oral transmission of WASH-related illnesses is likely to increase significantly in such settlements during the upcoming rainy season.

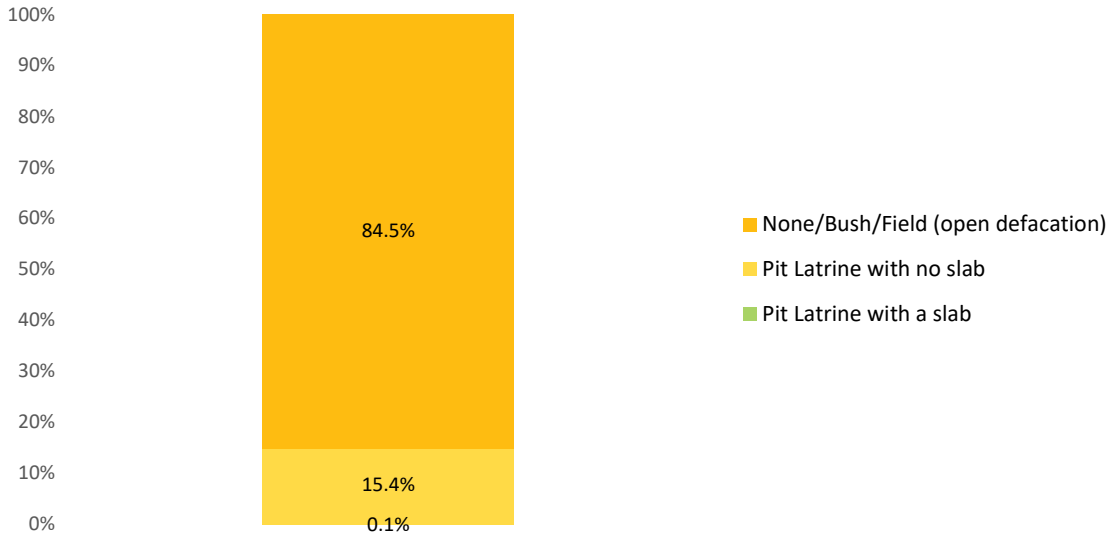


Figure 14: Sanitation facilities among IDP HHs

Handwashing Stations

Most IDP HHs do not have handwashing stations and are therefore unlikely to follow recommended handwashing practices. As figure 15 below shows, less than five percent of IDP HHs reported having a handwashing station. Even among the minority of IDP HHs that did have a handwashing station, however, just 14.8% reported having soap. Lack of effective handwashing among IDP HHs increases opportunities for transmission of WASH-related illnesses, with risk levels likely to peak over the upcoming rainy season.

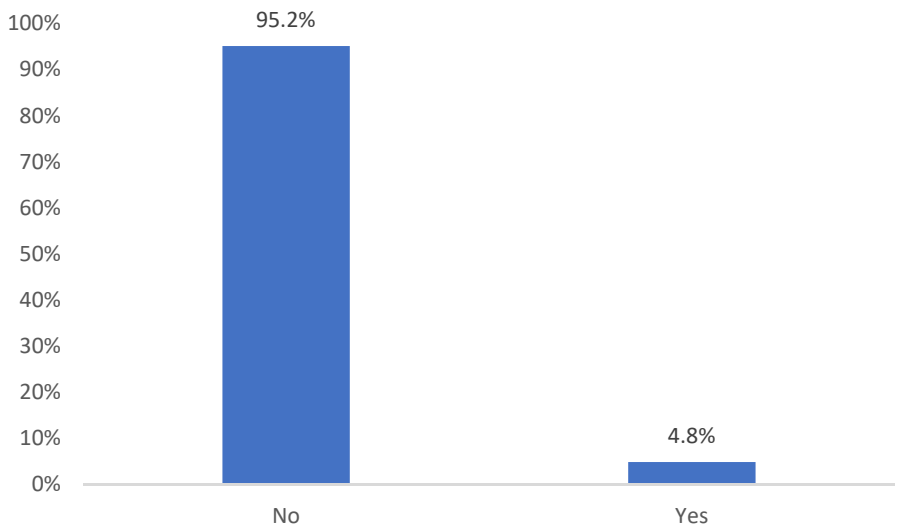


Figure 15: Do you have a handwashing station?

