IPC

Integrated Food Security Phase Classification

Evidence and Standards for Better Food Security and Nutrition Decisions

20 YEARS 2004 - 2024

informing decisions

FAMINE REVIEW COMMITTEE: SUDAN, DECEMBER 2024

CONCLUSIONS AND RECOMMENDATIONS

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1. EXECUTIVE SUMMARY

Key messages

- **The FRC finds Famine in at least five areas of Sudan for which reliable data exists, and projects Famine in five additional areas between December 2024 and May 2025.** Risk of Famine in the projection period is confirmed in seventeen additional areas.
- **The main drivers of Famine risk remain the armed conflict and forced displacement.** Urgent political action by all stakeholders with influence is required to achieve a sustainable ceasefire and full respect for IHL from the parties to the conflict, inside and outside of Sudan.
- **It is imperative that all parties ensure immediate and unhindered humanitarian access to areas classified as IPC Phase 3 or above** (Crisis, Emergency, and Famine). Assistance across all sectors must be scaled up and scaled out immediately across all lifesaving and life protecting sectors. Particular attention is needed to support displaced populations and the households hosting them, to prevent widespread loss of life.

The FRC classifies **Famine (IPC Phase 5)** for the period of October to November 2024 in Zamzam, Abu Shouk, and Al Salam camps, as well as in the Western Nuba Mountains,[1] affecting both residents and IDPs. Between December 2024 and May 2025, **Famine (IPC Phase 5)** is projected to continue in the same areas and expand in the North Darfur localities of Um Kadadah, Melit, El Fasher, At Tawisha, and Al Lait.

The FRC considers there is a **risk of Famine** in the Central Nuba Mountains and in areas likely to experience high influxes of IDPs in North and South Darfur. These include Tawila, Nyala Janoub, Nyala Shimal, Beliel, Shattaya, As Sunta, Buram, and Kas in South Darfur, , as well as in Medani Al Kubra and Sharg Al Jazirah in Al Jazirah State, Mayo and Alingaz in Jebel – Awilia in Khartoum State.

The population in areas of intense conflict in Khartoum (Mayo and Alingaz in Jebel Awlia) and Al Jazirah (Medani Al Kubra and Sharg Al Jazirah) might be experiencing the same conditions as that of the areas classified in **Famine (IPC Phase 5)**. However, the lack of recent data prevents the FRC from confirming whether Famine thresholds have been surpassed. Immediate data collection is recommended to determine if Famine exists.

The current analysis reflects the situation during the harvest period, a time when hunger and acute malnutrition are typically at their lowest. From December onwards, **there will be few seasonal mitigating factors that could improve conditions on the ground**. Only a halt to the conflict, and significant scale-up and scale-out of assistance can prevent an even greater catastrophe.

In the most affected areas, the hunger season is expected to begin well before the next rains. When the rains start, humanitarian assistance will face not only man-made blockages but also logistical challenges. **Immediate action to preposition supply stocks** is critical to prevent human suffering from spiraling into a crisis of unprecedented severity and magnitude.

For humanitarian decision-makers, politicians, and parties to the conflict, urgent action is required with exceptional measures to end mass suffering and prevent further deaths. This must include areas classified as Famine and those currently at **IPC Emergency and Crisis levels** of food and nutrition insecurity, which are at risk of deteriorating into Famine in the coming months.

Data and verifiable information, especially on IDPs in settlements and hosted in public buildings, as well as in areas at risk of Famine in South Darfur, Al Jazirah, and Khartoum is extremely scarce and there is an urgent need to continue and strength data collection as well as the humanitarian response. **Parties to the conflict must prioritize removing administrative and security barriers to enable effective data collection** and analysis for the millions of people identified by the FRC as being at very high risk of famine.

[1] *Throughout the FRC report, Western Nuba mountains denomination refers to the following localities in South and West Kordofan : Lagowa, As Sunut, Habila, Dilling; while Central Nuba mountains, located in South Kordofan, refers to the following localities: Delami, Western Kadugli, Um Durein, Al Buram.*

Eighteen months into the conflict, the Sudanese population continues to confront a severe and multifaceted political and humanitarian polycrisis. The ongoing conflicts have resulted in unprecedented displacement, economic collapse, and disruptions to supply chains for food, essential non-food commodities, and services. Hostilities have had direct and indirect impacts on agricultural activities in rural areas during the past productive season, including in the bread breadbasket states.

Overall, since July, the humanitarian situation in Sudan has worsened, with an increase in magnitude and severity of an already extremely serious situation and is projected to continue to significantly worsen in the coming months. Armed conflict, restrictions in the movement of goods, limited humanitarian access, problems with the availability of physical cash to conduct transactions, price inflation, a marked increase in malaria infections and a large cholera outbreak in Al Jazira have all contributed to a further worsening of the situation in the past months.

While the whole country is suffering the impacts of the conflict and associated humanitarian crisis, the risk of famine is extremely high in a large number of areas encompassing North and South Darfur, parts of West and South Kordofan, Al Jazirah and Khartoum states. Despite a relative increase of food aid over recent weeks, the assistance provided remains wholly inadequate both in terms of scale and outreach. Similarly, despite some degrees of improvements in commercial access as well as the opening of the Adre crossing point for humanitarian assistance, humanitarian and commercial access remains very challenging.

Above-average rains have sustained agriculture activities where security allowed farmers to access fields and inputs, alleviating some food insecurity. However, not all populations benefited equally. Reliance on credit for agricultural inputs, coupled with dysfunctional financial systems, likely reduced yields even in safer areas. In regions like Greater Darfur, Greater Kordofan, Sennar, Al Jazirah, and parts of White Nile, insecurity and conflict severely disrupted farming activities, leading to abandoned crops, looting, and stock destruction. Displaced households, especially a significant minority living in settlements and public buildings,[2] are unlikely to be benefiting significantly from the harvest.

The sustained reduction in market access and difficulties in conducting trade, along with insecurity and mass displacement has impacted on many people's livelihoods and access to basic services in Sudan and reduced their coping capacities. Their ability to deal with normal seasonal changes and minor shocks has therefore been reduced, exposing communities to additional risks.

As a follow up if its previous review,[3] the FRC re-assessed the situation in Zamzam IDP camp, the area previously classified in Famine (IPC Phase 5) and expanded the geographical scope of its review to include areas where new evidence of Famine thresholds being approached or surpassed had emerged, as well as all areas where the IPC TWG has issued a risk of Famine statement.

The plausibility of the classifications for this period were assessed by the FRC and the results are shown in Table 1.

[2] *IOM, DTM Sudan Mobility Update, Dec. 10 2024. https://dtm.iom.int/reports/dtm-sudan-mobility-update-12?close=true*

[3] *IPC Famine Review Committee: combined review of: (i) the famine early warning system network (FEWS NET) IPC compatible analysis for IDP camps in El Fasher, North Darfur; and (ii) the IPC Sudan Technical Working Group analysis of Zamzam camp (North Darfur), Sudan Report Sudan, July 2024. https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/IPC_Famine_Review_Committee_Report_Sudan_July2024.pdf*

2. KEY RESULTS

The main conclusions of the FRC are summarized in Table 1.

Table 1: Key Conclusions from the FRC on the Acute Food Insecurity (AFI) Classifications under Review

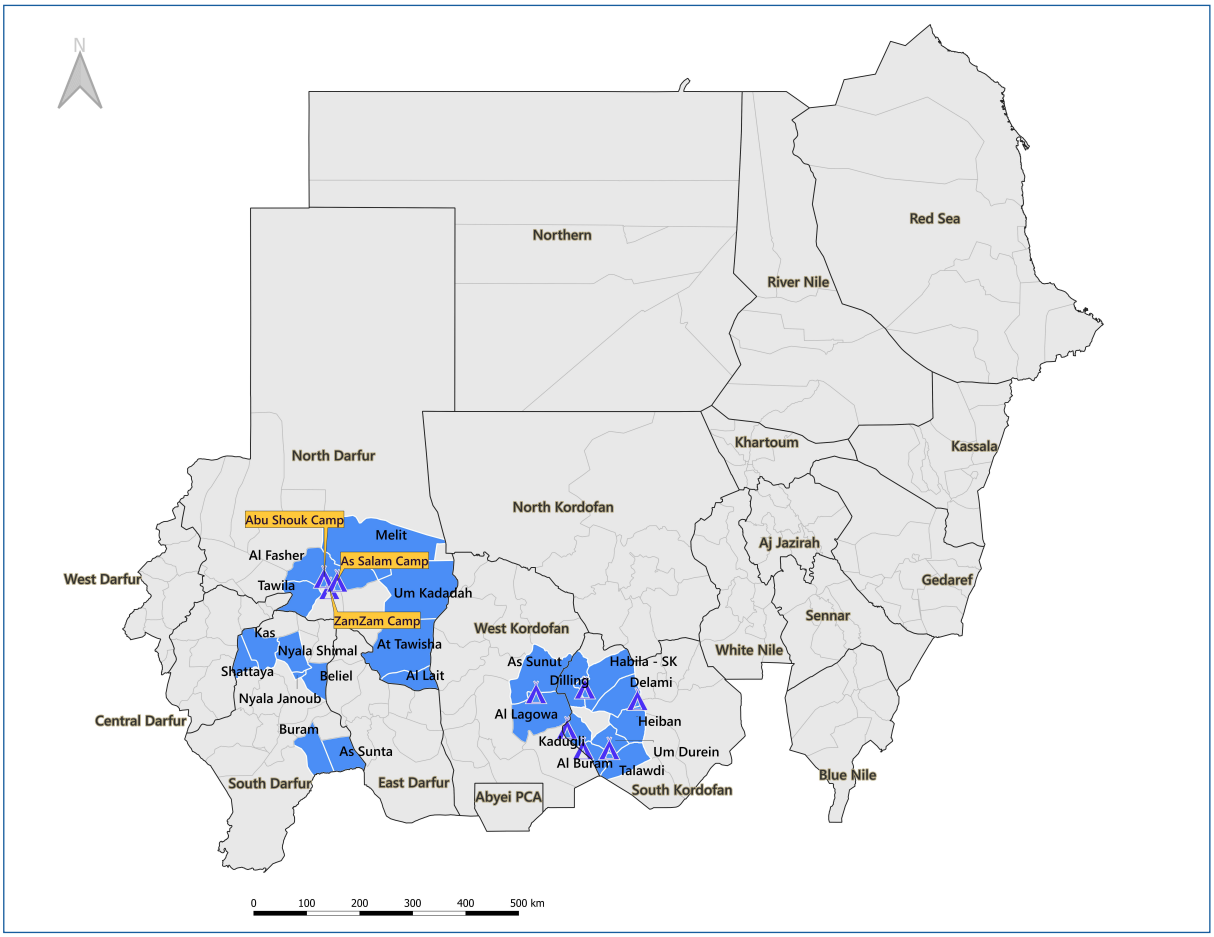
Unit of Analysis	IPC Analysis Technical Working Group classification	FRC Conclusion for the period October to November 2024 and December 2024 to May 2025
Zamzam, Abu Shouk and Al Salam camps in El Fasher locality (North Darfur)	Zamzam camp IPC AFI Phase 4 (Emergency), 15% of households in Catastrophe (IPC Phase 5), ***Risk of Famine***	The FRC finds the IPC TWG classification (IPC AFI Phase 4 – Emergency) not plausible. The FRC classifies Zamzam, Abu Shouk and Al Salam camps in IPC Phase 5 (Famine) in the periods October to November 2024 and December 2024 to May 2025.
IDPs and Resident in Western Nuba Mountains (West and South Kordofan State) in the following localities (Lagowa, As Sunut, Habila, Dilling)	• **South Kordofan IDPs**, IPC AFI Phase 4 (Emergency), 5% of households classified in Catastrophe (IPC Phase 5), ***Risk of Famine (only for Dilling IDPs)*** • **Lagowa, As Sunut, Habila and Dilling,**[4] IPC AFI Phase 4 (Emergency), 0% of households in Catastrophe (IPC Phase 5)	The FRC finds the IPC TWG classification (IPC AFI Phase 4 – Emergency) not plausible, with the exception of Al Buram locality. The FRC classifies the IDPs and residents in Western Nuba Mountains in IPC Phase 5 (Famine) in the periods October to November 2024 and December 2024 to May 2025.
IDPs and Resident in Central Nuba Mountains (South Kordofan State) in the following localities Delami, Western Kadugli, Um Durein, Al Buram)	• **Kadugli IDPs and refugees** IPC AFI Phase 4 (Emergency), 5% of classified in Catastrophe (IPC Phase 5), ***Risk of Famine*** • **Kadugli** IPC AFI Phase 4 (Emergency), 5% of households classified in Catastrophe (IPC Phase 5) • **Delami** IPC AFI Phase 4 (Emergency), 0% of classified in Catastrophe (IPC Phase 5) • **Um Durein** IPC AFI Phase 4 (Emergency), 0% of classified in Catastrophe (IPC Phase 5) • **Al Buram** IPC AFI Phase 4 (Emergency), 0% of classified in Catastrophe (IPC Phase 5)	The FRC finds the IPC TWG classification (IPC AFI Phase 4 – Emergency) and the risk of Famine statement plausible.
At Tawisha, Um Kadadah, Al Lait, Tawila, Melit and El Fasher localities (North Darfur)	• **Um Kadadah and Melit** IPC AFI Phase 4 (Emergency), 5% of households in Catastrophe (IPC Phase 5), ***Risk of Famine in Um Kadadah*** • **El Fasher** IPC AFI Phase 4 (Emergency), 15% of households in Catastrophe (IPC Phase 5), ***Risk of Famine*** • **At Tawisha and Al Lait** IPC AFI Phase 4 (Emergency), 10% of households in Catastrophe (IPC Phase 5), ***Risk of Famine*** • **Tawila** IPC AFI Phase 4 (Emergency), 5% of households in Catastrophe (IPC Phase 5)	The FRC finds the IPC TWG classification (IPC AFI Phase 4 – Emergency) in Um Kadadah, Melit, El Fasher, At Tawisha, Al Lait and Tawila plausible for the period October to November 2024. The FRC classifies Um Kadadah, Melit, El Fasher, At Tawisha, Al Lait in IPC Phase 5 (Famine) and considers there is a risk of Famine in Tawila for the period December 2024 to May 2025.

[4] *It has to be noted that the IPC TWG clustered a number of localities in South Kordofan, merging Al Buram with Lagowa, As Sunut, Habila and Dilling. The FRC considered AL Buram as part of the Central Nuba mountains for classification purposes.*

Unit of Analysis	IPC Analysis Technical Working Group classification	FRC Conclusion for the period October to November 2024 and December 2024 to May 2025
Localities in South Darfur namely As Salam, Nyala Janoub, Nyala Shimal and Beliel, Shattaya, As Sunta, Buram and Kas	• The TWG classified **As Salam, Nyala Janoub, Nyala Shimal and Beliel** together in IPC AFI Phase 4 (Emergency), 5% of households classified in Catastrophe (IPC Phase 5), ***Risk of Famine for IDPs in Nyala Janoub, Nyala Shimal and Beliel*** • **Shattaya, As Sunta, Buram and Kas** IPC AFI Phase 4 (Emergency), 0% of households classified in Catastrophe (IPC Phase 5)	The FRC finds the IPC TWG classification (IPC AFI Phase 4 – Emergency) in Nyala Janoub, Nyala Shimal and Beliel, Shattaya, As Sunta, Buram and Kas plausible for the period October 2024 to May 2025. The FRC considers that a risk of Famine exists in the period December 2024 to May 2025 and should be extended to all these areas.
Localities in Al Jazirah State, namely Medani Al Kubra, and Sharg Al Jazirah.	• **Medani Al Kubra** IPC AFI Phase 4 (Emergency), 5% of households classified in Catastrophe (IPC Phase 5), ***Risk of Famine*** • The TWG classified Al Hasahisa, Kamlin, Janub Al Jazirah, **East/Sharg Jazirah and Algura** together in IPC AFI Phase 4 (Emergency), 0% of households classified in Catastrophe (IPC Phase 5), ***Risk of Famine in Sharg Al Jazirah***	The FRC finds the IPC TWG classification (IPC AFI Phase 4 – Emergency) in Medani Al Kubra and Sharg Al Jazirah plausible for the period October 2024 to May 2025. The FRC concurs with the risk of Famine statement made on these areas, but concludes that due to an absence of recent data and the high volatility of the situation, there is a significant degree of uncertainty. Data collection is highly recommended to assess the situation.
Localities in Khartoum state, namely Mayo and Alingaz in Jebel - Awlia	• The TWG classified **Jebel Awlia** and Karrari together in IPC AFI Phase 4 (Emergency), 3% of households classified in Catastrophe (IPC Phase 5), ***Risk of Famine in Mayo and Alingaz in Jebel Awlia***	The FRC finds the IPC TWG classification (IPC AFI Phase 4 – Emergency) in Mayo and Alingaz in Jebel – Awilia plausible for the period October 2024 to May 2025. The FRC concurs with the risk of Famine statement made on these areas, but concludes that due to an absence of recent data and the high volatility of the situation, there is a significant degree of uncertainty. Data collection is highly recommended to assess the situation.

Figure 1: Maps of all areas under review

The following map highlights in blue the units of analysis covered by the FRC Review.



3. THE FAMINE REVIEW PROCESS

The Famine Review Committee (FRC) may be activated under four different scenarios as detailed in the IPC Famine Guidance Note.[5] The review by the FRC is a neutral and independent process that aims at supporting IPC quality assurance and ensuring technical rigour and neutrality of the analysis.

In accordance with the FRC Terms of Reference (ToR)[6] once the IPC TWG analysis has been concluded, the Famine Review Committee convenes to assess the plausibility of the classification. Once activated, the FRC is considered active until available evidence confirms that the extreme severity depicted in the previous Famine Review no longer prevails (no evidence at or above Famine thresholds and contributing factors showing signs of improvements).

In July 2024, the Famine Review Committee conducted a review of the IPC analysis in Sudan and found Famine levels in Zamzam camp (North Darfur, El Fasher Locality) in the analysis period from July to October 20242. Given the high level of uncertainty, notably the possible mitigating effects of the October 2024 to January 2025 harvest season, the evolution of the conflict, and the level of humanitarian and commercial access, the FRC was unable to make a determination on the expected conditions between November 2024 and January 2025. However, the FRC found a high likelihood that famine conditions would have persisted. Additionally, the FRC stated that within Darfur and elsewhere, other areas were potentially experiencing Famine and would remain at risk of Famine as long as the conflict continued, and access was denied for the provision of humanitarian aid at the scale and urgency necessary.

Since the publication of the FRC review on 1 August 2024,[7] armed conflict has continued, and the number of internally displaced persons has now reached 11.5 million, with 3.2 million mixed cross border movements. The Greater Darfur and Greater Kordofan areas, as well as the Khartoum and Al Jazirah states, have experienced significant changes and new and alarming evidence has become available.

From 14 October - 26 November 2024, the Sudan IPC Technical Working Group (TWG) conducted an analysis to update the second projection period from the May analysis (from 1 October 2024 – 28 February 2025).

This FRC review is therefore a continuation and an expansion of the previous July 2024 review in which the FRC was unable to make a determination on the expected conditions between November 2024 and January 2025.

The FRC analysed all the evidence made available during the review and conducted a series of key informant interviews to gain an in-depth understanding of the context and situation on the ground. The FRC also considered evidence that was available to the Sudan TWG, though not employed in their analysis. This regards in particular four SMART surveys conducted in the Nuba Mountain area, an area including localities in both West and South Kordofan and several MUAC screenings conducted in hotspot areas by a variety of agencies.

In its review, the FRC has also modified the analysis period and based its current assessment of the situation during the month when the review started, and the preceding month, i.e. October and November 2024. A projection period of December 2024 to May 2025 was selected because of the known seasonality of food insecurity and malnutrition in Sudan.

[5] *IPC, Guidance Note – Famine Classification, 29 February 2024, https://www.ipcinfo.org/ipcinfo-website/resources/resources-details/en/c/1152897/*

[6] *IPC, Famine Review Committee Terms of Reference, Updated October 2024. (Annex 4) IPC_Famine_Review_Committee_ToRs.pdf*

[7] *IPC, Famine Review Committee: combined review of: (i) the famine early warning system network (FEWS NET) IPC compatible analysis for IDP camps in El Fasher, North Darfur; and (ii) the IPC Sudan Technical Working Group analysis of Zamzam camp (North Darfur), Sudan Report Sudan, July 2024. IPC_Famine_Review_Committee_Report_Sudan_July2024.pdf*

4. FRC ASSESSMENT OF THE SITUATION AS OF DECEMBER 2024

4.1 Hazards and vulnerabilities

In this section the hazards and vulnerabilities for all the seven macro-areas of analysis are discussed. The similarities and differences between areas are described for conflict and humanitarian access, displacement, and natural hazards such as floods and heavy rains.

Conflict

Since the outbreak of the fighting in Sudan in April 2023, the center, south, and west of the country have seen widespread conflict, violence against civilians, and mass displacement. The international efforts to secure a ceasefire have failed.[8] Active fighting is ongoing in Al Jazirah, Darfur, Khartoum, North Kordofan, South Kordofan and Sennar, driving significant displacement. Other states not directly experiencing conflict, such as Kassala, Northern, Red Sea, and River Nile states, also suffered conflict indirect impact on the local economy and state services. Additional violence and skirmishes primarily involve ethnic tensions, political instability, and economic grievances. The large presence of IDPs also exacerbates civil unrest due to the limited resources available for an increasing demand of essential goods and services.

Additionally, the presence of armed groups and shifting political alliances contributes to the volatility in the region. As stated in the previous review, North Darfur and the locality of El Fasher have experienced intense conflict and continued ground operations, particularly since the escalation in April 2024 and continuing until now. Towns and farmlands around El Fasher were heavily impacted by hostilities, with fighting concentrated in and around the town, and entire villages burnt or razed to the ground. Recent satellite imagery analysis[9] identified more than 40 communities located mainly in agricultural areas to the North and West of El Fasher town as likely targets of arson attacks. Zamzam camp, previously spared from the conflict, suffered shelling and indirect attacks from December 2024.

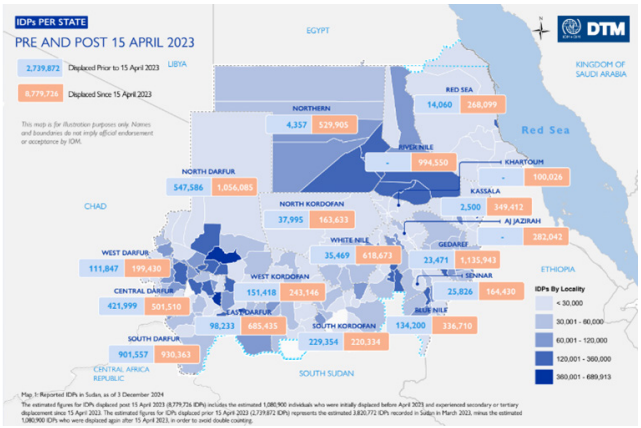
Displacement

Recent displacement figures[10] suggest around 30% of the population is displaced and continues to face repeated displacement.

Forced displacement is happening at a large scale across many areas of Sudan. Over 11.5 individuals have been internally displaced in Sudan, over 8.7 million of them since April 2023, the past twenty months alone.[11] Over half of the displaced are individuals under the age of 18. The most recent large-scale displacement is happening in the areas under review. As of December 2024, there are 1.6 million IDPs in North Darfur, 1.8 million in South Darfur, and around 1 million in West and south Kordofan.[12] The recent escalation of hostilities in Al Jazirah led to widespread displacement with nearly 400,000 individuals displaced since mid-October 2024.

Food is the top reported need in nearly all states of Sudan and unaffordable for 90% of displaced households. Health services is needed by nearly 80% of displaced populations, while not affordable (29%) or available (25%) for over half of displaced populations. There has been limited improvement in livelihood opportunities since August 2024 and 77% of displaced households did not have sufficient sources of income.

Figure 2: IDPs per State pre and post April 15, 2024, 10 December 2024. *Source: DTM.*



[8] *ACAPS, Sudan: Scenarios, October 2024. https://www.acaps.org/fileadmin/Data_Product/Main_media/20241007_ACAPS_Scenarios_Sudan.pdf*

[9] *Yale School of Public Health, Special Reports on El Fasher - 29 publications so far released between April and December 2024. https://medicine.yale.edu/lab/khoshnood/publications/reports/*

[10] *DTM-IOM, Sudan Mobility Overview, 14 November 2024, https://dtm.iom.int/reports/sudan-mobility-overview-3?close=true*

[11] *DTM-IOM, Sudan Crisis Regional Response Situation Update n. 64, 12 December 2024.https://sudan.iom.int/sites/g/files/tmzbdl1606/files/documents/2024-12/sudan-crisis-regional-response-situation-update-64-12-decemeber-.pdf*

[12] *DTM IOM, Sudan Mobility Update 12, 10 December 2024. https://dtm.iom.int/reports/dtm-sudan-mobility-update-12?close=true*

DTM-IOM, Sudan Focused Flash Alert: Aj Jazirah (Update 004), 1 December 2024. https://dtm.iom.int/reports/dtm-sudan-focused-flash-alert-aj-jazirah-update-004?close=true

In North Darfur and South Kordofan, routes to El Fasher, Dilling and Kadugli remain severely impacted by the continued fighting and siege-like conditions in addition to significant administrative barriers.

Since May 2024, the escalation of fighting has forced nearly 300,000 people to flee conflict-affected and partially besieged neighbourhoods of El Fasher town, including the Abu Shouk and Al Salam IDP camps. Most of those displaced have sought refuge in Zamzam camp, while others have moved further to locations such as Tawila, Jabal Marrah, Dar El Salam, and nearby areas. The main road south from El Fasher to Zamzam camp has seen a surge in civilian movement and a significant expansion of IDP settlements. With the increased violence, the influx of IDPs fleeing El Fasher town and other areas has likely expanded the camp's population to at least 500,000.

Populations movement between areas, especially contented ones, are extremely complex. Insecurity and financial barriers are preventing many from fleeing the areas of intense fighting Many roads are accessible few hours a day or during a single day in the week.

Humanitarian access

Humanitarian access across many parts of Sudan is highly restricted. Insecurity and administrative barriers such as checkpoints, trans-shipment of goods across borders and the very poor condition of roads make the logistics chain tortuous, expensive and inflexible. This continues to hinder the free flow of goods and food into the Greater Darfur and Greater Kordofan, as well as in Khartoum and Al Jazeera. The ability to assist populations is heavily constrained by bureaucratic requirements and approval processes imposed by the parties to the conflict. These procedures severely limit both the reach and scale of humanitarian efforts, even affecting informal trade. Ensuring cross-border access from Chad is vital to addressing these challenges. In addition, checkpoints established by different parties including local 'community checkpoints' which function to restrict movement of goods and/or extract taxes for allowing movement through their area of control.

There are currently two entry point open from Chad, namely At Tina and Adre, which are being used to deliver assistance to Greater Darfur region. The South Sudan corridor has recently become passable with the drier conditions of the roads, allowing the reopening of the route towards Greater Kordofan. There are no viable roads from east and central SAF-controlled areas to the RSF-controlled western states, which prevents distribution of Humanitarian assistance as well as food and other goods supply through internal East-West corridors. From the East, the road near Melit and onwards to Port Sudan has been cut off since mid-April and no route is available for humanitarian actors to provide supplies into Greater Darfur.

Conflict and insecurity are significantly narrowing the humanitarian space, restricting access to only a few actors who are capable of operating in such precarious conditions. Large-scale humanitarian efforts by the United Nations and other international organizations are extremely complex to set up, while local and community-based organizations, such as the Emergency Response Rooms (ERR), remain active but struggle with the magnitude of needs. Limited supplies of food and non-food items are entering the area through informal trade channels, with local traders taking considerable risks to keep markets stocked, risks that are compensated by increasing the price of transported goods in the market.

Floods and heavy rains

Flooding has affected many parts of Sudan in recent months. This has exacerbated issues around commercial trade and humanitarian access described above.

Between 1 June and 13 September 2024, Sudan reported more than 100 incidents of heavy rain and floods that damaged infrastructure and home triggering sudden displacement in Sudan. Rain and floods displaced an estimated 178,460 individuals from locations across 15 different states in Sudan.[13] The states with the highest number of individuals displaced were River Nile (57,925), North Darfur (35,235), Northern (22,860), Red Sea (22,190) and West Darfur (20,025). In

[13] *DTM-IOM, Flood Displacement summary (Update 005), 15 September 2024. https://dtm.iom.int/reports/flood-displacement-summary-update-005*

North Darfur, in particular, flooding has also affected Zamzam camp, with significant impact on water contamination due to inadequate sanitation services. This has probably contributed to increase in prevalence and severity of acute malnutrition and cases of watery and bloody diarrhoea.

There was also severe seasonal flooding in parts of South and West Kordofan, leaving already vulnerable communities completely inaccessible during the rainy season. Many of these communities were hosting large number of IDPs. Some parts of South Kordofan were still accessible by informal trade or aid from South Sudan, but even this was minimal during the rainy season.

4.2 Acute Food Insecurity

Food Availability

Food availability in the areas under review is primarily determined by the ongoing harvest and market supply.

In 2023, cereal harvests were 40% lower than the previous year, with even greater reductions observed for sorghum and millet. This resulted in early depletion of stocks for farmers and higher market prices. Farmers faced significant challenges accessing seeds and other agricultural inputs due to the poor harvest in the previous season, compounded by the impacts of conflict in 2024. Armed actors frequently targeted fields, crops, livestock, and other essential agricultural assets. Incidents of looting, burning of storage facilities, and direct attacks on farmers have severely hindered planting efforts. Reportedly, in more insecure area, farmers limited planting to areas in proximity of their villages, and farming activities have been restricted to elderly, as women and youth faced significant protection challenges due to first, the risk of gender-based violence, and second, recruitment by armed parties.

In areas experiencing extreme food shortages, displaced and resident populations have resorted to consuming seeds, grasses, leaves, bark, twigs, peanut shells, and other unsafe items.

There are no assessments available to determine the extent to which populations have accessed agricultural lands or estimates of the current harvest. Additionally, there is uncertainty regarding the impact of locusts and other pests on agricultural production, as extension services have been severely disrupted or halted. This uncertainty also extends to the loss of livestock assets due to conflict, unvaccinated animals, and the potential spread of animal diseases. Furthermore, notable post-harvest losses are anticipated, as many commercial and domestic storage facilities have been damaged or destroyed. Infestation, pests, and weather-related damage are expected to exacerbate losses during and after the current harvest.[14]

Despite these uncertainties, the arrival of the harvest in November has begun to alleviate food insecurity for some farmers, either directly through access to their harvest or indirectly through a temporary reduction in cereal prices in the market. To some extent, displaced populations may also have benefited from labour opportunities during harvest activities. However, it is unlikely that the seasonal improvement will significantly alleviate food insecurity for populations without direct access to agricultural activities, particularly displaced individuals living in settlements and public buildings.

Regarding market availability, armed actors in parts of North Darfur and the Greater Kordofan region are hindering or blocking the movement of food into besieged areas. This occurs both through force—using checkpoints, restrictions, and blockades—and economically, with newly available goods being purchased in bulk from local markets or traders to limit supplies for opposing forces. Additionally, the lack of transport options is further disrupting the ability of traders and producers to move and store large quantities of commodities between agricultural areas and market or urban centres.

Preliminary reports from partners[15] on crop cultivation around El Fasher confirm that active conflict and displacement have severely restricted household access to farmland and cultivation activities. While relatively calmer areas of North Darfur are anticipated

[14] *FAO, Sudan Country brief, August 2024. https://www.fao.org/giews/countrybrief/country.jsp?code=SDN&lang=en*

[15] *FEWSNET, Sudan Alert, October 2024. https://fews.net/east-africa/sudan/alert/october-2024 has been employed in absence of a Crop and Food Security Assessment Missions (CFSAM) report, or any other harvest assessment.*

to yield comparatively better harvests, the overall regional harvest is expected to be significantly below average. Additionally, the movement of goods from higher-production areas into El Fasher will face severe challenges due to intensified fighting and an increase in checkpoints, heightening both physical and financial risks for traders.

Consequently, the harvest, which usually becomes available in November, is unlikely to provide meaningful relief to current conditions in the most affected areas.

Household food stocks are low. Between 50 and 80% of households in the Western and Central Nuba mountains reported having no food stocks as of June-July 2024 with IDPs and residents in western Nuba mountains localities reporting the lowest levels of stocks.

Food Access

Access to food on the market. Access to food in Sudan has been severely compromised by the conflict dynamics.

According to FEWSNET,[16] sorghum, millet, and wheat are the most essential food commodities in Sudan. Sorghum serves as the staple food for most low-income households in central and eastern Sudan, while millet is the primary staple for most households in Darfur and parts of the Kordofan regions in western Sudan. Wheat, although widely used as a substitute across northern Sudan, is the main staple for the northern states. During the lean season, which is expected to conclude around October-November in the areas under review, most households rely on market for accessing food. This is particularly the case in 2024, considering the below average harvest in 2023-2024 agricultural season and the early depletion of stocks. Markets are the main source of food for the vast majority of the IDPs.

Financial access. The price of sorghum, the primary commodity, is five times higher than it was the previous year in the Al Fasher, Nyala, and Kadugli markets, reflecting price trends in North Darfur, South Darfur, and South Kordofan. With the onset of the harvest, prices have reportedly begun to decline, which may temporarily ease the sustained price increases observed since the conflict began in April 2023. However, this decline is expected to be short-lived due to the anticipated early depletion of stocks.

In addition to food scarcity, the high cost of food is exacerbated by the lack of liquidity. Digital transactions incur a 30% surcharge on the price of goods, further reducing purchasing power.

Purchasing power is currently at its lowest. While some daily labour opportunities may have become available during the harvest season, these are primarily for the most vulnerable groups, including IDPs. Once the harvest concludes, these households are unlikely to find other opportunities until the next planting season.

The main markets in North Darfur, South Darfur, and South Kordofan are operating intermittently, supported by irregular commercial deliveries to urban centres. Airstrikes on Nyala's main market in South Darfur on 9 November caused significant damage to one of western Sudan's key hubs for wholesalers and retailers, severely affecting the financial and physical access to food for both residents and IDPs. Similarly, on 9 December, airstrikes on the main market in Kebkabiya town (North Darfur) resulted in around 100 casualties and disrupted the value chain in localities west of El Fasher.

Businessmen and traders continue to transport food, money, and fuel through unsafe areas, paying taxes to armed groups and taking significant risks. They also face extended routes due to impassable roads, particularly near the El Tina border. While high prices limit access to food for many, some people continue to make purchases, indicating that the market has not yet fully collapsed.

Physical access. Physical access is significantly hampered by conflict. A recent proliferation of community checkpoints across many areas of Sudan has been reported and significant administrative

[16] *FEWSNET, Price bulletin, October 2024. https://fews.net/east-africa/sudan/price-bulletin/october-2024*

obstacles to the movement humanitarian goods and personnel continue. In addition to difficulties in reaching markets during the rainy season, markets have been directly targeted by bombing and shelling, particularly in El Fasher and Nyala.

Access to humanitarian food security assistance. Most of the areas under review have received minimal or limited humanitarian food security assistance in recent months. While recent deliveries to Zamzam camp (equivalent to a one-month ration for only 5% of the population) and improved service availability by humanitarian organizations in Tawila town are encouraging developments, they address only a negligible portion of the overall needs. Similarly, some areas of South Kordofan remained partially accessible by road from South Sudan but only minimal amounts of aid were available. Some areas of the Western Nuba mountains were completely cut off from both humanitarian assistance and market trade during the rainy season.

According to OCHA,[17] between 20 August and 14 October, 202 aid trucks crossed Adre transporting 6,265 metric tonnes (MT) of food, nutrition, medical, emergency shelter and essential household supplies. During the same period, 113 trucks carrying 3,400 MT of humanitarian supplies crossed into North Darfur from Chad, through the Tine border crossing.

These supplies delivered were only enough to cater for the needs of up to 1.4 million people, out of more than 5 million IDPs served through this route. This volume of aid is extremely below the scale-up necessary for saving lives in Greater Darfur area, and despite the enormous efforts that this have required, a negligeable amount of assistance has reached El Fasher.

All in all, in the areas under review, an average of only 10% of the total population received food assistance[18] in the past three months.

A number of factors hamper the scale up of the Humanitarian Food Security Assistance, namely:

- Conflict Zones: Increased difficulty accessing areas under active conflict, particularly in Khartoum, Sennar, Al Jazirah, and North Darfur, due to volatile security and restricted movement.
- Border Crossings: Current closure of seven out of fifteen cross-border points, of which most critical is Aweil, necessary to access South and East Darfur and Kordofan.
- Bureaucratic Hurdles: Persistent bureaucratic impediments delay the movement of humanitarian goods and personnel, with clearances taking up to three months.
- Infrastructure Damage: Severe infrastructural damage from the worst floods in 40 years, rendering critical bridges unusable and impeding aid delivery.

Some promising signs of improvement in humanitarian access appeared in the last month, with West Kordofan reached for the first time since the conflict began. In addition, some attempts of scaling up digital transfers and voucher are likely to provide some alleviation. However, digital transfers are challenged by unstable network - only granting access to those who have an internet connection or can pay fees to middlemen who own one.

Remittances and social safety nets. IDPs primarily rely on savings and informal safety nets for survival. These culturally ingrained networks provide vital support but are limited and may be overwhelmed by the scale of the crisis. While remittances, facilitated by these networks, are an important source of liquidity, connectivity issues, high transaction costs, and liquidity shortages make it unlikely that they will significantly alleviate the situation.

[17] *OCHA, Situation Report, 3 November 2024. https://reliefweb.int/updates?advanced-search=%28PC220%29_%28S1503%29*

[18] *WFP, Humanitarian Food Security Assistance, data from the World Food Programme employed by the IPC Analysis Team, October 2024 and November update.*

Food Utilization

In a context of constrained food access for millions of Sudanese, an efficient level of absorption of food becomes critical particularly for the most vulnerable segments of the population like IDPs, children, pregnant and breastfeeding women, and elderly.

Food utilization in Sudan remains severely compromised due to a combination of interrelated factors. Firstly, the limited access to improved water sources, particularly in IDP settlements and densely populated areas, presents significant obstacles to the safe and hygienic cooking and preparation of food. Secondly, the heavy flooding led to the contamination of wells and water points, underpinning diarrheal diseases. In Khartoum, the prevalence of malaria among young children – a major limiting factor of food absorption – occurred during the peak of rains and floods around mid-end of September, a few weeks before the peak of malnutrition recorded by some health facilities in the capital.

Additionally, many of the newly displaced million IDPs lack essential cooking equipment and gas, which, coupled with market disruptions, further limits their ability to prepare food adequately.

Even households that are able to sporadically access food face substantial challenges in its utilization and absorption, especially for children, pregnant and breastfeeding women, and the elderly. The constraints on their biological capacity to utilize the food ingested are compounded by high morbidity rates and hygiene issues.

In response to these challenges, partners of the Non-Food Items (NFI)/Shelter cluster have taken action by distributing NFI kits, which include cooking supplies, to over 400,000 individuals, representing approximately 43% of the target population, between September and November 2024. This distribution has primarily benefited 360,000 newly displaced IDPs and 35,000 Ethiopian refugees. Most of the aid has been directed towards IDPs from Al Jazirah who have relocated to Gedaref state, as well as those in West, Central, and South Darfur states. This intervention aims to alleviate some of the pressing challenges related to food utilization and overall wellbeing in these vulnerable communities.

4.3 Acute Malnutrition

Acute malnutrition seasonality[19] in Sudan is described as having two seasonal peaks with the first, larger, peak in May through July, and a second peak in September-October.

4.4 Health Services and Health Status

Health Services. Throughout many areas of Sudan, the major determinants of access to health services are currently insecurity are destruction of facilities.

The conflict severely disrupted access to basic services, including healthcare, clean water, and electricity. Infrastructures in conflict-affected areas have suffered extensive damage, with facilities often targeted or inaccessible due to ongoing hostilities. Hospitals and clinics had to close, leaving people without access to medical care. This has resulted in increased disease incidence and malnutrition, compounded by food and water shortages. Outbreaks of cholera and other diseases have further escalated health risks, including mortality.[20] Health services are critically limited in both quantity and quality, with significant gaps in human resource, and are unable to meet the needs of the population effectively.

Although no recent quantitative data is available on health services and health conditions in Zamzam camp, qualitative information gathered revealed that since May, the health services in Zamzam camp have been significantly disrupted. The conflict has forced medical staff to leave the area, leading to a collapse of health care provision. At the end of September, MSF were forced to interrupt their activities, having resumed only one month earlier.

MSF is one the few international aid organizations still operating in Zamzam. Humanitarian access restrictions have severely hindered their ability to restock supplies.