Health

Sources of Healthcare Services

When asked where they received health services when they got sick, most IDP HHs (78.1%) reported accessing a clinic. As figure 16 shows though, among those who reported accessing a clinic when they were sick, more than one-third (37.5%) indicated that the clinic was more than an hour's walk away. The distance IDP HHs have to travel to reach clinics will become an increasingly significant barrier to healthcare access as the onset of the rainy season makes travel to clinics more difficult. This is particularly problematic as malaria rates also typically peak during the rainy season.[26]

[26] The number of new malaria cases in the region typically peaks each year near the end of the rainy season, around September or October.

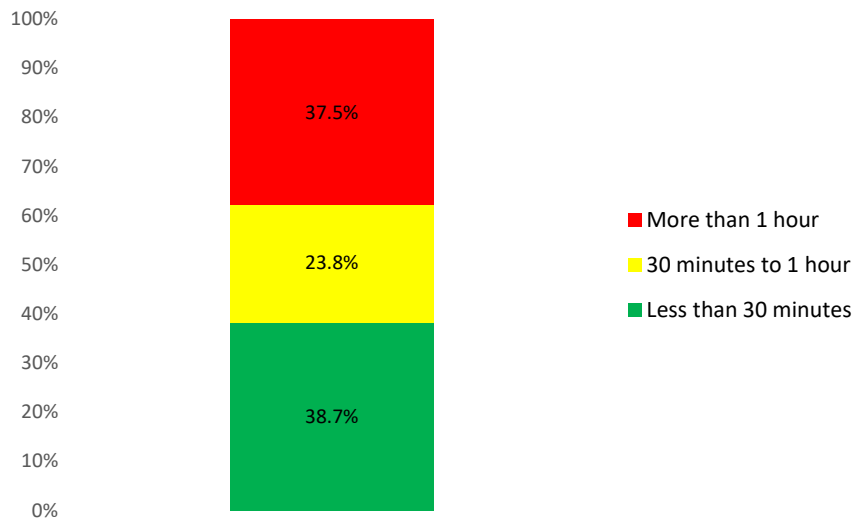


Figure 16: Distance to nearest clinic
(among those who reported receiving health services from a clinic when sick)

Health Conditions

As part of the assessment, IDP HHs were asked to identify the most common illnesses they experienced while in their IDP settlement. Figure 17 below shows that the most commonly-mentioned illnesses were diarrhea, malaria and acute respiratory infections. The risk of acquiring such illnesses is elevated within the IDP camps due to high population density, lack of adequate sanitation/hygiene infrastructure and low rates of mosquito net usage (see NFI section below for discussion). Clinics in the region have the means to treat these illnesses, but for many IDPs clinic distance will remain an obstacle to accessing treatment when they become sick.