[19] *FAO and Tufts University, Twin peaks: the seasonality of acute malnutrition, conflict and environmental factors – Chad, South Sudan and the Sudan, September 2019. https://fic.tufts.edu/wp-content/uploads/Twin-peaks-study-report.pdf*

[20] *OCHA, Sudan Sectoral Cash Snapshot, October 2024. https://www.unocha.org/attachments/12e0dc36-93cb-48d5-86dc-afc33be3e0b4/Sudan_Sectoral_Cash_Snapshot_October_2024.pdf*

Nutrition supplies have dwindled to critically low levels, forcing the suspension of community programs and the allocation of the remaining ready-to-use therapeutic foods (RUTF) solely for the most severe hospitalized. This halt in essential, life-saving support has left the camp's population vulnerable to worsening infections and severe acute malnutrition, likely resulting in an accelerated rate of deaths caused by starvation, disease and their compounded effects.

In recent months, significant efforts have been done to deliver and pre-position RUTF throughout many of the areas under review. The only localities that did not receive any RUTF supplies are Jebel Awlia in Khartoum, Wad Madani, and Sharq Al Jaziragh localities in Jazira, which are the most hard-to-reach areas.

Health Status. Sudan is facing catastrophic public health outcomes. In August, Sudanese authorities officially declared a cholera outbreak, which continues to spread nationwide. As of November, there had been 44,000 reported cases, including 1,200 deaths (2.7% fatality rate) across 81 localities in 11 states.[21]

SMART surveys conducted between July and September in North Darfur and South Kordofan show alarming morbidity rates for diarrheal diseases of children under 5 years of age, ranging between 30 and 45 percent in North Darfur and South Kordofan states. The morbidity driven by fever and ARI ranges from 50 to 70 percent in most localities. Conversely, access to health services and facilities remains a major challenge for over 80 percent of people in North and South Darfur states, South Kordofan and West Kordofan (IOM MSNA).

According to recent SMART surveys, measles vaccination coverage is still at moderate levels, despite the widespread damage to the health system. The coverage among children ranges from 74 percent in Um Kadadah to 89 percent in At Tawisha locality of North Darfur. Other localities, such as Tawila, El Fasher, Melit, and Al Lait, report coverage between 80 and 86 percent. In South Kordofan, 71 percent of children have been vaccinated against measles, whereas West Kordofan localities, including Lagowa and As Sunut, show a lower coverage of 64 percent. It should be noted that no surveys indicated adequate coverage of this high priority health intervention. With coverage below 90% in all areas measles vaccination campaigns are urgently needed, and should prioritise areas with the lowest or unknown coverage. The urgency for this has been highlighted by reports from key informants of a possible measles outbreak in Nyala.

4.5 Water, Sanitation, and Hygiene (WASH)

Water supply and the provision of sanitation and hygiene services have been severely affected by the current conflict in many areas of Sudan. Additionally, the rainy season from July to September 2024 was one the wettest periods in the recent history of Sudan. Precipitation commenced later than usual at the end of July and decreased in intensity by early September. Heavy rainfalls concentrated over a narrow timeframe of four to six weeks across most states impacted infrastructure, trade and humanitarian assistance delivery, public health, nutrition status, and food utilization. The residual impact of floods continues to pose significant risks in areas currently hosting large population of IDPs like North Darfur, Khartoum and Gedaref states, due to the contamination of water points and sanitation facilities, and to increased morbidity to water borne diseases and cholera.

Heavy floods led to major damage to the irrigation and water ways infrastructures, exposing people to heightened risks of malaria and other water borne diseases. Since November, an increasing number of cases of cholera are reported in Gedaref and Sennar, which host around 300,000 new displaced individuals from Southern and Eastern Al Jazirah. Similarly, severe flooding heightened the risk of malaria and other water borne diseases in South Kordofan as well as in Khartoum.

Access to safe drinking water sources in localities with high presence of IDPs like Tawila, Melit and El Fasher in north Darfur ranges from 40 to 60 percent (SMART), while improved sanitation facilities are slightly less

[21] *International Medical Corps (IMC), Sudan Conflict Situation Report #24, 11 December 2024. https://reliefweb.int/attachments/37047e82-2127-4dc8-bf0c-a7146952732a/IntlMedCorps-SudanConflict_SitRep24-2.pdf*

accessible. In El Fasher locality over 90 percent of people reported facing challenges in accessing water points, mainly related to the distance, insecurity, and high cost for purchasing water in the markets, when fetching water from other sources became dangerous (IOM MSNA). In North Darfur localities with a high presence of IDPs, such as El Fasher, Tawila, and Um Kadadah, between 50 and 80 percent of people reported having been affected by flooding and seeing sanitation facilities damaged with excreta contaminating the surroundings and shelters during heavy rain. As data from MSNA IOM were collected around the beginning of the heavy rains, these figures might underestimate the actual impact during the height of the rainy season, and the residual current discomfort in densely populated urban centres and IDP settlements.

The analysis conducted by the Joint Research Centre (JRC), utilizing sentinel sites during July and August, indicates that the most severe flooding occurred primarily in Khartoum, Kassala, Al Jazirah, Sennar, and West and North Darfur. Zamzam camp reported two significant floods episodes in late July and early August. Floods resulted in the destruction of over 1,000 homes, and damage to more than 800 latrines, further straining the precarious hygiene and sanitation situation for the hundreds of thousands of IDPs in the area.

4.6 Mortality

Mortality rates in Sudan have been elevated since April 2023 by the direct and indirect effects of conflict across many areas of the country. While direct conflict deaths are high, disruption to the health and WASH systems, food insecurity, and disease outbreaks are all expected to have contributed to an elevated risk of indirect mortality. However, the extent of excess mortality is difficult to quantify.

There is currently no reliable vital statistics recording in Sudan. In addition, household survey data, such as SMART surveys, or rapid nutrition assessments, are only available intermittently and from some areas of the country. To our knowledge, no reports from mortality surveillance systems are available. This lack of data makes it very challenging to estimate the total direct and indirect death toll or the total excess deaths associated with the famine or emergency phase classifications.

Where survey data has been collected during mid-2024 the death rates reported during their recall periods have been classified in lower IPC phases than the severity of the acute malnutrition. This may be due to a number of factors including time lags between the different IPC outcomes. The moderate to high levels of measles vaccination coverage measured during the surveys may have been providing important protection against epidemic outbreaks. In addition, the FRC noted some concerns regarding the methods used to determine the retrospective death rate. These are listed in the recommendations section of this report.

Alternative methods for estimating mortality have also been attempted. Grave counting by satellite image analysis has been conducted and reported in limited areas in North Darfur.[22] A capture-recapture study by LSHTM, published in November 2024, indicated a higher level of international injury deaths in Khartoum since the beginning of the war than reported via media sources for the whole of the country, suggesting a large element of routine under-reporting.[23]

Field reports and testimony from key informants interviewed by the FRC indicate that deaths associated with hunger have been occurring in several of the areas that have been reviewed. The available evidence for each area is discussed below.

[22] *Reuters, How Reuters counted the dead in famine-stricken Sudan, 5 December 2024.https://www.reuters.com/investigates/special-report/famine-response-sudan-graves/*

[23] *Dahab, M. et al., War-time mortality in Sudan: A capture-recapture analysis, 14 November 2024. https://www.lshtm.ac.uk/research/centres-projects-groups/sudan-research-group#current-research*

5. OUTCOMES FOR AREAS OF ANALYSIS

The analysis conducted by the TWG in October – November 2024 was an update of the second projection period (October 2024 – February 2025) that it used in the May 2024 analysis. As per of the IPC protocol, no new outcome indicators are needed for an IPC projection update. However, some new food security and nutrition outcome data were collected by partners and made available to the TWG. However, not all these data were utilised in the TWG analysis. The FRC considered all available outcome indicator data in its review. This section presents all the outcome indicator data utilised in the FRC review.

5.1 Zamzam, Abu Shouk, Al Salam camps in El Fasher locality (North Darfur)

Acute Food Insecurity

No direct quantitative evidence on food security outcome indicators was collected for the October analysis update for the specific units of Zamzam, Abu Shouk or Al Salam camps. For Zamzam camp, in May 2024, the TWG analysis used the IPC protocol that permits comparison with similar or nearby areas[24] - using data collected in El Neem camp by the WFP Food Security Monitoring Survey (FSMS). For this current review, the FRC considered the whole body of evidence on food security, mainly contributing factors, to conclude that there has been a strong deterioration of the food insecurity situation and that the IPC Phase 5 (Famine) thresholds for acute food insecurity have likely been surpassed.

Acute Malnutrition Outcomes

Evidence on acute malnutrition in Zamzam camp is limited, with no data available for Abu Shouk or Al Salam camps, which are assumed to have similar conditions during the current time period. The FRC relied on a Rapid Nutrition Assessment (RNA) conducted by MSF/Epicentre in Zamzam camp in January 2024, which also used in its August 2024 review. This assessment, using MUAC, reported GAM at 23.1 percent (18.4 – 28.5, 95% CI). The data's plausibility was confirmed during the previous review. The FRC included this evidence in its current analysis, as conditions on the ground remain largely unchanged, with children persistently facing life-threatening risks due to extreme vulnerability and inadequate interventions. In addition, several MUAC screenings have been conducted since January. Although not meeting the requirement for an area classification, they portray a deteriorating outlook (Table 2 in Annex 1):

- A mass MUAC screening conducted by MSF between 24 March and 7 April 2024[25]. The estimates of GAM (29.4 percent, n=46,790) were consistent with the January assessment, and suggested a deteriorating situation,

- A follow up mass MUAC screening conducted by MSF in September 2024 covering 29,355 children aged 6-59 months. GAM by MUAC was 33.8 percent, suggesting a worsening situation from April screening.

Although only the data collected in January 2024 meets IPC standards for sufficient reliability, subsequent mass screenings have indicated a progressive deterioration in conditions. As such, the FRC deems it plausible to reaffirm the classification made in August, 2024. Over the past 10 months, no substantial evidence suggests an improvement, nor is there an expectation of significant progress during the projected period. While some temporary alleviation might have occurred due to the harvest season or intermittent access to certain camps, these factors are unlikely to bring meaningful or sustained improvements to the dire conditions faced by the displaced population. **With the expected early approach of the lean season and conflict intensity likely picking up again in the dry season, IPC Phase 5 (Extremely Critical) levels of Acute Malnutrition are expected to persist.**

Mortality

The available mortality data comes from the MSF/Epicentre report on the rapid nutrition assessment conducted in January 2024 within Zamzam camp. After removal of deaths due to trauma the MSF/Epicentre

[24] *As detailed in the IPC Technical Manual 3.1., page 48. https://www.ipcinfo.org/ipcinfo-website/resources/ipc-manual/en/*

[25] *This activity screened 46,790 out of an estimated 66,000 children, aged 6-59 months, residing in Zamzam camp. Children identified with GAM by MUAC were admitted to a TSFP programme in which they received Ready-to-Use Therapeutic Food (RUTF) for a period of two to four weeks. Ready-to-Use Supplementary Food (RUSF) was distributed to all non-malnourished children to prevent them from falling into acute malnutrition. Due to lack of documentation, it was not possible for the FRC to assess the quality of the data and age distribution of screened children.*

analysis showed a CDR for non-trauma deaths of 1.9/10,000 person/day (1.5 – 2.4, 95% CI). The CDR reported from January was very close to the Famine threshold. Since that time there has been a prolonged increase in the risk factors for both trauma and non-trauma mortality including the recent increase in conflict and the bombardment of sites in Zamzam camp. Detailed information regarding the current level of non-trauma mortality in the IDP camps around El Fasher is not available due to the continued insecurity and disruption of the health information system, coupled with the limited capacity of personnel in the camp. However, the FRC consider it highly likely that famine thresholds for CDR are currently being exceeded in Zamzam camp and the other IDP camps in close proximity to Al Fasher town, namely Abu Shouk and Al Salam.

5.2 IDPs and Residents in Western Nuba mountains (Areas of West and South Kordofan State)

Acute Food Insecurity

Among IDP and host households in the Western Nuba mountains area, an MSNA conducted in July (Table 4 of annex 1) found that 16% of households, respectively, were experiencing Very Severe hunger according to the Household Hunger Scale (HHS), indicative of IPC AFI Phase 5 (Catastrophe), and while 93% and 84% of IDP and resident households, respectively, had a Poor Food Consumption Score (FCS) indicative of IPC Phase 4 (Emergency) or 5 (Catastrophe). A later survey in August, using a different sample from the same area, found 12% of households in IPC AFI Phase 5 (Catastrophe) by the HHS. Both of these point measurements indicate a steep increase compared to data from the Western and Central Nuba mountains in previous years, as shown in Figure 1 of Annex 1. Over 60% of households in the area reported zero food stocks in their households at the time of the survey. Given the likely complete lack of access to these areas during the rainy season and the fact that the harvest began in December, the figures for IPC Phase 5 catastrophe were expected to have been surpassed by October - November, 2024. Detailed tables of Food Security outcomes can be found in Annex 1.

Acute Malnutrition Outcomes

Two SMART nutrition and mortality surveys were carried out between mid-August and mid-September of the current year in the Western Nuba mountains of South Kordofan. One survey targeted the population living in IDP sites in Dilling, Habila, and Al Lagowa, and the other survey targeted the resident population (not in IDP sites) in the same counties, with the addition of As Sunut. Malnutrition estimates surpassed the thresholds of Extremely Critical situations (IPC AMN Phase 5) in both surveys with a GAM WHZ prevalence of 36.3% (31.8 - 37.1) among IDPs (n=410), and a GAM WHZ of 31.2% (25.8 - 37.1) among the resident population (n=645) (Table 6 in Annex 1). The same survey showed a GAM MUAC of 22.7% (18.9 - 27.0, n=424) among IDPs and 25.0% (20.0-30.7, n=669) among residents. Although not employed for classification purpose, recent screenings conducted in the areas show Extremely Critical level of Acute Malnutrition.

Between the mid-point of data collection, at the start of September, and the October-November analysis period, malnutrition is likely to have increased due to greatly reduced road access and further reductions in food availability, and an increased risk of disease associated with the rainy season together with a degraded and under supplied health system.

Mortality

The mortality results of both surveys at the start of September showed a CDR corresponding to IPC AFI Phase 4 (Emergency) in the IDP sites (1.07 (0.73 – 1.57), and IPC Phase 3 (Crisis) situation (0.86 (0.54 - 1.38) in the resident population (Table 7 in Annex 1). Between then and the analysis period, mortality is likely to have increased for the same reasons as malnutrition and crossed the Phase 5 threshold for CDR of 2/10,000/day. Recent field assessments and information from key informant interviews describe extreme malnutrition and hunger-related deaths of children and adults in IDP camps and clinics.

5.3 IDPs and Residents in Central Nuba mountains (South Kordofan State)

Acute Food Insecurity

A MSNA conducted in the Central Nuba Mountains area in June-July 2024 measured FCS and HHS in three IDP areas and in six areas containing resident households. The HHS results indicate that 11% of IDP households had a very severe HHS above the AFI Phase 5 (Catastrophe) threshold, while in the resident areas the proportion in Phase 5 (Catastrophe) was 7%. The FCS results indicated that 68% of IDP households and 64% of resident households in these areas were in either IPC AFI Phase 4 (Emergency) or IPC AFI Phase 5 (Catastrophe) respectively (Table 8 in Annex 1 contains the average results for the combined areas). Given that most of these areas remained at least somewhat accessible during the rainy season, the famine thresholds for acute food insecurity were likely not breached except in localized areas, but the whole population remains at high risk.

Acute Malnutrition Outcomes

Two SMART nutrition and mortality surveys were carried out in the Central Nuba mountains of South Kordofan in August and September 2024, targeting IDP sites located across Delami, Western Kadugli, and Um Derein counties (in August), and the resident population across the same counties, with the addition of Heiban, Al Buram (Thobo). Estimates of GAM based on WHZ fell under IPC AMN Phase 4 (Critical) in both surveys. After disaggregation of results into the IDPs and residents located in each county or group of counties, GAM by WHZ remained within IPC Phase 4 across all groups (Table 9 of Annex 1). The nutrition situation is likely to have deteriorated between the date of survey data collection and the start of the FRC analysis period in October. However, the FRC considers it unlikely that the famine threshold for acute malnutrition would have been crossed during this time.

Mortality

The mortality results of both surveys showed a CDR at levels corresponding to IPC AFI Phase 4 (Emergency) in the IDP sites (1.24 (0.84 - 1.83)), and IPC Phase 3 (Crisis) situation (0.99 (0.70 - 1.39)) in the resident population (Table 10 in Annex 1). As is the case for acute malnutrition, the FRC considers it unlikely that the famine threshold for mortality would have been crossed by the start of the FRC analysis period in October. However, the situation remains very fragile.

5.4 Localities in North Darfur: At Tawisha, Um Kadadah, Al Lait, Tawila, Melit and El Fasher

Acute Food Insecurity

The DTM/IOM MSNA conducted in North Darfur between June and August, 2024, found that food consumption was indicative of IPC Phase 4 or 5 (Emergency or Catastrophe) when considering the poor FCS in Al Lait (87%), At Tawisha, Melit, and Al Fasher (Table 11 in Annex 1). The FCS was indicative of Phase 3 in Um Kadadah and Tawila, which were considered generally better-off, cash crop-producing regions. While the HHS results did not converge with the poor FCS, food-based coping was also notably high in Al Lait (49%) in Phase 3 and above, followed by Melit (36%), and Al Fasher (26%). Due to the deterioration in conflict and displacement, agricultural seasonality, and difficult transport conditions during the rains, food security conditions are considered to have worsened for most of the time period between the time of data collection and the start of the FRC analysis period in October. While these localities were classified as IPC Phase 4 in the period from October to November, a deterioration in the food security situation is expected given the continued conflict and siege in El Fasher. In addition, given that much of the worst-case scenario is already materializing, with a massive influx of IDPs to Tawila, it is likely that the situation will breach the famine thresholds in the period of December to May 2025. Although not statistically representative, a disaggregation of the food security data suggests more severe outcomes for IDPs in most localities.

Acute Malnutrition Outcomes

SMART nutrition and mortality surveys were conducted in six localities across North Darfur in August and September, 2024. They revealed IPC AMN Phase 5 (Extremely Critical) levels of acute malnutrition as measured by GAM WHZ in At Tawisha, Um Kadadah, and Al Lait. In Tawila and Melit, the prevalence was marginally below Extremely Critical thresholds with the upper limits of the 95% confidence interval exceeding the threshold.

When disaggregated by area, the SMART survey conducted in El Fasher locality showed Extremely Critical levels of Acute Malnutrition for the rural population north of El Fasher town. In contrast, the population in Shagra IDP camp (located on the road between Tawila and El Fasher) showed a GAM prevalence consistent with AMN Phase 2, indicating that large differences in vulnerability may exist within small geographical areas. (Table 12 in Annex 1).

Acute malnutrition outcomes are considered highly likely to have deteriorated in between the data collection in August and the start of the FRC analysis period in October. This is due to continuing conflict and displacement, reduced road access and further reductions in food availability during the rains, and an increased risk of disease associated with the rainy season together with a degraded and health system.

Mortality

The mortality results from the SMART surveys conducted across North Darfur in August and September 2024, showed a CDR corresponding to IPC Phase 4 (Emergency) in At Tawisha, and at levels corresponding to IPC Phase 3 (Crisis) in all other localities (Table 13 in Annex 1). Considering the trajectory of the risk factors for mortality, it is considered highly likely that mortality outcomes deteriorated in between the data collection in August and the start of the FRC analysis period in October, crossing the Phase 4 threshold.

5.5 Localities in South Darfur: Nyala Janoub, Nyala Shimal, As Sunta, Buram, Shattaya, and Kas

Acute Food Insecurity

The food security data from the MSNA of DTM/IOM on South Darfur is largely indicative of Phase 4/5 with poor food consumption ranging from 25% in Nyala South to 65% in As Sunta. As Sunta also notably had 17% in Phase 4 and 10% in Phase 5 based on the HHS results. Only Shattaya and Beliel had FCS indicative of Phase 3. Meanwhile, all areas had high food-based coping, ranging from 29% in Nyala South to 65% in Beliel. Further, as many localities in South Darfur will continue to be impacted by the ongoing conflict by an influx of IDPs from North Darfur, it is likely that food consumption, which is already poor, will continue to deteriorate. This is particularly true for the IDPs who have exhausted their assets, however, is also true for the residents, who largely missed the planting season due to the disrupted availability of seeds.

Acute Malnutrition Outcomes

MUAC screenings were carried out in August in Nyala Janoub, Shimal and Shattaya localities, targeting children aged 6-23 months as part of an immunization campaign. The estimates of acute malnutrition across the three localities were over 30 percent (Table 15 in Annex 1). However, considering the methodology does not align with IPC requirement, these data could not be employed directly for classification purposes.

Mortality

There was no survey data available on mortality from 2024.

5.6 Localities in Al Jazirah State: Medani al Kubra and Sharg Al Jazirah

Acute Food Insecurity

There was no updated food security outcome data available for the two localities.

Acute Malnutrition and Mortality Outcomes

There was no survey data on acute malnutrition or mortality available from 2024.

5.7 Localities in Khartoum: Mayo and Alingaz in Jebel – Awlia

Acute Food Insecurity

There was no updated food security outcome data available for the two localities.

Acute Malnutrition and Mortality Outcomes

There was no survey data on acute malnutrition or mortality available from 2024.

6. CONCLUSIONS FOR THE PERIOD OCTOBER 2024 TO NOVEMBER 2024

Overall, during the period from October to November 2024, conditions in Sudan remained dire, with important differences from area to area. The major drivers of acute food insecurity and acute malnutrition continue to be conflict, generating mass displacement, and limited access. On the other side, the above average rains are expected to allow harvest in the communities less affected by conflict, and an improvement in road transport associated with the end of the rains and a reduction in flooding will somehow alleviate the conditions observed during the lean season. However, the benefits associated with these developments were reduced by difficulties in farmers accessing land earlier in the year due to insecurity, a shortage of inputs, and continued travel and transport restrictions in many areas. The health and WASH situation continued to be in crisis. The TWG and FRC classifications for each unit of analysis are shown by time period in Table 1.

Zamzam, Abu Shouk, and Al Salam. For the period October to November 2024, considering that the nutrition and mortality were expected to continue meeting or surpassing the threshold for IPC Phase 5 (Famine) conditions, and also considering the convergence of the Food Security contributing factors, the FRC concludes that Famine (with reasonable evidence) is plausible for Zamzam camp. The FRC extended its classification to Abou Shock and Al Salam IDP camps in El Fasher.

Western Nuba Mountains. In the Western Nuba Mountains, the Food Consumption Score and the Household Hunger Score results from July suggested a population prevalence of IPC AFI Phase 5 (Catastrophe) that was below but approaching 20%. GAM prevalence was already over the IPC AMN Phase 5 (Extremely Critical) threshold by August, while the CDR was at Phase 3 levels in residents and Phase 4 (Emergency) in IDPs. A further deterioration is highly likely to have occurred between these data collection time points and the start of the FRC analysis period. The FRC classifies the IDPs and residents in Western Nuba Mountains in IPC Phase 5 (Famine) in the period October to November 2024.

Central Nuba Mountains. Conditions in the Central Nuba mountains are critical for both IDP and resident populations. Outcome indicators are indicative of a high IPC AFI Phase 4 (Emergency), with the presence of population in IPC AFI Phase 5 (Catastrophe). Acute Malnutrition is also in IPC Phase 4 (Critical) and mortality levels were also at IPC Phase 4 (Emergency) or Phase 3 levels. FRC considers plausible that the areas located in the Central Nuba mountains are in IPC Phase 4 (Emergency) in the period October to November 2024.

North Darfur localities in proximity of Al Fasher. Outcome indicators show that food security outcomes at the time of data collection (June to August 2024) were indicative of a high IPC AFI Phase 4 (Emergency) situation. In contrast, the SMART surveys conducted in Um Kadadah, Melit, At Tawisha, Al Leit and Tawila indicated that Acute Malnutrition was at Extremely Critical (IPC AMN Phase 5) levels. This was also observed in rural communities in El Fasher locality. Mortality levels were consistent with a classification of IPC Phase 3 (Emergency).

FRC considers it plausible that Um Kadadah, Melit, Al Fasher, At Tawisha, Al Leit were in IPC Phase 4 (Emergency) for the period October to November 2024.

South Darfur localities south of El Fasher. The FRC concurs with the existence of a risk of Famine in Nyala Janoub, Nyala Shimal and Beliel, extended to the period December 2024 to May 2025. However, this statement should be extended to all the areas susceptible of receiving further IDPs influx, namely Nyala Janoub, Nyala Shimal and Beliel, Shattaya, As Sunta, Buram and Kas.

In fact, the extreme volatility of the area and the intense fighting in the El Fasher locality is expected to generate significant additional displacement of population and it is not possible to predict the exact destination (and magnitude) of these mass displacements.

At risk localities in Al Jazirah and Khartoum. The FRC concurs with the risk of Famine statement made by the TWG in Medani Al Kubra and Sharg Al Jazirah and Mayo and Alingaz in Jebel – Awlia, however the FRC notes that due to an absence of recent data and the high volatility of the situation, there is a significant degree of uncertainty. The Cholera outbreak represents a significant risk factor. The FRC also notes the very recent intensification of fighting in areas of Khartoum and the impact this is reported to be having on access to health care. **Data collection is highly recommended to exclude Famine conditions.**

7. CONCLUSIONS FOR THE PROJECTION PERIOD (DECEMBER 2024 – MAY 2025)

The analysis team updated its projected analysis covering the period from October 2024 to February 2025, as per IPC protocols. The FRC considered the projection period of December 2024 to May 2025 to draw its conclusions. The assumptions for the projection period can be found in Annex 2.

Overall, from December 2024 to May 2025, the FRC considers that conditions in Sudan will remain dire and likely deteriorate in most areas. On the food security front, conditions are anticipated to worsen as food stocks are expected to deplete way before the typical hunger season (June to September). This decline stems from limited harvests, particularly among IDPs and the households hosting them. Food availability is likely to remain constrained if humanitarian food security assistance (HFSA) delivery continues at current levels, covering less than 10% of the population in these areas under review. Furthermore, the ongoing conflict is expected to restrict food supply chains, while the purchasing power of IDPs is projected to decline further. This deterioration is driven by worsening terms of trade between labor and sorghum and by seasonal increases in food and commodity prices. Employment opportunities will remain scarce until the next planting season.

In areas forecasted to experience IPC Phase 5 (Famine) conditions, such as in North Darfur and the Western Nuba Mountains, the healthcare system has largely collapsed. Due to insecurity, humanitarian actors have had to scale back operations, including screening programs, leaving remaining health facilities under-resourced. This has significantly reduced their ability to meet the needs of the population in crisis, compromising the treatment of acute malnutrition due to inadequate capacity and supply shortages. Access to sanitation and hygiene services is critically undermined, with water supply projected to remain below Sphere minimum standards.

As an early lean season approaches, Acute Malnutrition levels are anticipated to exceed Famine (IPC Phase 5) thresholds. This will be driven by persistent food insecurity, increased exposure to infectious diseases, and severely limited access to healthcare and nutrition services. Mortality will continue from the direct effects of the conflict and may well increase significantly, while deaths due to starvation and disease will increase.

The FRC projected classifications for each unit of analysis are shown by area in Table 1 and detailed here.

Zamzam, Abu Shouk, and Al Salam. The FRC has maintained its classification of IPC Phase 5 (Famine) for Zamzam, Abou Shouk and Al Salam IDP camps in El Fasher for the period December 2024 to May 2025.

Western Nuba Mountains. The FRC maintains its classification in IPC Phase 5 (Famine) for the Western Nuba mountains in West and South Kordofan for the period December 2024 to May 2025.

Central Nuba Mountains. The FRC classifies the IDPs and residents in Central Nuba Mountains in IPC Phase 4 (Emergency) in the periods October to November 2024 and December 2024 to May 2025. The FRC considers that there is a risk of Famine in Central Nuba Mountains.

Spillover effect from El Fasher crisis

The FRC consider that the localities that are expected to experience a significant spillover from the El Fasher crisis, already portraying extremely Critical (IPC AMN Phase 5) levels of Acute Malnutrition, will likely receive a significant amount of population influx. This is particularly the case for the localities surrounding El Fasher and those representing a route forof potential mass displacement in both North Darfur and South Darfur. Excess mortality is expected to significantly increase, driven by heightened severity of food insecurity and dire WASH and health services conditions in areas of IDPs concentration in North and South Darfur.

North Darfur localities in proximity to El Fasher. Considering the already Extremely Critical levels of Acute Malnutrition detected from the SMART surveys in August-September 2024, and the short-lived mitigation that the harvest might provide, it is expected that food insecurity and Acute Malnutrition will remain above the Famine thresholds with the approach of the lean season. Taken together, these issues are likely to sustain the elevated mortality incidence above Famine thresholds. The FRC classifies Um Kadadah, Melit, El Fasher, At Tawisha, Al Lait in IPC Phase 5 (Famine) and considers there is a risk of Famine in Tawila for the period December 2024 to May 2025.

South Darfur localities South of El Fasher. The FRC considers that a risk of Famine exists in the period December 2024 to May 2025 and should be extended to all the areas susceptible to receiving a continued IDP influx, namely Nyala Janoub, Nyala Shimal and Beliel, Shattaya, As Sunta, Buram and Kas.

At risk localities in Al Jazirah and Khartoum. The FRC concurs with the risk of Famine statement made by the TWG in Medani AlL Kubra and Sharg Al Jazirah and Mayo and Alingaz in Jebel – Awilia, however due to the absence of recent data and high volatility of the situation, there is a significant degree of uncertainty as to how the situation will evolve during the projection period. Data and verifiable information on the situation in several areas is scarce and there is an urgent need to continue and strength data collection as well as the humanitarian response.

8. RECOMMENDATIONS FROM THE FAMINE REVIEW COMMITTEE

The FRC report outlines several key actions and recommendations for addressing famine in Sudan, emphasizing the urgent need for humanitarian assistance and the resolution of the ongoing conflict. The FRC notes that some of the recommendations made in its July report were acted upon, while others remain pending.

For Senior Decision Makers and Resource Partners

- **Negotiate a ceasefire:** This Famine is caused by a war with multiple international actors. Actions by senior politicians and policymakers can bring this conflict to an end. External actors should put maximum pressure to bear on the conflict actors to negotiate a sustainable ceasefire and peace agreement.
- **Protect civilians:** Even in the absence of a ceasefire, international actors should demand the immediate halt by warring parties to any attacks on hospitals, humanitarian organizations, and civilian infrastructure in accordance with International Humanitarian Law and ensure the full delivery of services to mitigate the likelihood and severity of Famine.
- **Urgently prioritise humanitarian assistance** for areas and populations already in Famine, and urgent preparations are needed now to prevent famine in the locations where it is projected to occur in the next five months.
- **Urgent priority must be placed on ensuring unhindered access routes** into, and within, Greater Darfur and Greater Kordofan states for both humanitarian and commercial actors. In particular:
  - Ensure **unhindered cross-border access** through all border crossings for large-scale humanitarian assistance and commercial deliveries.
  - Create a **safe airspace** enabling the resumption of operations through the airports of El Fasher, Nyala, and Kadugli for the delivery of medical supplies, non-food items and emergency therapeutic foods.
  - Ensure a safe **route-space for commercial and humanitarian convoys** towards the most critical IDP/refugee settlements, and urban centres in Greater Darfur and Greater Kordofan states.
  - Ensure **telecommunication networks** are functional and enable the flow of remittances, and lobby for unhindered use of Starlink or other global and local providers of internet connectivity at global, regional, and local levels. Restore the functionality of banking systems and credit-access facilities as soon as possible.
- **Analyse unassessed areas:** There is equal need to prioritize access and humanitarian assistance in other areas of the country for which—at the moment—inadequate information exists to accurately assess whether famine is prevailing or not. However, it is certain that a great deal of human suffering is occurring in those areas as well. Conflict actors should be pressured to allow not only the greater flow of humanitarian assistance and commercial trade in these areas but also to guarantee access for the proper assessment of human conditions.
- **Support local and community-based response systems** have played a vital role to ensure the survival of the vulnerable populations in Sudan and these efforts should be supported. In particular:
  - Support the efforts of local actors, and channel international humanitarian response through these for a high-scale distribution of humanitarian assistance, particularly in hard-to-access areas.
  - Support the immediate scale up of Emergency Response Room programmes and communal kitchens through direct financial support, and advocate for unhindered supply chains and their safe operational environment.
- **Plan now** to fund the scale up of the distribution of agricultural inputs well in advance of the next planting season.

For the Humanitarian Country Team

- **Continue advocating** for **enhanced cross-border access**, particularly across the Chad-Sudan border, and pre-position supplies and staff for a rapid scale-up of humanitarian assistance to Darfur and Kordofan for fast deployment as soon as conditions permit.
- **Ramp up support for conflict affected areas** in the eastern part of the country as well and continue advocating for unhindered access for proper assessment.
- **Ensure a well-coordinated and multi-sectorial response**, including food security, nutrition, health, WASH, shelter, livelihoods and protection sectors.
- **Update the UN's Famine Prevention Plan:** Revise the implementation plan for inaccessible areas like El Fasher, where prolonged access challenges have led to a likely depletion of assets, requiring mid-term support to agro-pastoral livelihoods alongside life-saving food security, nutrition, and health initiatives.
- **Support relief efforts on WASH** including the rehabilitation of the water pumping and treatment systems from local reservoirs into El Fasher. This is necessary to reduce the risk of water borne and water washed infections, and to mitigate poor food utilization.
- **Implement measles vaccination campaigns** prioritizing areas with low levels of vaccination coverage and high levels of malnutrition
- **Monitor food availability in local markets** in support of the expansion of cash-based programmes targeting markets with stable food availability, especially those in areas that are inaccessible for humanitarian actors and can only be supplied by private traders.
- **Support the scaling up of local response systems** such as ERRs/Communal kitchens to provide humanitarian food assistance in areas that are inaccessible for UN agencies due to conflict and are facing extreme food insecurity.
- **Plan for increased assistance:** While the focus of this famine review was on Greater Darfur, Greater Kordofan, and areas identified as risk of Famine by the TWG, continue planning for increased humanitarian assistance, including agricultural and livelihood support, to all areas and other states with populations that may be at risk of famine
- **Implement weekly updates:** The FRC strongly recommends that OCHA publishes weekly updates on the humanitarian situation in Sudan, and utilizing its mandate for inter-cluster coordination, draws together key indicators from the food, health, nutrition, WASH and shelter clusters to provide an integrated overview of the situation, including the areas identified at risk of famine in the IPC report.
- **Push for greater access for assessment** in conflict-affected areas and establish a real time monitoring system for the main risk factors and drivers of food insecurity and nutrition, such as conflict, displacement, food prices, trade flows, crop production, labour opportunities, remittances and humanitarian assistance, and update the IPC analysis in April/ May or as needed.
- **Consider establishing a multisectoral Analysis Unit** to coordinate, coalesce, and analyse vital humanitarian information across sectors and for all vulnerable areas in Sudan. This would need to be done in coordination with the OCHA data management roles.
- **Advocate for immediate, safe and unhindered access** to all localities of Greater Darfur states, including IDP camps in El Fasher, though also Greater Kordofan, Khartoum, and Al Jazirah states, to collect food security, nutrition, mortality, health, and livestock data.

Recommendations on Data Collection and Analysis

- **Collect representative data** on food security, nutrition, and mortality, focusing on areas with extreme food insecurity, to inform new IPC analysis in April/May 2024, or earlier if required, and for use by other stakeholders.
- **Analyse unassessed areas:** There is an urgent need for proper food security and nutrition surveys in unassessed areas of greatest concern, including greater Khartoum and Al Jazirah.
- **Assess hotspots:** Survey planning should include data collection from areas where the situation is expected to be the worst, including areas already identified as being in Famine and at risk of falling into famine. These should be published by May at the latest.
- **Conduct disaggregated analysis for IDPs:** Survey design should allow for disaggregated analysis by IDP status to understand the differing vulnerabilities of residents and IDPs.
    - This is especially critical as failure to include IDP populations in some of the surveys conducted in recent months meant that there have been large data gaps on population sub-groups that are likely to be the most vulnerable.
    - Future surveys must not exclude IDP sites or other populations believed to be extremely vulnerable, unless these are covered in a separate survey.
    - In household surveys of mixed populations, questions should be included to allow the results to be disaggregated by IDP and resident status. For IDP, the time since arrival and the location from which they have come should also be asked and used to analyze the relative vulnerabilities of the population groups and to gain some insight into the situation in areas from which IDP are migrating.
- **Include mortality data collection in surveys using a clearly defined recall period:** Questionnaires used for mortality surveys should, whenever possible, include a memorable date to define the recall period. This can help to reduce recall bias. The recall date used should be clearly specified in survey reports.
    - Translation of survey questionnaires into Arabic and locally used languages should be checked to **ensure that the deaths of all household members during the recall period are captured.** Using a current census listing of the household is a standard method but care is needed to ensure that respondents recall the deaths of household members that do not appear on the current listing.
- **Conduct nutrition and health screening of new arrivals** in the refugee camps in Chad and provide weekly reports on the number of new arrivals and the proportion with GAM by MUAC and any notable health conditions.
- **Strengthen food security surveys** through a series of suggested actions:
    - **Improve enumerator training and field supervision**, such that obvious errors in data collection or misunderstanding of questions by respondents are caught in the field.
    - Continue to systematically include modules to track sensitive indicators to extreme food insecurity conditions including the **Household Hunger Scale (HHS).**
    - Reasons for the **large divergence in results obtained from FCS and HHS questions** in household surveys should be investigated and, if found to be necessary, adjustments should be made to the wording of the questions and the training of survey staff.
    - Better **contextualize the Livelihood Coping Strategy** module, and consider including different response options to avoid a high proportion of 'non-applicable' responses.
    - Enhance questions on **income sources,** including the scale, type, and timing of remittances received.

- **Continue to plan and conduct SMART surveys** taking into account the recommendations above on survey design. Continue to conduct additional nutrition screenings and systematically include methodological notes and records (i.e., tally sheets) of children screened, enabling ex-post plausibility checks.

- **Closely monitor the following contributing factors** through appropriate means (satellite imagery, surveillance mechanisms, surveys and other data collection or monitoring): conflict hotspots, population displacement, post-harvest production estimates, HH food supplies, pastoral conditions and markets, market trade routes and impacts on food supplies, key commodity market prices and terms of trade, employment rates, consumer prices indices and inflation, international remittance flows, cross border trade, liquidity and related impacts of cash-based assistance programs, internet access, humanitarian assistance from UN, NGO, and State actors, financial services, community and household support mechanisms, and others to be tailored to specific localities.

ANNEX 1: MAIN OUTCOME DATA FOR AREAS OF ANALYSIS

This section presents the outcomes for each of the areas of analysis.

A1.1. Zamzam, Abu Shouk, Al Salam camps in El Fasher locality (North Darfur)

Table 2 presents acute malnutrition prevalence estimates based on MUAC assessments among children aged 6-59 months in Al El Fasher IDP camps. The September screening provides the latest evidence from Zamzam, indicating a possible deterioration, though the nature of the methodology employed does not allow use for classification purposes. Evidence from Abu Shouk and Al Salam camps is still lacking, as noted in the July FRC review.

Table 2. Acute malnutrition estimates among children aged 6-59 months in Zamzam camp (El Fasher), January and September 2024.

Locality	Population group	Data collection period	GAM by WHZ		GAM by MUAC	
			Number of children	% (95% CI)	Number of children	% (95% CI)
El Fasher	Zamzam camp	Jan-24	-	-	659	23.1% (18.4 – 28.5)
El Fasher	Zamzam camp	April 2024*	-	-	46,790	29.40%
El Fasher	Zamzam camp	September 2024*	-	-	29,355	33.80%

Source: MSF
**These screenings were not directly employed for classification purposes.*

Table 3 presents mortality estimates from MSF's January rapid nutrition and mortality assessment for Zamzam camp, referenced in the August FRC review. Evidence remains unavailable for Abu Shouk and Al Salam camps, as previously noted in the same review.

Table 3. Mortality estimates in Zamzam camp (El Fasher), January 2024.

Locality	Population group	Data collection period	CDR/10,000/people/day	U5DR/10,000/people/day
			CDR (95% CI)	U5DR (95% CI)
El Fasher	Zamzam camp	Jan-24	1.9 (1.5 – 2.4)	2.0 (1.1 – 3.6)

Source: MSF

A1.2. IDPs and Residents in Western Nuba mountains (West and South Kordofan State)

MSNA data were made available to the FRC for the Nuba mountains. The tables below present the results for Food consumption (FCS, rCSI, HHS) and Livelihoods (LCS) indicators for Western Nuba region disaggregated for IDPs and Residents (Table 4). For residents in Western Nuba, the results have to be read with caution as the sample is not statistically strong. This also applies to Table 5 that presents the detail of results for the strategies used to calculate the indicator.

Table 4. Food security outcome data for IDPs and Residents in Western Nuba Mountains, MSNA June-July 2024.