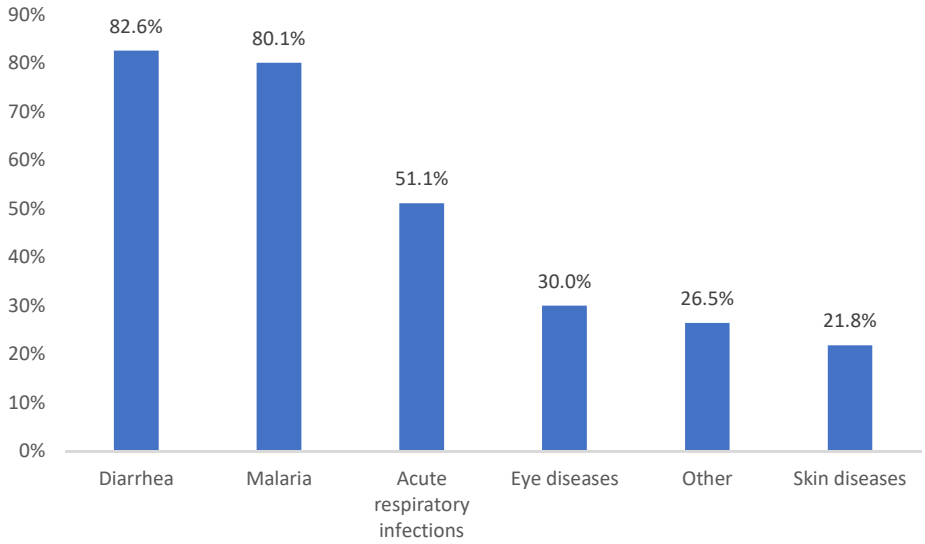


Figure 17: What are the common diseases/sicknesses you are experiencing this camp?
(multiple responses allowed)

Shelter

Shelter Characteristics

Nearly all assessed IDP HHs are currently living in non-permanent shelters. As figure 18 indicates, the majority of IDP HHs (80.2%) reported living in some form of emergency/temporary shelter. Such shelters typically consist of wooden pole frames with thatched grass walls and roofs (see photos below). An additional 6.1% of IDP HHs report sleeping out in the open or with minimal coverings. IDP HHs reported having an average of just 1.4 rooms in their shelters, which suggests a high degree of crowding. Photos from the assessment also indicates few IDP HHs have tarps to help waterproof their shelters – a situation which will create challenges for many during the rainy season.

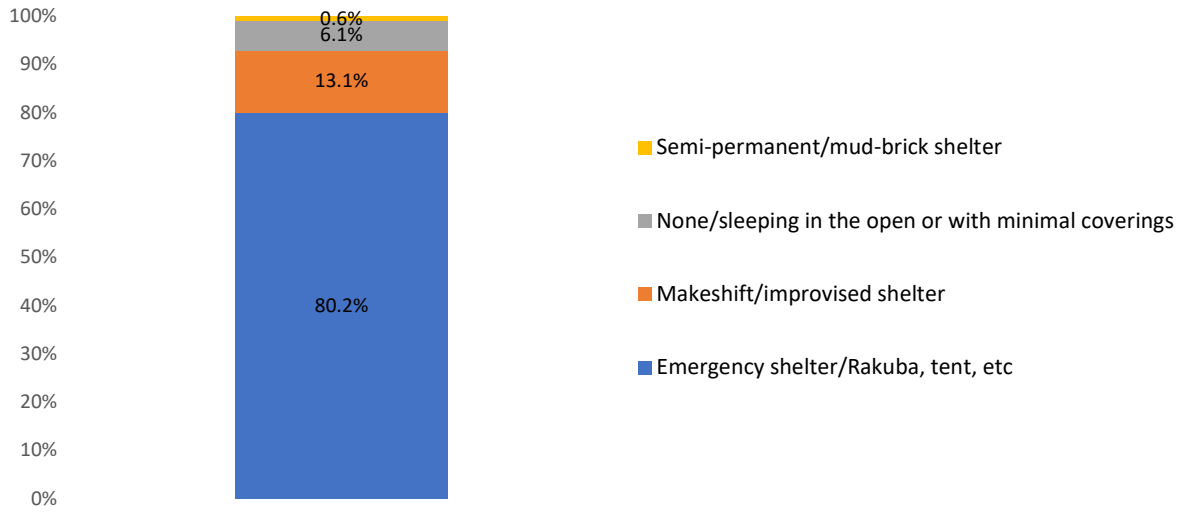


Figure 18: Current shelter type for IDP HHs

Grass shelters in IDP settlement.

Woman constructing wooden pole frame for shelter in IDP settlement

IDP children in a makeshift shelter.