Anonymous MSNA: Western Nuba (June-July 2024)																
Region	Sample (n=)	Food Consumption Score (FCS) 21/35			reduced Coping index (rCSI)			Household Hunger Scale (HHS)					Livelihood Coping Strategies (LCS)			
		Acceptable	Borderline	Poor	Low	Medium	High	None	Little	Moderate	Severe	Very severe	None	Stress	Crisis	Emergency
Western Nuba IDPs	172	2%	5%	93%	5%	48%	47%	0%	0%	61%	23%	16%	26%	16%	36%	22%
Western Nuba Residents	45	2%	13%	84%	0%	49%	51%	2%	0%	67%	16%	16%	22%	27%	31%	20%

Source: anonymous

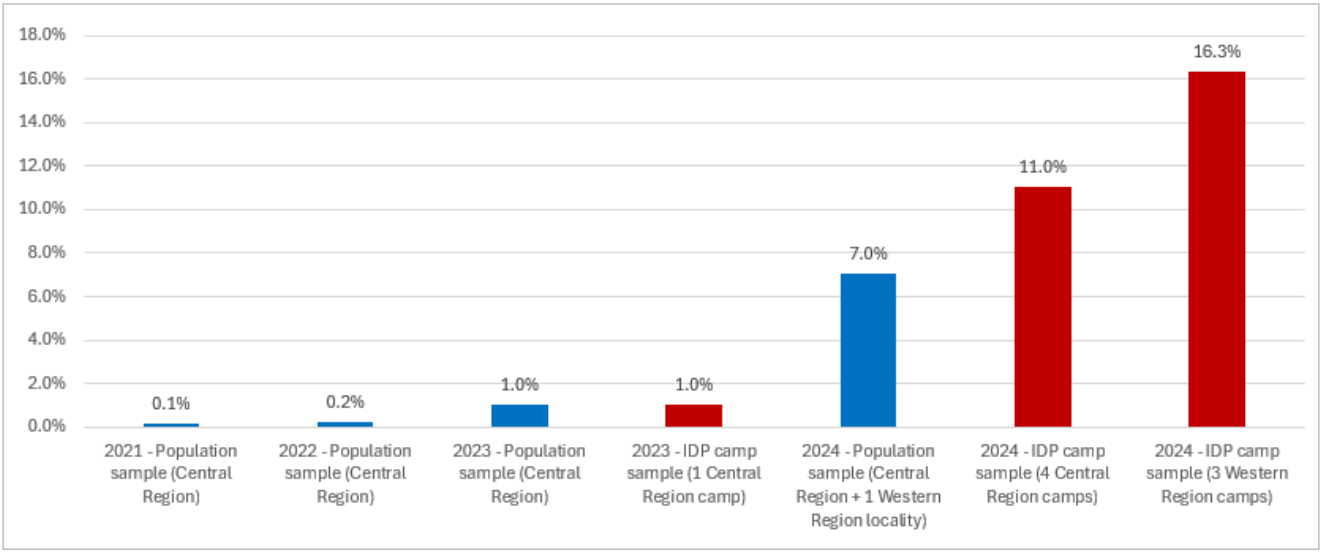
Table 5. HHS outcomes for IDPs and Residents in Central and Western Nuba Mountains, MSNA June-July 2024

Region	Total (n=)	HHS Overall (%)					HHS Question 1 (%)				HHS Question 2 (%)				HHS Question 3 (%)			
		Phase 1 (%)	Phase 2 (%)	Phase 3 (%)	Phase 4 (%)	Phase 5 (%)	None	Rarely (1-2 times)	Sometimes (3 - 10 times)	Often (more than 10 times)	None	Rarely (1-2 times)	Sometimes (3 - 10 times)	Often (more than 10 times)	None	Rarely (1-2 times)	Sometimes (3 - 10 times)	Often (more than 10 times)
Central Nuba Mountains - IDPs	236	5%	3%	65%	17%	11%	7%	28%	42%	23%	8%	36%	43%	13%	22%	37%	33%	8%
Western Nuba Mountains - IDPs	172	-	-	60%	23%	16%	10%	19%	51%	19%	-	31%	41%	28%	20%	24%	34%	22%
Central Nuba Mountains - Residents	767	6%	5%	71%	11%	7%	11%	38%	38%	13%	11%	40%	40%	9%	29%	39%	27%	5%
Western Nuba Mountains - Residents	45	2%	0%	67%	16%	16%	7%	36%	47%	11%	2%	24%	56%	18%	11%	42%	27%	20%

Source: anonymous

As shown in Figure 1 below, the historical trend on HHS shows an increase of households experiencing severe hunger in the Nuba Mountains (Western and Central) over time, between 2021 and 2024.

Figure 1. Prevalence of Households experiencing very severe hunger by HHS in Western and Central Nuba Mountains: 2021-2024 trends.



Source: anonymous

Table 6 shows shows Acute Malnutrition estimates from SMART surveys conducted in Western Nuba Mountains, covering residents and IDPs in sites. Both surveys reported Global Acute Malnutrition exceeding IPC AMN Phase 5 (Extremely Critical) thresholds using WHZ and MUAC. Data quality checks on the SMART Surveys from anonymous sources have been conducted by the SMART initiative, which validated the data for its use in an IPC analysis.

Table 6. Acute malnutrition estimates among children aged 6-59 months in the Western Nuba Mountains, SMART 15 August to 10 September 2024.

State	Region	County	Population group	Data collection period	GAM by WHZ		GAM by MUAC	
					Number of children	% (95% CI)	Number of children	% (95% CI)
South Kordofan	Western Nuba	Dilling, Habila and Al Lagowa	IDP sites	15 August to 10 September 2024	410	36.3% (31.8 - 37.1)	424	22.7% (18.9 - 27.0)
South Kordofan	Western Nuba	Dilling, Habila, Al Lagowa, As Sunut	Residents	12 August to 10 September	645	31.2% (25.8 - 37.1)	669	25% (20.0 - 30.7)

Source: anonymous

Table 7 presents mortality estimates for populations in and outside IDP sites. Estimates inside IDP sites correspond to IPC Phase 4 (Emergency) while outside correspond to IPC Phase 3 (Crisis).

Table 7: Mortality estimates in the Western Nuba Mountains, SMART 15 August to 10 September 2024.

Region	County	Data collection period	CDR/10,000/people/day	U5DR/10,000/people/day
			CDR (95% CI)	U5DR (95% CI)
Western Nuba Mountains - IDPs	Dilling, Habila and Al Lagowa	15 August to 10 September 2024	1.07 (0.73 - 1.57)	0.44 (0.12 - 1.58)
Western Nuba - Residents	Dilling, Habila, Al Lagowa, As Sunut	12 August to 10 September	0.86 (0.54 - 1.38)	1.04 (0.49 - 2.18)

Source: anonymous

A1.3. IDPs and Residents in Central Nuba Mountains (West and South Kordofan State)

Some data were collected in the Central Nuba Mountains during a MSNA in June – July 2024, distinguishing the situation of the IDPs and the resident population. Table 8 below shows the results of the outcome indicators related to food consumption (FCS, rCSI, and HHS) and livelihoods (LCS).

Table 8. Food security outcome data for IDPs and Residents in Central Nuba Mountains, MSNA June-July 2024.

Anonymous MSNA: Central Nuba Mountains (June-July 2024)																
Region	Sample (n=)	Food Consumption Score (FCS) 21/35			reduced Coping index (rCSI)			Household Hunger Scale (HHS)					Livelihood Coping Strategies (LCS)			
		Acceptable	Borderline	Poor	Low	Medium	High	None	Little	Moderate	Severe	Very severe	None	Stress	Crisis	Emergency
Central Nuba Mountains - IDPs	236	6%	25%	68%	4%	41%	55%	5%	3%	65%	17%	11%	21%	23%	36%	20%
Central Nuba Mountains - Residents	766	7%	29%	64%	7%	45%	48%	6%	5%	71%	11%	7%	13%	22%	49%	17%

Source: anonymous

Table 9 shows acute malnutrition estimates from SMART surveys in the Central Nuba Mountains, South Kordofan, covering populations in and outside IDP sites. Both surveys reported acute malnutrition at IPC AMN Phase 4 (Critical) using WHZ, and between IPC Phase 3 and 4 in IDP sites, and between IPC Phase 2 and 3 outside, using MUAC.

Table 9: Acute malnutrition estimates among children aged 6-59 months in the Central Nuba Mountains, SMART 8 August to 09 September 2024.

Region	County	Data collection period	GAM by WHZ		GAM by MUAC	
			Number of children	% (95% CI)	Number of children	% (95% CI)
Central Nuba Mountains - IDPs	Delami, Western Kadugli, Um Durein	Aug-24	335	18.4% (14.9 – 22.6)	401	10% (7.4 – 13.3)
Central Nuba Mountains - Residents	Delami, Talawdi, Western Kadugli, Um Durein Heiban, Al Buram (Thobo)	08 August to 09 September 2024	828	15.1% (12.6 – 18.1)	844	7.8% (5.8 – 10.5)

Source: anonymous

Table 10 presents mortality estimates for populations in and outside IDP sites. Estimates inside IDP sites correspond to IPC Phase 4 (Emergency) while outside correspond to IPC Phase 3 (Crisis).

Table 10: Mortality estimates in the Central Nuba Mountains, SMART, 8 August to 9 September 2024.

Region	Locality	Data collection period	CDR/10,000/people/day CDR (95% CI)	U5DR/10,000/people/day U5DR (95% CI)
Central Nuba Mountains - IDPs	Delami, Western Kadugli, Um Derein	12-29 August 2024	1.24 (0.84 - 1.83)	0.71 (0.24 - 2.07)
Central Nuba - Residents	Delami, Talawdi, Western Kadugli, Um Durein, Heiban, Al Buram	08 August to 09 September 2024	0.99 (0.70 - 1.39)	0.74 (0.37 - 1.50)

Source: anonymous

A1.4. Localities in North Darfur: At Tawisha, Um Kadadah, Al Lait, Tawila, Melit and El Fasher

New Food Consumption outcome indicators were collected in June – August 2024 through the face-to-face MSNA survey conducted by OCHA – DTM. Table 11 presents the results of these outcome indicators (FCS, rCSI and HHS) for IDPs and resident population together.

Table 11. Food security outcome data for North Darfur mixed IDPs and residents, MSNA June-August.

MSNA OCHA-DTM: North Darfur (June-August 2024)										
LOCALITY	Sample (n=)	Food Consumption Score (FCS) (21/35)			reduced Coping index (rCSI)			Household Hunger Scale (HHS)		
		Acceptable	Borderline	Poor	Low	Medium	High	Moderate	Severe	Very severe
El Fasher	276	34%	39%	27%	30%	44%	26%	17%	0%	0%
At Tawisha	126	5%	17%	78%	56%	36%	9%	16%	0%	0%
Um Kadadah	131	76%	14%	10%	86%	7%	7%	5%	2%	1%
Al Lait	119	9%	3%	87%	36%	15%	49%	33%	0%	0%
Tawila	134	31%	69%	1%	7%	77%	16%	5%	1%	0%

Source: OCHA-DTM.

Table 12 presents acute malnutrition estimates from SMART surveys across several North Darfur localities covering resident populations. New IDP sites were excluded during the survey design, but some IDPs co-habiting with resident households may have been included. In At Tawisha, Um Kadadah, and Al Lait, acute malnutrition exceeded IPC AMN Phase 5 (Extremely Critical) thresholds based on WHZ, though MUAC indicated varying but high levels. In Tawila and Melit, WHZ-based prevalence was slightly lower than the Extremely Critical thresholds, i.e. 30% (respectively by 0.3 and 2.7 percent), with upper 95% confidence intervals crossing the threshold. In El Fasher, the survey results were disaggregated by location to allow for separate analyses

Table 12: Acute malnutrition estimates among children aged 6-59 months in localities across North Darfur, SMART August-September 2024.

Locality	Population group	Data collection period	GAM by WHZ		GAM by MUAC	
			No. of children	% (95% CI)	No. of children	% (95% CI)
At Tawisha	Resident	Aug-24	660	33.3% (29.5 – 37.4)	673	23% (18.4 – 28.4)
Um Kadadah	Resident	Aug-24	538	31.8% (27.3 – 36.6)	541	12.8% (9.5 - 17.0)
Al Lait	Resident	Aug-24	459	31.6% (25.7 – 38.2)	470	18.9% (14.7 – 24.0)
Tawila	Resident	Aug-24	548	29.7% (19.33- 35.94)	563	21.3% (17.1 – 26.3)
Melit	Resident	Aug-24	444	27.9% (22.8 - 33.7)	451	11.1% (8.4 – 14.4)
El Fasher	Rural Resident & Shagra IDP camp	Sep-24	529	21.6% (16.2 – 28.1)	547	21% (17.4 – 25.2)
El Fasher	Rural agricultural and pastoral areas only	Sep-24	318	34.4% (27.6-41.6)	330	22.7% (17.9-28.4)

Source: Nutrition Cluster partners.

Table 13 presents mortality estimates with the situation showing IPC Phase 4 (Emergency) in At Tawisha and IPC Phase 3 (Crisis) elsewhere.

Table 13: Mortality estimates in localities across North Darfur, SMART August-September 2024

Locality	Population group	Data collection period	CDR/10,000/people/day	U5DR/10,000/people/day
			% (95% CI)	% (95% CI)
At Tawisha	Resident	Aug-24	1.88 (1.31 - 2.68)	1.47 (0.75 - 2.87)
Um Kadadah	Resident	Aug-24	0.5 (0.28 - 0.89)	1.18 (0.52 - 2.68)
Al Lait	Resident	Aug-24	0.61 (0.32 - 1.02)	1.75 (0.71 - 3.78)
Tawila	Resident	Aug-24	0.32 (0.32 - 1.11)	0.71 (0.21 - 2.40)
Melit	Resident	Aug-24	0.43 (0.25 - 0.75)	1.03 (0.44 - 2.42)
El Fasher	Resident	Sep-24	0.71 (0.45 - 1.11)	1.17 (0.52 - 2.60)

Source: Nutrition Cluster partners

A1.5. Localities in South Darfur: Nyala Janoub, Nyala Shimal, Beliel, As Sunta, Buram, Shattaya, and Kas

New outcome indicators related to Food consumption (FCS, rCSI and HHS) were collected between June and August 2024 through the face-to-face MSNA survey and made available for the TWG analysis and the FR review. Table 14 below presents the results per locality.

Table 14. Food Security Outcomes for South Darfur mixed IDPs and residents, MSNA June-August.

MSNA OCHA-DTM: South Darfur (June-August 2024)										
LOCALITY	Sample (n=)	Food Consumption Score (FCS) (21/35)			reduced Coping index (rCSI)			Household Hunger Scale (HHS)		
		Acceptable	Borderline	Poor	Low	Medium	High	Moderate	Severe	Very severe
Nyala South (Janoub)	167	37%	39%	25%	17%	54%	29%	25%	1%	4%
Nyala North (Shimal)	154	25%	34%	41%	10%	42%	48%	55%	1%	1%
Shattaya	120	53%	39%	8%	4%	39%	57%	49%	2%	0%
Beliel	122	58%	29%	13%	6%	30%	65%	48%	0%	0%
As Sunta	126	13%	21%	65%	0%	48%	52%	30%	17%	10%
Buram	125	25%	16%	59%	5%	48%	47%	18%	15%	6%
Kas	129	43%	19%	38%	21%	21%	58%	40%	3%	0%

Source: MSNA OCHA-DTM.

The table 15 below shows estimates on acute malnutrition in children aged 6-23 months in Nyala Janoub, Nyala Shimal and Shattaya. Estimates in all locations were over 30%.

Table 15: Acute malnutrition estimates among children aged 6-23 months from a screening part of an immunization campaign in primary health care centers and outreach sites in South Darfur, August 2024.

State	Locality	Date of screening	Number of children (6-23 months) screened	Estimate of GAM (MUAC)
South Darfur	Nyala Janoub	Aug-24	4,810	32.20%
South Darfur	Nyala Shimal	Aug-24	2,984	34.10%
South Darfur	Shattaya	Aug-24	1,807	30.90%
South Darfur	Beliel	-	-	-
South Darfur	As Sunta	-	-	-
South Darfur	Buram	-	-	-

Source: MSF

ANNEX 2: ASSUMPTIONS FOR THE PROJECTED PERIOD DECEMBER 2024 TO MAY 2025

The table below shows the key assumptions for the most likely and the plausible worst-case scenario with reasonable chances of materializing, as laid out on the main drivers by the analysis team for these two scenarios:

Assumptions for the most likely and reasonable worst-case scenarios

Conflict

IDPs Camps (Zamzam, Abu Shouk, Al Salam). North Darfur is anticipated to continue experiencing high levels of conflict throughout the projection period. The siege of El Fasher town is likely to persist at least until early 2025, with intense fighting displacing populations from El Fasher, Abu Shouk, and Al Salam. IDPs will primarily seek refuge in Zamzam and Shagara camps, as well as Tawila town, and localities in South and West Darfur. Recently, multiple shelling in Zamzam indicates that the area is now affected by the conflict, contrary to previous assumptions. Despite this, the population of Zamzam is expected to grow through February 2025. In a worst-case scenario, intensified conflict in and around El Fasher will likely lead to an acceleration in the inflow of IDPs into Zamzam, even as the camp faces increasing military incursions and airstrikes.

Melit, Um Kadadah, At Tawisha, El Fasher, Tawila and Al Lait localities. El Fasher, Melit and Um Kadadah localities will likely continue to be contended and with high degree of intensity of conflict and siege. El Fasher will continue to be the epicentre of the conflict in Darfur at least until January 2025. Reportedly, if El Fasher town shifts control, Um Kadadah is expected to be the next target for attacks by warring parties. A further intensification and expansion of the conflict in these localities will displace an even greater number of people towards Tawila, At Tawisha and Al Lait. Under a worst-case scenario, the conflict expands and escalate north and west of El Fasher, with intensified clashes in and around El Fasher, Melit and Um Kadadah. Al Lait and At Tawisha, currently spared from conflict, under a worst-case scenario would be affected by the spillover conflict that is currently affecting the neighboring localities of West Kordofan state, on the south-eastern side of North Darfur state.

West and South Kordofan. Urban areas of West and South Kordofan, including Dilling and Kadugli, as well as some rural areas at the edge of contested territories are likely to see continued conflict among the armed parties. Other organised violence remains likely, especially in West Kordofan and South Kordofan states, where a wide range of armed actors are involved in the fighting. Conflict along major transportation corridors through El Obeid in North Kordofan remains likely through the projection period. In a worst-case scenario, Dilling would face a protracted besiegement, becoming the stage for intensified fighting between the factions surrounding the town, with large impact on the mobility of goods and IDPs to and from the town. An increased of other organised violence from a multitude of armed actors involved will fuel further displacements into the IDPs camps, with the most vulnerable population unable to flee remaining trapped in the crossfire.

South Darfur. The localities of As Salam, Nyala Janoub, Nyala Shimal, Beliel, Shattaya, Kas are expected to remain under the control of the RSF throughout the projection period. Occasional airstrikes will probably keep hitting Nyala, causing casualties and property destruction. No escalation of ground military operations is expected. However, targeted attacks on specific ethnic groups will persist, fueling displacement and deepening social fragmentation. The number of IDPs in the state is expected to increase further, with Nyala remaining the main destination for new IDPs from North Darfur joining the numerous protracted ones. The surge in IDPs will exert additional pressure on scarce resources and services, including food, water, shelter, and healthcare, especially in IDP camps. The competition over HFSA might strain the socio-economic fabric of communities, triggering tensions and civil unrest. In a worst-case scenario, fighting intensifies as SAF tries to recapture the localities of As Salam, Nyala Janoub, Nyala Shimal, and Beliel, with major displacement into the already packed IDP settlements in and around Nyala town.

Al Jazirah. The conflict between SAF and RSF is expected to continue and escalate in some hotspots as the dry season progresses, and despite international attempts to mediate. Fighting remains mostly concentrated on the riverine areas of Madani Al Kubra and Sharg Al Jazirah localities. An increase of internal displacement to other areas of Al Jazirah state, as well as Gedaref and cross-border will likely increase further. Many IDPs fleeing are those originally displaced from Khartoum to northern, eastern, and southeastern regions. Under a worst-case scenario, the current hotspots-based conflict layout would leave room to widespread fighting across most localities in the Al Jazirah state, with major displacement into Gedaref, Sennar and White Nile states, depending on the security situation in these states.

Khartoum. Sustained, intensified conflict is expected to continue affecting several locations of Khartoum including in Bahri, Jebel Awlia and Khartoum localities, while reducing in Omdurman and Karrari. It is also expected that conflict in Khartoum locality will continue focusing mainly on flash points in the locality, with medium persistence before moving to other areas. However, in a worst-case scenario, conflict would become widespread and continued, bringing in larger level of displacement and leaving little opportunity to people trapped in crossfire for fleeing the area. The major risk is for the populations of Mayo and Alingaz in Jebel Awlia and Tuti Island in Khartoum. The island is largely inhabited and will not see major return in the projection period.

Humanitarian access and supply routes

Insecurity in **North Darfur** will keep restricting humanitarian access from Chad and Port Sudan, causing major disruptions in food and nutrition assistance. Administrative hurdles will further delay aid efforts. Although trade flows will remain disrupted, they will not cease completely. Business deliveries will struggle due to armed conflicts and community checkpoints, while cash transfer programs will have limited impact due to liquidity issues and rising prices as food supplies deplete. Access to Al Fasher will remain difficult, with high transport costs for traders. Plans to scale up the Humanitarian Food Security Assistance (HFSA) may face significant challenges. Um Kadadah and Melit will remain cut off from the main routes to the south and west. Using alternative routes will pose high risks and transport costs, leaving Melit and Um Kadadah likely isolated from critical supply routes for both private and humanitarian deliveries. Tawila will also face significant supply shortages and disruptions. In a worst-case scenario, ongoing fighting could entirely block HFSA and commercial food flows into El Fasher, Melit, and Um Kadadah, leading to skyrocketing food prices and reduced availability as traders limit their activities. Additionally, localities like Al Lait and At Tawisha may be affected by spillover conflict from West Kordofan, resulting in increased insecurity and restricted mobility on currently open roads.

West and South Kordofan. Ongoing conflict in Dilling and insecurity in West and South Kordofan, including looting, high taxes, and mobility restrictions, combined with soaring fuel prices, will severely limit the access of goods and services to and from the area. This will particularly affect the majority of IDPs who rely heavily on markets for their needs. Despite some potential progress in access agreements for South Sudan to South Kordofan routes, the siege around Kadugli will continue to obstruct humanitarian food assistance corridors. While there may be some improvements in access arrangements between the SPLM-N and SAF regarding these routes, a worst-case scenario would see the siege around Dilling tightening further, eliminating humanitarian food security assistance corridors and emergency deployments. Conflict in other regions, such as Kadugli, will restrict access to humanitarian support for vulnerable residents, IDPs, and refugees.

South Darfur. The disruption of transportation and supply routes will partly hinder the movement of goods, resulting in shortages of essential supplies like food, water, and medical items. Most markets and supply chains in the region will remain operational, except for the destroyed Nyala market. However, the availability of products will be limited due to intermittent supply route disruptions, challenges in cash access, high supply costs, and persistent insecurity in Nyala. Physical access to marketplaces will likely remain problematic due to insecurity. In a worst-case scenario involving renewed conflict between the RSF and SAF, the market and supply chain situation in Nyala and surrounding areas could deteriorate significantly. Routes from Chad and South Sudan, currently used for humanitarian food assistance, would become obstructed, restricting the delivery of essential food and non-food supplies to residents and the 1.8 million IDPs—whose numbers would likely increase under such conditions. Food prices would soar significantly, and most people will not have sufficient purchasing power to access it.

Al Jazirah. The provision of food assistance to vulnerable resident populations and approximately 300,000 internally displaced persons (IDPs) in the state will continue to face significant challenges due to precarious security conditions, widespread looting, loss of humanitarian assets, and destruction of facilities. Humanitarian actors can only access the most at-risk communities after securing safety assurances and clearances from controlling military parties for specific territories or transport routes. These obstacles are expected to persist throughout the projection period.

Local social networks and remittances will remain the primary means of food access for affected communities through February 2025. In a worst-case scenario, humanitarian relief efforts could halt entirely due to ongoing violence and bureaucratic obstacles, leaving many individuals without access to food, medical care, or shelter. Although remittances will continue to flow, they are likely to decrease due to internet disruptions and liquidity shortages.

Khartoum. The expansion of conflict into Al Jazirah and the seizure of Wad Madani, a major trade hub, continue to disrupt trade flows and market functionality across the region, heavily impacting Khartoum locality. Currently, the only operational route for traders and humanitarian actors is the Dongola-Omdurman route. As a result, prices for available goods are expected to rise, further straining people's purchasing power. Khartoum, Bahri, and Omdurman remain priority areas for humanitarian assistance, with plans to support one-third of the population primarily through Emergency Response Rooms and Communal Kitchens in Khartoum city. However, in a worst-case scenario where conflict spreads beyond localized hotspots, Emergency Response Rooms may become non-functional, halting the distribution of humanitarian food assistance in Khartoum.

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ANNEX 4. TERMS OF REFERENCE FOR THE FAMINE REVIEW COMMITTEE

This Terms of Reference (ToR) outlines four aspects of the Famine Review Committee (FRC)[1], including its purpose, governance, composition, and process. This replaces the previous ToR agreed upon in 2014 by the IPC Global Steering Committee and incorporates the latest changes in protocols and processes to Famine Reviews as well as changes in the IPC governance structure. The FRC adheres to the IPC technical protocols, including those related to famine analysis and classification[2]. The IPC Famine preparation process and the roles and responsibilities of partner entities during a Famine Review are presented in Annex 1 and 2.

1. Role and Purpose

The FRC is an ad hoc specialized committee consisting of a panel of internationally renowned technical experts. The committee is activated by the IPC Global Support Unit (GSU) whenever an IPC analysis team[3] makes a Famine classification or if key stakeholders have concerns about the need for a Famine classification.

The purpose of the FRC is to provide independent and neutral technical feedback to the IPC analysis team on their IPC analysis results. The FRC serves as an additional quality assurance step to help ensure technical rigour and neutrality of IPC results related to Famine classifications. The FRC can promote building technical in case of disagreement within the analysis team. Overall, the FRC enhances the credibility of the IPC process and outcomes.

The primary function of the FRC is to critically review results from an analysis team and make a technical determination if the results are plausible or not[4]. In the case where an analysis team was not able to reach a specific conclusion regarding a Famine classification due to a breakdown in consensus, the FRC may be called upon to conduct its own analytical assessment and recommendation of a Famine classification. This includes situations when the body of evidence available does not meet the minimum requirements for a Famine classification and expert judgment must be deployed to reach a decision.

Additionally, the FRC has two other functions. As part of each Famine Review, the FRC provides recommendations to stakeholders to prevent and mitigate famine, including senior decision-makers and analysts. Also, as part of the IPC GSU's ongoing efforts to improve the IPC normative protocols, the FRC contributes to the IPC technical development processes directly related to famine analysis.

[1] While the original name was the Emergency Review Committee, in 2017 the name was changed to the Famine Review Committee.
[2] Key technical reference documents include IPC Technical Manual 3.1 and IPC-Guidance-Note-on-Famine (www.ipcinfo.org)
[3] 'Analysis team' refers to the group of experts who conducted an IPC analysis, which may be a Technical Working Group (TWG), an ad hoc Analysis Team, or an IPC-compatible partner agency.
[4] As per IPC guidelines, the current standard practice of the FRC is to state that the analysis team results are 'plausible' or implausible', however, this terminology is currently under review and may change.

2. Governance

The FRC operates within the overall structure of the IPC as governed by the IPC Global Steering Committee while maintaining independence in its analytical functions, conclusions, and outputs. The IPC GSU serves as the chair and secretariat and provides coordination support to the FRC.

The FRC liaises with the IPC Global Programme Manager and through his/her coordination informs, briefs, or otherwise engages with other IPC bodies (IPC Global Steering Committee, IPC High-Level Executive Committee, Resource Partners, IPC Country Technical Working Groups, the IPC analysis team, and other relevant stakeholders).

FRC members do not represent their employers or any other institutions with which they are affiliated during Famine Reviews. FRC members are independent of the day-to-day implementation of the IPC programme or any organization that has a relationship to the outcomes of an IPC analysis.[5]

3. Composition

The FRC consists of international technical experts in the areas of food security, livelihoods, nutrition, and health. FRC members are expected to be completely neutral to the IPC outcomes for a given analysis and are obligated to declare any potential conflicts of interest and to recuse themselves if necessary. The participation of committee members in reviews is not fixed and can change or rotate according to needs and may increase or decrease as needed.[6]

The IPC Global Programme Manager will assign senior officers of the IPC GSU to support Famine Reviews by assisting with coordination, secretarial, or organizational tasks. As described in the IPC Special Additional Protocols for Famine Classifications,[7] the IPC GSU Famine Review Preparation Team will provide technical support for this process.

4. Process

Activation of the FRC

The FRC is activated when at least one of the following conditions is met:

- The analysis team concludes that at least one area is classified in IPC Acute Food Insecurity (AFI) Phase 5 (Famine).
- There is a breakdown in technical consensus within the analysis team regarding possible IPC AFI Phase 5 (Famine) classification.
- The IPC GSU is aware of evidence indicating the possibility of IPC AFI Phase 5 (Famine) and chooses to activate the FRC.

[5] Given their expertise, FRC members may be employed in an advisory capacity on normative technical development initiatives of the IPC.

[6] May be subject to FRC members' availability or the number of areas under review.

[7] IPC-Guidance-Note-on-Famine.pdf (ipcinfo.org)

- An IPC Global Partner officially requests the IPC GSU to activate it due to concerns about whether an area is in IPC Phase 5 (Famine).

Famine Reviews are mandatory for both IPC products and IPC-compatible products and are to be conducted before the analysis team releases findings[8].

Famine Review Activities

A Famine Review includes two main steps:

STEP 1: Famine Review Preparation

The Famine Review preparation is led by the Global Support Unit with inputs from experts from IPC Global Partners who have not been involved in the IPC analysis. This review consists of a preliminary screening of the Famine classification to verify adherence to IPC protocols, preparing evidence summaries, and providing the Famine Review Committee with general recommendations. More information on this step is available in Annex 1.

STEP 2: FRC Famine Review

- **Evidence review:** FRC members review available documentation and evidence to determine if a Famine review is feasible, considering the availability and adequacy of data, as well as the apparent level of severity. Following an induction meeting with the Famine Review Preparation Team and the initial technical consultation with the country IPC TWG or analysis team, the review process may identify data gaps or aspects needing further exploration and analysis, including possible travel to conduct field visits, face-to-face visits near the location of review, or hybrid analysis approaches should these present an added value in the Famine Review. Upon review of the available documentation and adequacy of evidence, the FRC is entitled not to conduct the Famine Review. This may occur when the available data or evidence are not sufficient to conduct the Famine review or when there are no signs of Famine to start with, as assessed by the multi-partner review team or the FRC.

- **Technical consultations:** Consultations are held with the analysis team as well as with the Famine Review Preparation Team. The technical review process may also include consultations with key informants to further technical understanding, access additional data, and gather context information, such as from experts who recently visited the areas under review. Key Informant Interviews are organized by the IPC GSU and help ensure that a diversity of stakeholder organizations is consulted by the FRC during its review. Key Informants may include local or national government officials, country technical experts, resource partners, and others. FRC consultations and all data and analysis submitted to a Famine review remain confidential unless explicitly authorized by the key informants interviewed or organizations sharing data and analysis.

- **Analysis and conclusions:** The FRC assesses the reliability of the evidence supporting the analysis team classification, the interpretation and documentation of evidence and analysis, and the overall conclusion on phase classification and population figures. The FRC concludes whether the findings of the analysis team are plausible or implausible, and in the case where an analysis team cannot reach a technical consensus, the FRC may reach its analytical conclusions on the appropriateness of a Famine classification.

- **Modify analysis parameters if necessary:** As part of the review process, some analysis parameters can be subject to modification by the FRC:
  - ***Geographical scope:*** The FRC is entitled to enlarge, reduce, or modify the original geographical scope of the analysis (IPC analysis unit) employed by the analysis team and submitted to the FRC. This can be done when a different disaggregation is instrumental in better identifying hotspots or excluding areas not presenting the same conditions as the area under review. In addition, the FRC might decide to request access to additional data for similar or nearby areas. This applies to any area of interest that could provide useful information on the areas under analysis, areas with a risk of Famine analysis, or additional areas of concern communicated to the FRC via the IPC GSU or through other channels.
  - ***Period of analysis:*** The FRC is entitled to reduce or extend the original period of analysis including a projection employed by the analysis team. This can be done when a different timeframe definition is instrumental to better analyse and highlight the severity of conditions.
  - ***Use of additional evidence:*** During a Famine Review, evidence not employed by the analysis team might become available to the FRC. The FRC is entitled to employ all available information, provided it respects the IPC requirements in terms of time and method reliability. Any data received during technical consultations are to remain confidential and internal to the members of the FRC and are not to be publicly released or referenced, by the FRC or the IPC GSU, unless approved by its respective owner.

- **Draft the FRC report:** The FRC members contribute to the production and finalization of the FRC report and to verifying the technical soundness of additional related documents that may be published alongside the FRC report upon request. The IPC report includes a conclusion on the plausibility of the famine classification, recommendations for senior decision-makers and Resource Partners, for the Humanitarian Country Team as well as recommendations on data collection and analysis.

- **Prepare and present FRC findings:** The FRC conclusions and recommendations are communicated by the Global Support Unit to the analysis team. The FRC, with the support of the IPC GSU, produces a concise presentation to be used in briefings held with the analysis team and other key stakeholders (national government or de-facto authorities, heads of agencies, UN Country Teams, regional entities, etc.). Additional briefings are usually organized with the IPC Global Steering Committee and resource partners.

- **Disseminate the FRC report:** The Famine Review concludes with the dissemination of the FRC report. The IPC GSU coordinates with the analysis team to the extent possible to align the dissemination and communication processes. The full FRC report and relevant annexes or additional material are published on the IPC webpage[9] together with the IPC country report, whenever possible, and further circulated through existing IPC communication channels.

Famine Review Activities

Once activated, the FRC is considered active until available evidence confirms that the extreme severity depicted in the previous Famine Review no longer prevails (no evidence at or above Famine thresholds and contributing factors showing signs of improvements). The analysis team is responsible for monitoring the situation closely and producing frequent updates, with the IPC Global Support Unit when needed.

Although not a formal function of the FRC, its members might provide ad hoc support on an individual basis, to IPC activities following the publication of the FRC report or in between IPC analyses. Analysis teams are encouraged to share additional support requests or technical queries (data collection efforts, survey, or sampling design, etc.) for the FRC via IPC GSU. This is recommended when IPC Phase 5 (Famine) classifications were projected or identified from risk of Famine analyses.

ANNEX 5. SUMMARY OF METHODS FOR OUTCOME DATA AND CONTRIBUTING FACTORS

Disclaimer: This annex has been prepared by the IPC Global Support Unit based on inputs from the multi-partner Famine Review Preparation Team in support of the work of the Famine Review Committee.

I. Outcome indicators

Food Security indicators

The FRC analysis used two main sources of food security data: 1) a country-wide Multisectoral Needs Assessment (MSNA) conducted by OCHA and IOM DTM, and 2) an anonymous MSNA for Western and Central Nuba Mountains (South and West Kordofan).

In addition, where updated data on outcome indicators was not available, data previously available during the initial Sudan analysis was also employed (i.e., mVAM, FSMS, and IFPRI data). For data quality checks on those data, please refer to Annex 4 of the previous FRC Sudan report, page 29 to 47: IPC_Famine_Review_Committee_Report_Sudan_July2024.pdf

MSNA OCHA-DTM

Methodology

The MSNA conducted by OCHA and IOM DTM was a country-wide survey, collected through a combination of face-to-face and remote (phone-based) interviews, depending on security conditions and accessibility. Data collection lasted approximately 11 weeks, from 6 June 2024 to 21 August 2024. For the MSNA household survey, a total of 26,660 households were surveyed, with 22,512 surveys retained in the final data set after data checking and cleaning. In total, all 188 localities in Sudan were covered. Household surveys were conducted in 162 localities across Al Jazirah, Central Darfur, East Darfur, Kassala, Gedaref, North Darfur, North Kordofan, Northern, Red Sea, River Nile, South Darfur, South Kordofan, West Darfur, West Kordofan and White Nile states, while the remaining 25 localities across Khartoum, Al Jazirah, Gedaref, Sennar and South Kordofan states were covered through other means (e.g. key informant interviews, due to the security situation and/or weather conditions. The aim was to obtain representative household-level data from both displaced and non-displaced populations.

The questionnaire was developed in consultation with cluster and cross-cutting leads. Due to the security situation, including frequent internet and network outages, a methodology for representative sampling in inaccessible localities was developed, complemented by indicative (non-representative) key informant interviews in partially or fully inaccessible areas where representative sampling was not feasible. DTM maintains a regular database tracking accessibility (based on the freedom of movement of DTM enumerators) across all 188 localities in Sudan. This data informed data collection method for each locality.

The overall sampling framework for the household survey was based on simple random sampling at locality level, utilising the population baseline data from HNO 2023 for the non-displaced population and on the latest DTM data for IDPs (Sudan Mobility Update 02), with 90% confidence level and 10% margin of error and a presumed design effect of 1.5. Additionally, a proportional sampling of both host communities and IDPs was utilized for each locality to try to ensure that both population groups were represented. To ensure the target was reached for each locality, a buffer of approximately 15% was adopted per locality. In the 28 localities where random sampling could not be fully implemented as planned, purposive sampling was used. In 21 localities, the sample was too small to achieve the targeted confidence level and margin of error.

DTM enumerators collected data through household-level surveys with heads of households. Responses were recorded using Kobo Collect, primarily through face-to-face interviews. In cases where security conditions made the use of tablets or mobile phones unsafe, interviews were conducted on paper, with data transferred to Kobo by dedicated teams in each state. Where face-to-face interviews were not possible due to security or weather conditions, remote household surveys were conducted via phone interviews.

This dataset included key food security indicators (i.e. food consumption score (FCS), reduced coping strategies (rCSI) and household hunger scale (HHS)). It also included key information on contributing factors, ranging from information on financial services, main income sources, reception of humanitarian food security assistance, to access to agricultural land, health and nutrition services.

Sample review

Where data was available from the MSNA OCHA-DTM for the areas under review in North Darfur, South Darfur, and South and West Kordofan, data were representative at the locality level. While a proportional sampling of both host communities and IDPs was utilized for each locality to try to ensure that both population groups were represented, the sample was not designed to be representative by population group (i.e. IDPs vs. residents) at locality level. While data was not representative by household status (IDPs vs. residents), this data was analysed by the Famine Review Preparation Team (FRPT) as indicative.

For the areas of concern, included in the Famine Review, data was largely collected face-to-face. However, in South and West Kordofan, areas were complemented by phone surveys, ranging from 2% in Kadugli to 31 % in Al Lagowa.

The data received for the purposes of this analysis did not indicate the date of data collection, so it was not possible to do a full sample review. In addition, the data received for quality checks and review had varying levels of sample sizes from the initial submission (prior to the projection update analysis of the Technical Working Group), compared to when asked for the raw data set for quality checks.

Data quality checks

The data that was used during the Sudan IPC TWG projection update analysis was reviewed, re-analysed and subject to quality checks for the Famine Review. However, the data that was received for review had a different sample size to that of which was shared during the TWG analysis update, both overall and by localities of interest to the review. For that reason, it was not possible to achieve the same results for the food security indicators (i.e., FCS, rCSI, and HHS). Nevertheless, results were recalculated for the purposes of the FRPT.

While a comparative analysis of the main food security outcome indicators between IDPs and residents bears limitations due to the very small sample size, indicative results were calculated. Data disaggregated by residents and IDPs (though only indicative, due to a very small sample size and given that the sampling frame was not designed to be representative by population group), showed that that IDPs were unequivocally worse off than residents in the areas of interest, as expected.

In both instances, there was a notably poor convergence between the results for the FCS and HHS, where households with very poor FCS did not have a correspondingly severe HHS. Overall, the severe and very severe categories for HHS (indicative of AFI Phase 4 and Phase 5, respectively, were generally very low compared to the expectation considering the very poor FCS, as well as other contributing factor information regarding lack of production and livelihoods.

There are a few possible explanations for this, which should be further investigated in the future to ensure that the module is correctly applied. Possible explanations include translation errors from English to Arabic, need for further enumerator training and better field supervision, or lack of social acceptance of admitting to having no food or going to bed hungry. In addition, this indicator was recently introduced in Sudan food security surveys, and further enumerator training and supervisor support is likely needed.