Non-Food Items (NFIs)

NFI Possession

As part of the Rapid IDP Assessment, respondents were asked if they had 12 different types of non-food items (NFIs). Figure 19 below summarizes the results. Nearly one-third (32.7%) had none of the NFIs listed. The proportion who had a given type of NFI was below one-third for every NFI in the list. The fact that just 22.6% of IDP HHs have plastic sheets/tarps is particularly concerning given that the rainy season will start soon. The fact that just 8.3% of IDP HHs have mosquito nets is also concerning since rates of malaria transmission will accelerate once the rainy season begins. IDP HHs are in clear need of a variety of basic NFIs, but have limited resources available to purchase them. Any intervention aimed at providing assistance should consider distributing NFIs to help IDP HHs meet basic needs.

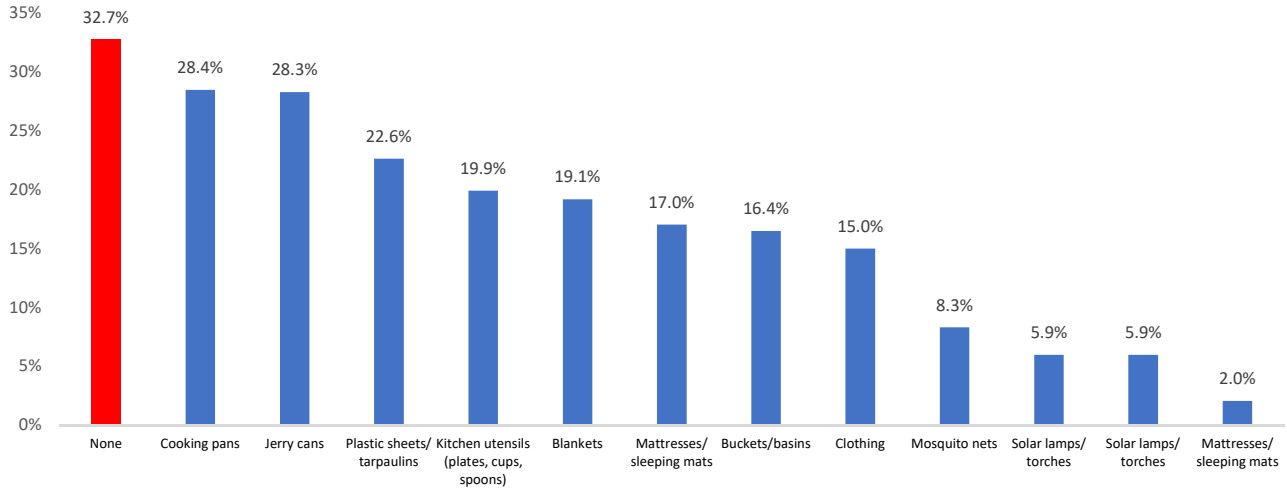


Figure 19: Percent of IDP HHs who have various types of NFIs

Conclusions

Findings from the Rapid IDP Assessment paint a troubling picture about the situation facing IDPs in the assessed areas of Sudan's Kordofan region. IDP households have found relative security in those areas, but now face extreme levels of hunger and malnutrition. The majority are female-headed households who face elevated levels of vulnerability, and most were also unable to plant during the 2023/2024 agricultural season. As a result, eight in ten IDP households have no food stocks and two-thirds are now resorting to wild foods as their primary food source.

These conditions have led to troubling levels of hunger and malnutrition. More than one-third of IDP households are experiencing severe hunger and 98 percent report food as their most pressing need. Mid-Upper Arm Circumference (MUAC) screening results show that nearly one-in-five 6-59 month old IDP children is malnourished, as are nearly four-in-ten pregnant and lactating women. The MUAC-based proxy-GAM (Global Acute Malnutrition) rate found among 6-59 month-old IDP children in the current assessment was higher than in any nutrition survey carried out in the assessed region since 2011.

Results from the Rapid IDP Assessment also show IDPs are facing significant Water, Sanitation and Hygiene (WASH) challenges. Although most (91.7%) IDPs used an improved water source, 41.8% reported it took an hour or more to travel to the water point, collect water and return home. Over three-quarters (84.5%) of IDP HHs reported practicing open defecation, and just 4.8% reported having a handwashing station.