Table 1. Overview of MSNA OCHA-DTM data

MSNA OCHA-DTM: Overview of Survey Sample									
State	Locality	Survey type		Household Status		Settlement Type			
		Face to face	Phone	IDP (%)	Non-IDP (%)	Camp	Informal	Rural	Urban
North Darfur	El Fasher	100%	0%	50%	50%	9%	7%	21%	63%
	At Tawisha	100%	0%	7%	93%	0%	0%	9%	91%
	Melit	100%	0%	31%	69%	1%	3%	28%	69%
	Um Kadadah	100%	0%	25%	75%	0%	0%	0%	100%
	Al Lait	100%	0%	29%	71%	0%	0%	0%	100%
	Tawila	100%	0%	100%	0%	50%	2%	18%	30%
South Darfur	Shattaya	100%	0%	0%	100%	0%	0%	55%	45%
	As Sunta	100%	0%	63%	37%	0%	18%	26%	55%
	Buram	100%	0%	51%	49%	0%	0%	24%	76%
	Beliel	100%	0%	45%	55%	48%	0%	27%	24%
	Nyala Shimal	100%	0%	80%	20%	79%	0%	2%	19%
	Nyala Janoub	100%	0%	25%	75%	19%	0%	6%	75%
South Kordofan	Dilling	91%	9%	28%	72%	0%	0%	5%	95%
	Kadugli	98%	2%	59%	41%	1%	2%	0%	97%
	Habila	81%	19%	17%	83%	7%	1%	92%	1%
	Delami	91%	9%	32%	68%	0%	0%	4%	96%
West Kordofan	As Sunut	79%	21%	3%	98%	0%	3%	54%	43%
	Al Lagowa	69%	31%	36%	64%	0%	1%	51%	48%

Source: MSNA OCHA-DTM

Table 2. MSNA OCHA-DTM Income, markets and humanitarian assistance

MSNA OCHA-DTM: Income and markets																		
State	Locality	Faced difficulties reaching markets	Which of the following financial services are accessible to you in the local area?						In the past 30 days, what were the three main sources of income for the household?									Humanitarian Assistance (Food, NFIs) last 12 months
			Mobile money	Liquidity	Bank	Hawala	ATM	None	Casual labour	Own business	Agricultural sales	No income	Support family or friends	HFSA	Salaried work	Unknown	Prefer not to answer	
North Darfur	El Fasher	61%	48%	38%	14%	20%	0%	9%	35%	21%	19%	41%	17%	1%	4%	3%	0%	10%
	At Tawisha	40%	98%	24%	79%	4%	2%	0%	98%	94%	84%	0%	5%	0%	0%	1%	0%	0%
	Melit	94%	89%	75%	2%	23%	0%	1%	86%	81%	71%	8%	5%	0%	0%	2%	2%	6%
	Um Kadadah	95%	27%	4%	91%	3%	0%	5%	10%	15%	2%	18%	2%	0%	4%	17%	35%	2%
	Al Lait	100%	20%	100%	0%	56%	0%	0%	34%	17%	0%	54%	0%	0%	8%	0%	0%	0%
	Tawila	67%	99%	69%	1%	0%	0%	1%	84%	18%	5%	7%	28%	0%	0%	1%	0%	0%
South Darfur	Kas	43%	85%	29%	2%	22%	0%	5%	55%	41%	36%	5%	11%	2%	6%	0%	0%	16%
	Shattaya	72%	81%	16%	0%	24%	0%	7%	48%	27%	15%	34%	17%	0%	0%	0%	0%	2%
	As Sunta	64%	36%	13%	33%	0%	1%	17%	34%	6%	6%	45%	6%	0%	1%	0%	0%	9%
	Buram	74%	42%	15%	18%	2%	0%	24%	31%	7%	3%	58%	1%	0%	2%	0%	0%	3%
	Beliel	80%	62%	60%	0%	0%	0%	7%	93%	18%	21%	3%	35%	1%	1%	0%	0%	27%
	Nyala Shimal	72%	74%	8%	3%	7%	0%	18%	49%	31%	5%	27%	8%	3%	2%	0%	0%	37%
	Nyala Janoub	78%	68%	26%	8%	7%	1%	17%	51%	38%	5%	16%	10%	0%	5%	0%	0%	15%
South Kordofan	Dilling	76%	98%	3%	49%	14%	0%	0%	27%	47%	8%	4%	87%	4%	1%	0%	0%	7%
	Kadugli	97%	99%	0%	58%	96%	3%	0%	83%	61%	14%	0%	47%	2%	14%	0%	0%	29%
	Al Buram	100%	50%	0%	50%	0%	50%	0%	100%	0%	50%	0%	0%	0%	0%	0%	0%	0%
	Habila	89%	24%	97%	6%	21%	0%	0%	30%	10%	12%	56%	19%	15%	0%	0%	0%	62%
	Delami	91%	99%	1%	1%	9%	0%	0%	48%	34%	36%	26%	12%	0%	16%	0%	0%	1%
West Kordofan	As Sunut	46%	94%	31%	1%	21%	0%	6%	12%	51%	41%	27%	14%	1%	0%	0%	0%	0%
	Al Lagowa	41%	77%	23%	10%	0%	0%	7%	84%	22%	41%	2%	7%	0%	8%	0%	0%	6%

Source: MSNA OCHA-DTM

Table 3. MSNA OCHA-DTM: Agricultural access

MSNA OCHA-DTM: Income and markets												
State	Locality	Had access to agricultural land in the past 6 months	If no, what are issues barring you to access agricultural land?									
			Security concerns	Physical barriers	Disputed ownership	Unlawful occupation	Rental fee dispute	Unclear processes	Inheritance issues	Lack of documents	Threat of eviction	Disability	Other
North Darfur	El Fasher	28%	54%	42%	5%	22%	1%	4%	3%	1%	4%	2%	13%
	At Tawisha	69%	3%	69%	3%	0%	5%	0%	0%	10%	26%	0%	13%
	Melit	42%	63%	2%	0%	2%	0%	0%	0%	11%	3%	0%	25%
	Um Kadadah	5%	90%	19%	16%	71%	13%	54%	1%	1%	0%	0%	0%
	Al Lait	43%	15%	74%	1%	0%	19%	0%	24%	0%	13%	0%	1%
	Tawila	48%	85%	62%	1%	54%	0%	19%	4%	0%	3%	1%	3%
South Darfur	Kas	53%	47%	19%	8%	34%	0%	4%	0%	4%	34%	2%	0%
	Shattaya	98%	0%	50%	0%	0%	0%	0%	0%	0%	0%	50%	0%
	As Sunta	61%	16%	73%	2%	0%	2%	2%	0%	0%	2%	2%	11%
	Buram	33%	35%	52%	1%	0%	0%	0%	0%	1%	0%	1%	15%
	Beliel	52%	70%	68%	20%	23%	0%	2%	2%	0%	0%	0%	18%
	Nyala Shimal	12%	36%	58%	3%	12%	5%	8%	1%	1%	0%	5%	15%
	Nyala Janoub	16%	44%	56%	5%	6%	0%	0%	0%	2%	2%	5%	12%
South Kordofan	Dilling	13%	73%	18%	0%	2%	2%	0%	0%	7%	1%	0%	9%
	Kadugli	23%	95%	53%	2%	5%	19%	6%	5%	10%	4%	0%	2%
	Al Buram	0%	50%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Habila	16%	53%	53%	2%	1%	4%	4%	0%	0%	2%	1%	2%
	Delami	25%	90%	34%	1%	1%	2%	2%	7%	2%	0%	0%	1%
West Kordofan	As Sunut	54%	59%	41%	0%	4%	4%	14%	0%	4%	4%	2%	14%
	Al Lagowa	59%	24%	20%	0%	20%	52%	4%	0%	4%	4%	0%	12%

Source: MSNA OCHA-DTM

Table 4. MSNA OCHA-DTM WASH elements

MSNA OCHA-DTM WASH																			
State	Locality	Main water source for drinking									Main toilet type						Time to fetch water			
		Handpumps or boreholes	Protected well	Water seller/ kiosks	Public tap	Rainwater collection	Surface water	Tanker trucks	Unprotected well	Unknown	Flush toilet	Pit latrine with no slab	Pit latrine with slap	Pit VIP	Open hole	Open defecation	0-15 min	16-30 min	31-60 min	more than 60 min
North Darfur	El Fasher	12%	52%	21%	1%	0%	0%	2%	7%	4%	22%	14%	33%	9%	12%	8%	19%	26%	25%	29%
	At Tawisha	0%	0%	2%	41%	0%	0%	0%	2%	54%	7%	10%	22%	2%	40%	1%	56%	22%	13%	9%
	Melit	77%	5%	2%	0%	0%	0%	14%	2%	0%	18%	6%	42%	3%	27%	4%	3%	7%	4%	85%
	Um Kadadah	3%	3%	89%	2%	0%	0%	0%	3%	0%	70%	9%	17%	3%	1%	0%	11%	47%	31%	11%
	Al Lait	0%	90%	0%	8%	0%	0%	0%	2%	0%	0%	45%	9%	45%	0%	0%	3%	1%	8%	89%
	Tawila	6%	87%	0%	0%	0%	1%	0%	5%	0%	1%	18%	74%	1%	3%	1%	12%	31%	37%	21%
South Darfur	Kas	32%	8%	42%	10%	1%	1%	0%	7%	0%	19%	14%	46%	7%	10%	5%	3%	8%	50%	39%
	Shattaya	0%	45%	3%	0%	0%	16%	1%	36%	0%	0%	33%	1%	0%	1%	64%	8%	29%	36%	27%
	As Sunta	2%	33%	24%	1%	2%	5%	0%	7%	26%	1%	2%	1%	0%	80%	16%	52%	22%	12%	14%
	Buram	2%	6%	38%	5%	2%	8%	4%	28%	5%	3%	3%	3%	1%	74%	10%	22%	34%	21%	23%
	Beliel	31%	26%	23%	17%	1%	0%	0%	1%	0%	4%	41%	19%	9%	24%	2%	32%	30%	30%	7%
	Nyala Shimal	10%	6%	70%	3%	1%	0%	5%	3%	1%	5%	18%	57%	10%	4%	5%	23%	28%	24%	25%
	Nyala Janoub	5%	10%	74%	5%	0%	0%	2%	3%	1%	8%	19%	32%	36%	1%	4%	26%	22%	19%	34%
South Kordofan	Dilling	97%	0%	2%	2%	0%	0%	0%	0%	0%	3%	15%	60%	1%	21%	1%	7%	14%	26%	53%
	Kadugli	81%	0%	1%	17%	0%	0%	0%	0%	0%	41%	11%	13%	1%	33%	1%	34%	30%	35%	1%
	Al Buram	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	50%	50%	0%
	Habila	45%	1%	0%	0%	32%	0%	18%	0%	1%	9%	15%	21%	6%	28%	19%	20%	16%	21%	42%
	Delami	98%	0%	0%	0%	0%	0%	1%	1%	1%	0%	81%	12%	0%	6%	1%	17%	79%	4%	1%
West Kordofan	As Sunut	82%	0%	0%	3%	12%	3%	0%	0%	0%	0%	56%	8%	2%	18%	15%	11%	45%	39%	5%
	Al Lagowa	18%	38%	0%	1%	15%	1%	1%	22%	3%	2%	23%	12%	0%	48%	15%	32%	28%	34%	6%

Source: MSNA OCHA-DTM

Table 5. MSNA OCHA-DTM Income, markets and humanitarian assistance

Top three priority household needs											
State	**Locality**	Food	Health	Water	Livelihoods	Education	NFIs	Latrines	Cash vouchers	Shelter	No needs
North Darfur	El Fasher	69%	59%	51%	29%	31%	10%	7%	11%	4%	7%
	At Tawisha	34%	94%	91%	10%	39%	1%	2%	3%	2%	0%
	Melit	94%	82%	94%	10%	7%	2%	3%	2%	1%	2%
	Um Kadadah	94%	88%	1%	53%	28%	2%	1%	11%	0%	2%
	Al Lait	100%	99%	0%	3%	82%	14%	0%	0%	1%	0%
	Tawila	100%	91%	20%	49%	8%	21%	1%	0%	7%	0%
South Darfur	Kas	82%	48%	18%	53%	31%	22%	12%	16%	12%	0%
	Shattaya	80%	91%	25%	23%	22%	38%	8%	9%	1%	0%
	As Sunta	92%	53%	42%	53%	22%	22%	2%	6%	6%	0%
	Buram	95%	64%	48%	34%	18%	14%	2%	18%	2%	0%
	Beliel	89%	72%	53%	30%	16%	21%	3%	1%	7%	0%
	Nyala Shimal	82%	60%	52%	21%	21%	18%	1%	17%	8%	0%
	Nyala Janoub	79%	47%	38%	34%	29%	27%	4%	29%	5%	0%
South Kordofan	Dilling	99%	82%	95%	19%	1%	0%	2%	1%	1%	0%
	Kadugli	99%	57%	11%	64%	5%	18%	4%	22%	19%	0%
	Al Buram	100%	50%	50%	50%	0%	0%	0%	0%	50%	0%
	Habila	97%	58%	28%	27%	28%	5%	19%	18%	14%	1%
	Delami	87%	63%	6%	23%	9%	47%	9%	26%	20%	0%
West Kordofan	As Sunut	96%	64%	41%	39%	13%	27%	2%	0%	11%	0%
	Al Lagowa	99%	74%	25%	38%	47%	6%	4%	1%	6%	0%

Source: MSNA OCHA-DTM

Table 6. Barriers to health services

MSNA OCHA-DTM Health barriers													
State	Locality	What challenges and barriers do members of your household face in accessing health services or information?											
		No barriers	No functional facility nearby	Medicine unavailable	Long wait time	Cost of consult	Cost of treatment	Cost of transport	Too far	Physical barriers	No transport	Insufficient staff	Unsafe to travel	Untrained staff
North Darfur	El Fasher	10%	8%	42%	27%	35%	42%	17%	18%	21%	13%	17%	14%	4%
	At Tawisha	84%	0%	0%	0%	2%	0%	0%	0%	17%	0%	1%	0%	0%
	Melit	0%	55%	77%	31%	25%	30%	10%	14%	2%	0%	15%	2%	0%
	Um Kadadah	6%	0%	26%	8%	68%	69%	41%	5%	21%	27%	6%	31%	0%
	Al Lait	2%	0%	1%	65%	4%	11%	0%	80%	14%	65%	0%	18%	1%
	Tawila	0%	1%	81%	9%	25%	69%	18%	8%	63%	0%	7%	1%	4%
South Darfur	Kas	0%	42%	65%	10%	9%	19%	6%	4%	33%	13%	29%	11%	2%
	Shattaya	1%	53%	59%	3%	4%	17%	14%	4%	21%	0%	47%	0%	7%
	As Sunta	3%	4%	37%	1%	21%	31%	5%	13%	39%	1%	20%	0%	9%
	Buram	10%	17%	45%	2%	17%	46%	5%	22%	43%	0%	22%	0%	4%
	Beliel	2%	43%	70%	33%	18%	44%	7%	8%	33%	2%	2%	2%	2%
	Nyala Shimal	7%	14%	38%	19%	19%	38%	16%	18%	31%	2%	7%	5%	6%
	Nyala Janoub	6%	8%	39%	18%	35%	42%	19%	17%	35%	4%	21%	2%	10%
South Kordofan	Dilling	2%	5%	80%	72%	68%	92%	49%	28%	2%	2%	24%	3%	2%
	Kadugli	1%	0%	67%	70%	46%	70%	15%	19%	34%	0%	6%	0%	1%
	Al Buram	0%	0%	100%	50%	100%	50%	0%	0%	0%	0%	0%	0%	0%
	Habila	2%	2%	24%	14%	45%	54%	29%	8%	34%	0%	2%	0%	0%
	Delami	3%	1%	44%	3%	9%	21%	2%	1%	62%	0%	34%	1%	1%
West Kordofan	As Sunut	10%	1%	45%	37%	18%	24%	18%	17%	20%	0%	3%	0%	0%
	Al Lagowa	3%	43%	43%	28%	38%	53%	37%	35%	21%	24%	25%	25%	20%

Source: MSNA OCHA-DTM

Table 7. Nutrition services and treatment

MSNA OCHA-DTM Nutrition elements																							
State	Locality	Nutrition																					
		Aware of nearby nutrition facility	Children (< 5 years old) enrolled in nutrition service	Able to access nearby nutrition facility when needed	Which type of nutrition services are the household's children (less than 5 years) enrolled in or provided to children?								What difficulties, if any, are encountered when attempting to access nutrition services or treatment?										
					Stabilization centre	Outpatient therapeutic	Targeted supplementary	Blanket supplementary	Infant feeding	Micronutrient supplementation	Growth monitoring	Do not know	No issues	Supplies out of stock	Physical barriers	Unaware	Difficulty enrolling	Facilities too far	Cost	Insecurity in travelling	Inaccessible minority	No staff	Quality of services
North Darfur	El Fasher	42%	5%	11%	7%	33%	47%	20%	13%	27%	7%	0%	35%	29%	13%	22%	29%	10%	10%	19%	0%	19%	13%
	At Tawisha	84%	8%	71%	0%	0%	0%	0%	10%	60%	10%	0%	91%	0%	7%	2%	0%	0%	2%	1%	0%	0%	0%
	Melit	23%	5%	6%	0%	0%	0%	17%	67%	17%	33%	0%	0%	75%	13%	13%	38%	0%	0%	0%	0%	13%	0%
	Um Kadadah	63%	15%	17%	5%	55%	70%	5%	0%	0%	0%	0%	5%	77%	5%	0%	45%	14%	0%	14%	55%	18%	5%
	Al Lait	82%	30%	32%	3%	89%	97%	94%	14%	0%	0%	0%	21%	0%	0%	16%	3%	63%	0%	42%	3%	0%	55%
	Tawila	54%	18%	40%	8%	88%	0%	0%	25%	0%	4%	0%	4%	74%	74%	12%	41%	0%	6%	0%	0%	2%	4%
South Darfur	Kas	64%	16%	40%	5%	10%	20%	20%	15%	25%	30%	5%	53%	20%	2%	0%	24%	0%	0%	2%	0%	2%	2%
	Shattaya	59%	19%	23%	4%	9%	26%	17%	0%	61%	13%	0%	19%	30%	7%	4%	59%	4%	0%	0%	4%	4%	0%
	As Sunta	0%	5%	1%	17%	17%	0%	0%	0%	0%	0%	67%	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%	0%
	Buram	12%	12%	7%	7%	0%	0%	0%	0%	27%	0%	60%	33%	33%	0%	0%	11%	0%	0%	0%	22%	0%	0%
	Beliel	52%	9%	24%	0%	36%	27%	18%	9%	0%	18%	0%	55%	10%	14%	27%	24%	7%	7%	0%	0%	0%	3%
	Nyala Shimal	66%	15%	21%	9%	30%	52%	9%	26%	4%	13%	0%	18%	70%	6%	3%	27%	0%	6%	3%	0%	3%	3%
	Nyala Janoub	50%	3%	8%	0%	60%	0%	20%	20%	0%	0%	0%	50%	43%	7%	0%	0%	0%	0%	0%	0%	0%	0%
South Kordofan	Dilling	55%	14%	18%	0%	56%	67%	44%	28%	28%	17%	0%	0%	75%	38%	21%	25%	8%	13%	0%	0%	8%	8%
	Kadugli	38%	4%	6%	17%	17%	33%	17%	0%	0%	0%	17%	38%	25%	0%	13%	13%	0%	0%	0%	0%	0%	13%
	Al Buram	0%	0%	0%												0%							
	Habila	15%	17%	25%	0%	35%	88%	81%	50%	27%	0%	4%	26%	3%	54%	18%	3%	3%	5%	0%	0%	0%	8%
	Delami	54%	20%	53%	3%	6%	78%	3%	3%	9%	0%	3%	39%	2%	53%	4%	2%	0%	18%	0%	0%	0%	0%
West Kordofan	As Sunut	2%	1%	3%	0%	0%	0%	0%	100%	0%	0%	0%	33%	33%	33%	0%	0%	0%	67%	33%	0%	33%	0%
	Al Lagowa	9%	4%	8%	0%	0%	0%	60%	40%	40%	20%	0%	10%	20%	0%	20%	20%	10%	20%	50%	0%	40%	0%

Source: MSNA OCHA-DTM

Anonymous MSNA

Methodology

The Anonymous MSNA was completed by 30 enumerators between 28 June to 13 July 2024 in the Central and Western Nuba Mountains regions (corresponding to localities in South and West Kordofan). The MSNA included sample groups for the overall population, which was designed to be representative of the region as a whole, and an IDP sample group. In total, 812 households were surveyed for the population sample, and 408 households were surveyed for the IDP sample.

Although the host community sample included households from both the Central and Western Regions, due to an incomplete sample frame for the Western Region, the majority (approximately 95%) of the sample came from the Central Region. The population sample used a two-stage cluster sample design with a total of 54 clusters (villages) selected using probability proportional to size (PPS). Households were then randomly selected within those clusters at the second stage. For the IDP sample, three of the included IDP camps were from the Western Region (172 households) while four were from the Central Region (236 households). IDP households were selected using simple random sampling (SRS), with the overall sample size in each camp allocated in proportion to the total number of IDP households registered.

Data quality checks

The MSNA data for the Western and Central Nuba mountains that was subject to quality checks for the Famine Review. Results recalculated by GSU confirmed the outputs produced by the anonymous organization for the outcome indicators.