Such poor sanitary conditions are likely a central reason why diarrhea was reported as a common illness in the IDP settlements by 82.6% of respondents. Other common illnesses included malaria (cited by 80.1% of IDP HHs) and acute respiratory infections (cited by 51.1% of IDP HHs). The challenges created by those illnesses are aggravated by the constraints IDPs face accessing medical treatment. Results from the current assessment indicate more than one-third (37.5%) of IDP HHs have to travel over an hour to reach the nearest health clinic when they need treatment.

Most IDPs are also living in temporary emergency shelters without access to basic non-food items (NFIs). More than nine in ten (93.3%) of IDPs reported living in emergency/makeshift shelters (primarily constructed from wooden poles and grass). Less than one-third of IDPs reported having basic NFIs such as cooking pans (28.4%), plastic sheets/tarps (22.6%) or mosquito nets (8.3%), and nearly one-third (32.7%) reported they had none of the NFIs listed in the survey.

Assessment results demonstrate an urgent need for large-scale distribution of emergency food and nutrition support for IDPs in the region. The high levels of food insecurity and malnutrition observed in the IDP population are extremely concerning – particularly since the situation is likely to further deteriorate during the upcoming lean season. Immediate action is needed to avoid catastrophic results.

In addition to food and nutrition assistance, IDPs are also in urgent need of WASH, health, shelter and NFI support. New boreholes need to be drilled in IDP settlements to ensure access to improved water sources and limit water collection time. Improved sanitation and handwashing facilities also need to be constructed in IDP settlements to help ensure safe disposal of excreta and to promote recommended hygiene practices. Failure to address these issues will raise the risk of transmission of WASH-related illnesses in IDP settlements once the rainy season starts.

Additional health facilities are also needed in closer proximity to IDP settlements to ensure residents have adequate access to treatment. As the rainy season approaches, it will also be important to ensure IDPs have basic NFIs such as plastic sheets/tarps to improve their shelters and mosquito nets to mitigate malaria risk over the rainy season.

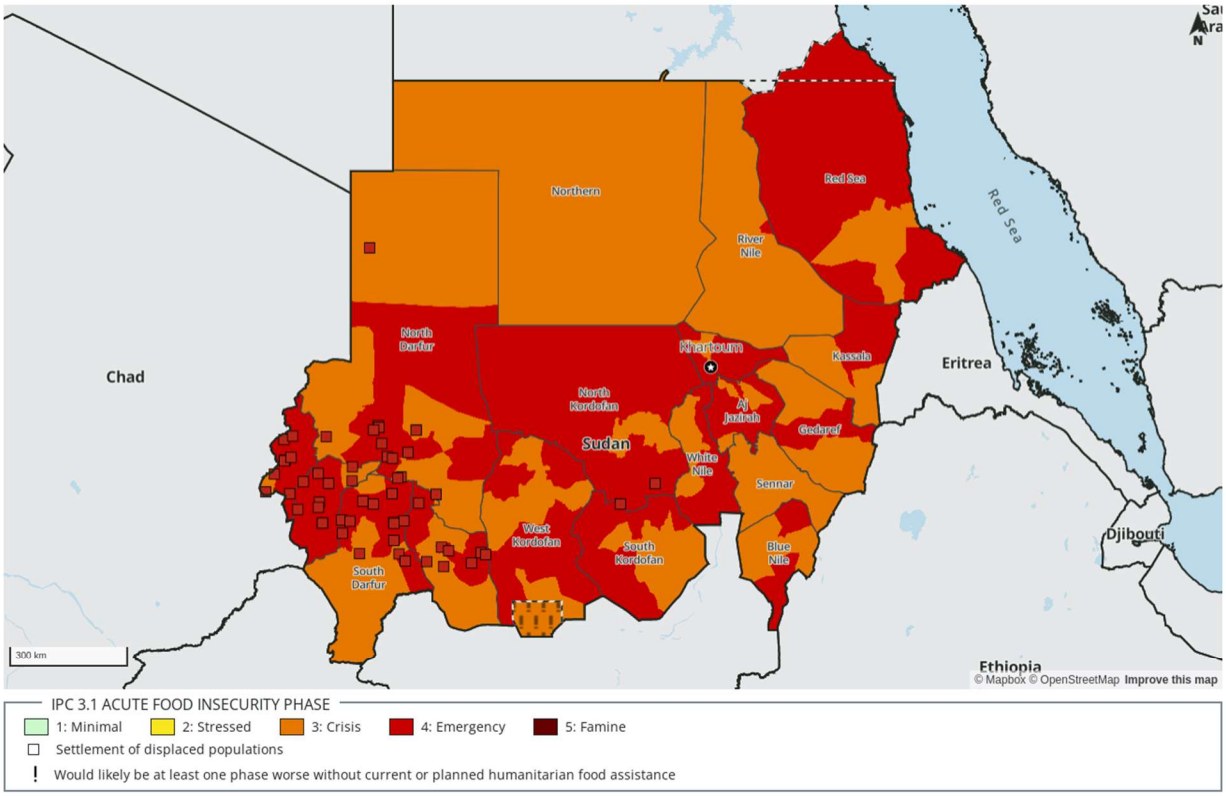
While active fighting and insecurity make it extremely challenging to deliver assistance to IDPs in other parts of Sudan, the assessed areas of Sudan's Kordofan region remain relatively secure and continue to be accessible. IDPs there can still be helped, but urgent action is needed.

Appendix

Sudan Projected Food Security Outcomes, June – September 2024 (FEWS NET)

FEWS NET USAID FROM THE AMERICAN PEOPLE

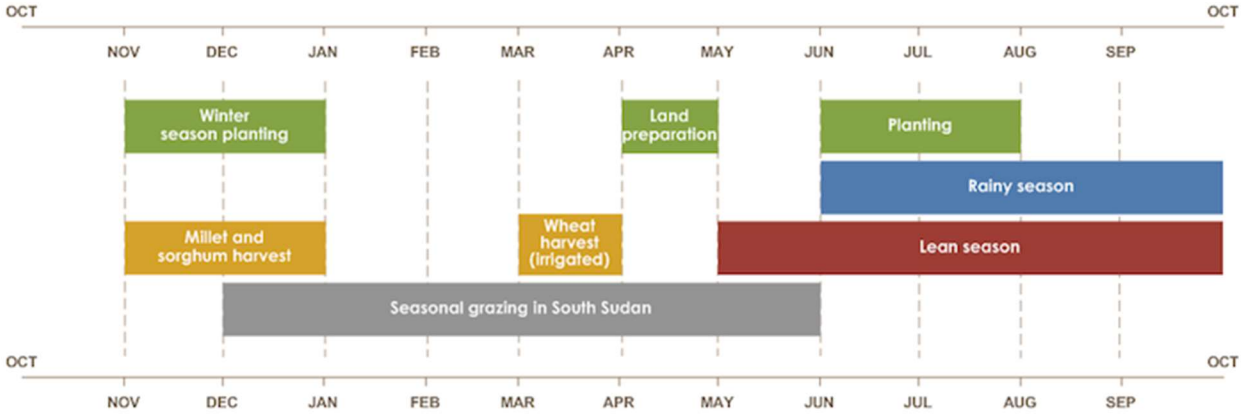
Sudan projected food security outcomes, June - September 2024



FEWS NET classification is IPC-compatible. FEWS NET's classifications are IPC-compatible. IPC-compatible analysis follows key IPC protocols but does not necessarily reflect the consensus of national food security partners. As of IPC 3.0, the IPC no longer assesses the impact of food assistance on classification and thus no longer maps the (!) However, FEWS NET continues to produce food security maps inclusive of the (!) as well as maps compatible with IPC 3.0/3.1, which include the mapping of food security assistance bags. FEWS NET and the IPC use different methods to estimate the total Population in Need of humanitarian food assistance and assess the risk of Famine. Learn more at www.fews.net/about.

Source: FEWS NET

Sudan Agriculture Season Calendar (FEWS NET)[27]



[27] https://fews.net/east-africa/sudan