In addition, additional data on contributing factors which were employed in the Famine Review are presented in Tables 8-10 below. It is important to note that the questionnaires for the population sample differed to those of the IDPs. For that reason, some of the information is barred out in the tables below. For example, reception of humanitarian assistance, barriers to agricultural production and whether the household cultivated sorghum in the 2023 cropping season was only posed to IDP households (Table 8). Meanwhile, questions on access to markets and minimum dietary diversity for women (MDDW) were only posed in the overall population sample groups (Table 9). Both the population sample and IDP sample were asked how many days per week that they gathered wild foods (Table 10). In general, IDPs gathered wild foods more than the population sample, and in general, central Nuba population groups were better off than the Western Nuba groups (both IDPs and residents).

Table 8. Agricultural contributing factors

Anonymous MSNA - Agricultural factors																
Mountain region	As an IDP, did you cultivate sorghum in the last cropping season 2023?	If did not cultivate sorghum in the last cropping season, what was the reason.										Household raises livestock	Cattle (ave)	Goats (ave)	Chicken (ave)	Donkey (ave)
		Displaced during farming season	Lack of farming knowledge	Lack of farmland	Lack of interest in farming	Lack of labor capacity	Lack of other farming inputs	Lack of seeds	Lack of time / too busy	Lack of tools	Too insecure to farm	Other					
Central Nuba IDPs	18%	63%	1%	6%	0%	0%	1%	10%	4%	1%	6%	8%	8%	0	0	0	0
Western Nuba IDPs	55%	33%	0%	22%	1%	1%	0%	28%	3%	1%	8%	3%	6%	0	0	0	0
Central Nuba residents													63%	2	3	3	0
Western Nuba residents													42%	1	2	1	0

Source: Anonymous MSNA

Table 9: Level of stocks, market functionality. Humanitarian Food Assistance and Diet diversity for women

Anonymous MSNA - Other contributing factors										
Mountain region	How long will your current household food stocks last?				How frequently are the markets functioning?				Household received assistance	Minimum Dietary Diversity for Women (MDDW)
	No food stock	Less than 1 week	1 week - 1 month	More than 1 month	Biweekly	Daily	Monthly	Weekly		
Central Nuba IDPs	50%	25%	19%	6%					73%	
Western Nuba IDPs	63%	32%	5%	0%					87%	
Central Nuba residents	54%	23%	16%	8%	4%	21%	1%	75%		2.5%
Western Nuba residents	82%	13%	4%	0%	0%	2%	0%	98%		0.0%

Source: Anonymous MSNA

Table 10. Wild food

Anonymous MSNA - Days per week the household gathered wild food in the past 7 days.									
Mountain region	0	1	2	3	4	5	6	7	More than 4+
Central Nuba IDPs	22%	0%	8%	11%	13%	12%	6%	28%	59%
Western Nuba IDPs	5%	1%	2%	7%	6%	17%	11%	51%	85%
Central Nuba residents	25%	3%	9%	14%	14%	10%	5%	20%	49%
Western Nuba residents	4%	2%	11%	4%	16%	7%	4%	51%	78%

Source: Anonymous MSNA

Nutrition and mortality outcome indicators

The FRC review and analysis used two main sources of evidence on acute malnutrition and its respective contributing factors: 1) SMART nutrition and mortality surveys conducted across localities in North Darfur by the Sudan Nutrition Cluster partners; 2) an anonymous SMART nutrition and mortality survey conducted in Western and Central Nuba Mountains; and 3) several mid upper-arm circumference (MUAC) screening data conducted as part of the partner's programme response in several localities across Sudan.

In addition, previously available data already used in the July FRC review were also used, namely: 1) MSF rapid nutrition and mortality assessment conducted in January in the Zamzam camp; and 2) MSF exhaustive MUAC screening conducted in the Zamzam camp in April. For data quality checks on those data, please refer to Annex 4 of the previous FRC Sudan report, pages 29 to 47: IPC_Famine_Review_Committee_Report_Sudan_July2024.pdf

Nutrition Cluster partners-led surveys in North Darfur

Methodology

The surveys were conducted in El Fasher, At Tawisha, Um Kadadah, Al Leit, Tawila and Melit, employing the SMART methodology for measuring nutrition and mortality. All surveys followed a two-stage cluster sampling approach. Stage one consisted of the selection of planned clusters, out of the total list of clusters in the locality, with a probability of selection proportional to the population size in each cluster. Stage two consisted of a selection of fourteen households, inside the clusters selected in stage one, through a simple random sampling process, using a random generator App, preceded by a listing of all households with the help of a village leader.

The sample frame included the population residing in the villages across the localities, excluding all camps or settlements, be it formal or informal, for the IDPs; hence likely excluding the most vulnerable populations. In spite of the fact that some of the IDPs reside with relatives outside the camps, these surveys did not have a question that could enable identifying IDPs amongst the sampled residents. This hampered the ability of the FRC to explore possible vulnerable populations amongst the sampled population residing outside the camps.

Regarding the measurement of mortality in the sampled households, the recall period in almost all localities was 93 days (default value in the ENA for SMART software), apart from Tawila, which was 102 days, starting from 10 April – Eid holiday.

Data quality checks

The quality of the data of all five surveys was verified by FRC through the plausibility check of the SMART methodology. The quality of the data of all surveys fell within the range of acceptability (Table 11 below).

Anonymous SMART surveys in the Nuba Mountains of South Kordofan

Methodology

The anonymous surveys measured acute malnutrition and mortality employing the SMART methodology in the Nuba mountains of western and central regions of South Kordofan. Each location had two separate surveys targeting two different population groups (i.e., IDPs and residents). Surveys in the western region on IDPs included IDP sites in Dilling, Habila and Al Lagowa county, and another survey on the population living outside the IDP sites (residents) in Dilling, Habila, Al Lagowa and As Sunut. Similarly, in surveys in central regions on IDPs included IDP sites in Delami, Western Kadugli and Um Durein counties, whilst those on the residents, included population across Delami, Talawdi, Western Kadugli, Um Durein, Heiban and Al Buram (Thobo).

The surveys on IDPs sites followed a systematic random sampling process, while those in residents followed a cluster-based approach.

Data quality checks

Data quality checks on the SMART Surveys from anonymous sources have been conducted by the SMART initiative, which validated the data for its use in an IPC analysis. The quality of the anthropometric data of all surveys fell within the range of acceptability (Table 11). As for mortality, a review of the questionnaire used indicated issues with the questions' formulation, including the lack of a memorable date for the recall period.

MSF MUAC screening in the Zamzam camp

Methodology

Between 31 August and 5 September, the MSF team undertook a vaccination campaign that included the screening of acute malnutrition using MUAC and checking the presence of bilateral pitting edema in children aged 6-59 months in the Zamzam camp. Whilst the vaccination started on day one, with 12 % of the target population reached, the MUAC screening started on day two. A total of 29,355 children aged 6-59 months were screened, corresponding to 85 % of the targeted population, while the vaccination reached 96 % of the target population.

Data quality checks

The quality of the data of these screenings could not be verified due to the lack of individual-level datasets.

Table 11. Data quality report of the SMART surveys

State	Locality/Region	Population group	# Children	Flagged data	Overall sex ratio	Overall age ratio: 6-29, 30-59 months	"Digit preference score: Weight "	"Digit preference score: Height "	"Digit preference score: MUAC "	Standard deviation WHZ	Skewness WHZ	Kurtosis WHZ	Poisson distribution WHZ	Overall Score	Overall survey classification
North Darfur	El Fasher	Residents	547	5 (3.3 %)	"0 (p=0.966) "	"0 (p=0.253) "	2 (8)	2 (9)	2 (9)	0 (1.05)	1 (-0.29)	0 (0.14)	"1 (p=0.019) "	13%	Good
	At Tawisha	Residents	678	0 (1.9%)	"0 (p=0.818) "	"10 (p=0.000) "	0 (7)	2 (12)	2 (10)	0 (1.08)	0 (-0.02)	1 (-0.33)	"0 (p=0.509) "	15%	Acceptable
	Um Kadadah	Residents	542	0 (0.6 %)	"2 (p=0.086) "	"0 (p=0.344) "	0 (3)	2 (9)	0 (5)	0 (0.95)	0 (-0.09)	0 (-0.03)	"1 (p=0.011) "	5%	Excellent
	Al Lait	Residents	458	0 (2.1%)	"0 (p=0.552) "	"0 (p= 0.471) "	0 (4)	2 (11)	0 (6)	0 (1.05)	1 (-0.20)	0 (0.03)	"5 (p= 0.000) "	8%	Excellent
	Tawila	Residents	566	5 (2.7%)	"0 (p=0.737) "	"0 (p= 0.309) "	0 (3)	2 (9)	2 (10)	5 (1.15)	1 (-0.26)	0 (-0.17)	"0 (p=0.336) "	15%	Acceptable
	Melit	Residents	451	0 (1.6%)	"0 (p=0.605) "	"4 (p=0.010) "	0 (5)	2 (7)	2 (6)	0 (1.06)	1 (-0.21)	0 (-0.04)	"0 (p=0.061) "	5%	Excellent
South Kordofan	Western Nuba Mountains	IDP sites	424	5 (3.3%)	"0 (p = 0.698) "	"0 (p=0.292) "	0 (4)	2 (10)	0 (4)	5 (1.11)	0 (0.05)	0 (0.06)	N/A	15%	Acceptable
	Western Nuba Mountains	Residents	669	5 (3.4%)	"0 (p=0.202) "	"0 (p=0.154) "	0 (5)	0 (6)	0 (4)	5 (1.4)	0 (-0.02)	3 (-0.44)	"3 (p=0.001) "	16%	Acceptable
	Central Nuba Mountains	IDP sites	401	0 (0.5%)	"0 (p=0.881) "	"0 (p=0.564) "	0 (6)	0 (7)	2 (8)	0 (1.06)	0 (-0.12)	0 (-0.10)	N/A	2%	Excellent
	Central Nuba Mountains	Residents	844	0 (1.9%)	"0 (p = 0.409) "	"0 (p=0.341) "	0 (6)	2 (9)	0 (3)	0 (1.03)	0 (0.13)	0 (-0.16)	"1 (p=0.027) "	3%	Excellent

**Not applicable. Survey was systematic random sampling based.*

Source: Nutrition Cluster partners'-led and anonymous SMART survey datasets

Health, diseases, water hygiene and sanitation, child's minimum acceptable diet from the SMART surveys

The SMART surveys aforementioned in the section about nutrition and mortality outcomes also measured the levels of childhood morbidity, caregivers' health-seeking behaviour when a child is ill, coverage of vaccination against measles and vitamin A supplementation, child's minimum acceptable diet, the indicative prevalence of acute malnutrition among women in reproductive age. It also measured household access to safe drinking water and access to improved sanitation facilities.

The anonymous survey lacked the full set of indicators collected as those from the nutrition cluster partners-led surveys.

Table 12. Acute malnutrition's contributing factors

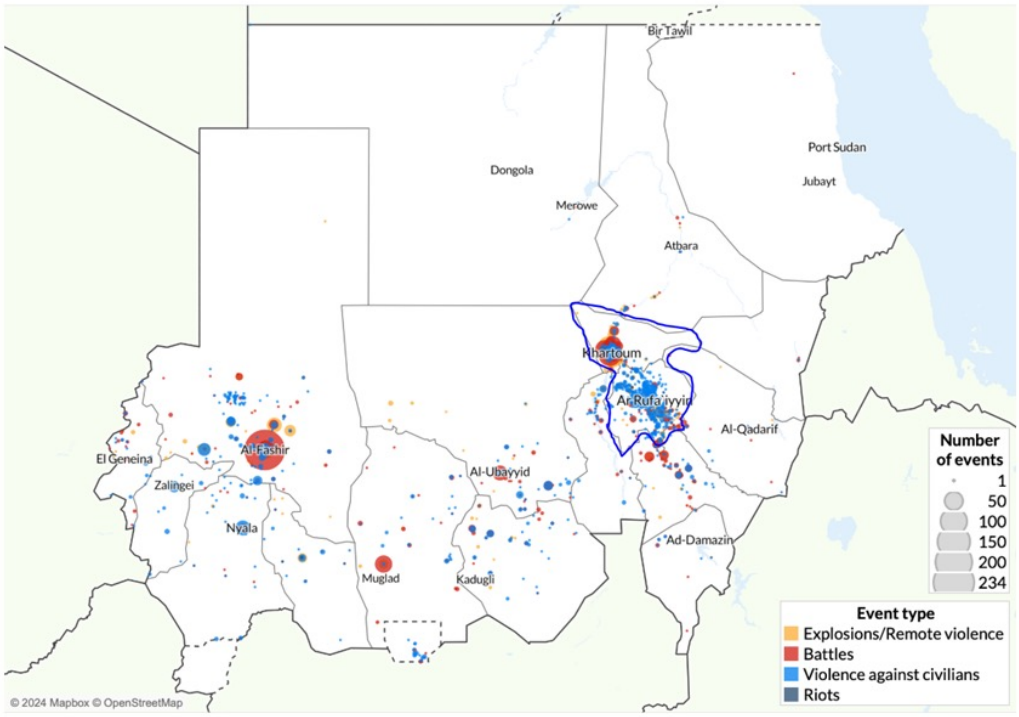
State	Locality	Morbidity	Highest morbidity	Health seeking behaviour	Access to safe drinking water	Improved sanitation	Coverage of measles vaccination	Coverage of vitamin A supplementation	GAM Women Reproductive Age (WRA)	Minimum Acceptable Diet
North Darfur	El Fasher	41.9%	29.9% (Diarrhea)	70.7%	60.6%	39.8%	80%	21.1%	24.7%	29.9%
	At Tawisha	47.80%	34.7% (Diarrhea)	66.00%	N/A	>86%	88.90%	57.30%	6.30%	12.45%
	Um Kadadah	47.42%	"35.24% (Fever) "	73.93%	71%	6.40%	73.56%	6.46%	26.4%	3.37%
	Al Lait	53.46%	33.75% (Diarrhea)	46.27%	99.17%	9.36%	86.51%	33.55%	31.80%	43.95%
	Tawila	60.50%	44.4% (Diarrhea)	50.40%	40.50%	~30%	80.50%	45.20%	30.1%	10.1%
	Melit	28.60%	"18.4 (Fever) "	66.70%	39.60%	64.30%	80.40%	45.30%	4.70%	18.80%
South Kordofan	Western Nuba (IDPs sites only)	69.1%	43% (Fever) but also 34% (Diarrhea)	76.1%	N/A	N/A	70.6%	16.3%	40.1%	N/A
	Western Nuba (Residents/Hosts only)	49.5%	58.6% (Fever) but also 36.3% (Diarrhea)	59.8%	N/A	N/A	70.8%	15.1%	44.4%	N/A
	Al Buram (Thobo)	70.6%	"50.4% (Fever) "	95.7%	N/A	N/A	64.5%	20.7%	22.0%	N/A
West Kordofan	Lagowa & As Sunut (Residents /Hosts)									

Source: Nutrition Cluster partners-led and anonymous surveys datasets

II. Other Contributing Factors

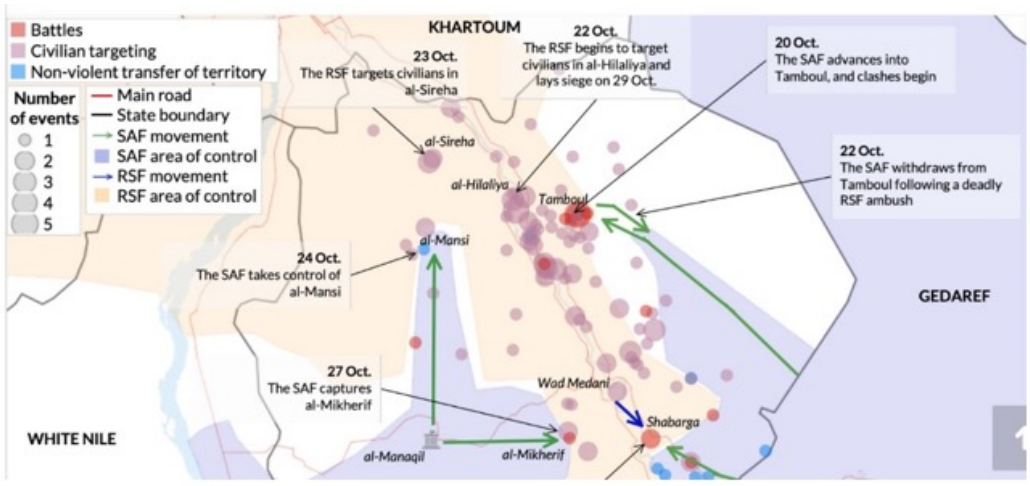
Conflict

Figure 1. Type of conflict incidents in Sudan, 1 January – 29 November 2024



Source: ACLED

Figure 2. Battles, civilian targeting and territorial gains in Al-Jazirah, 5 October to 8 November 2024



Source: ACLED

Displacement

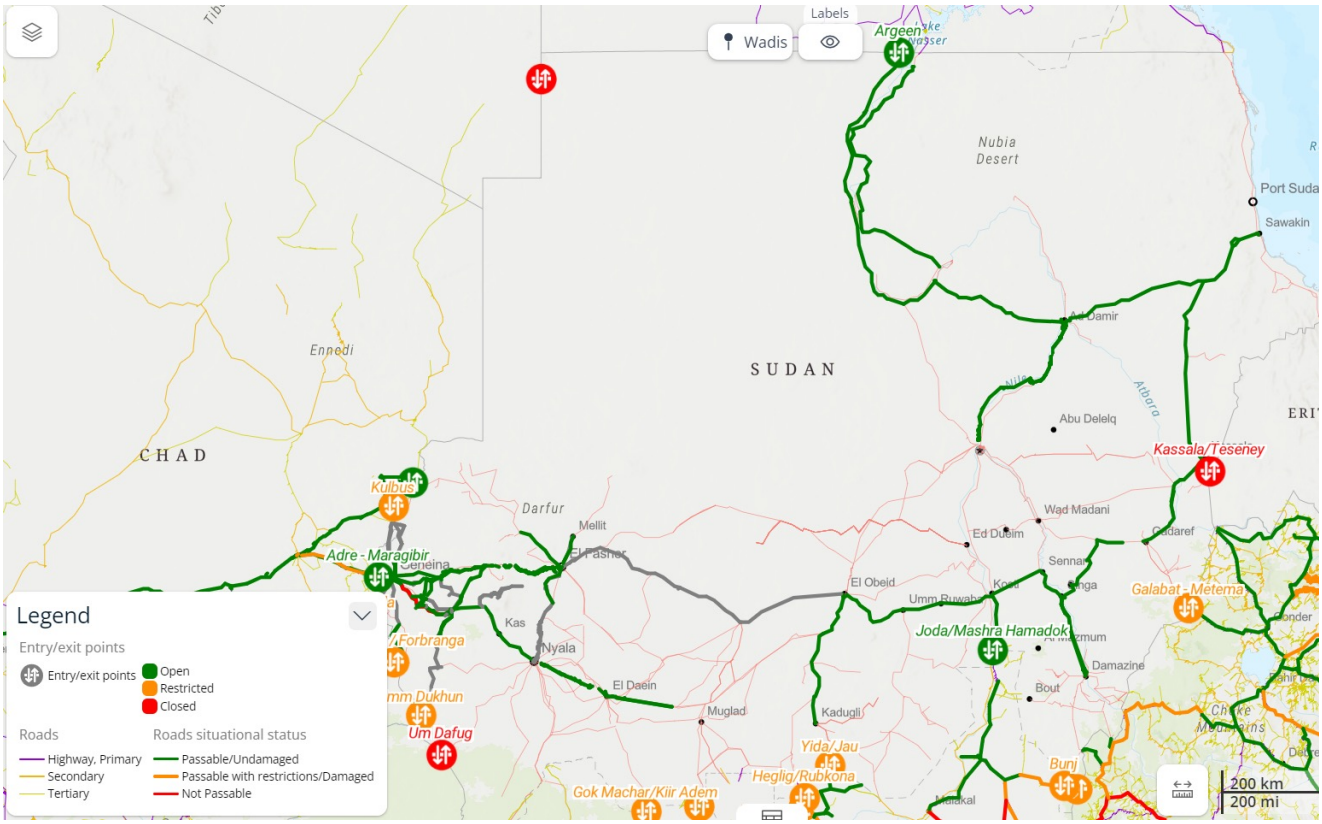
Table 13. Master list of IDPs as of 6 November2024

Location Information		Total							Nationality by Indiviuals	
State of Displacement	Locality Of Displacement	Current IDPs	Current HHs	East Darfur	Khartoum	North Darfur	South Darfur	West Kordofan	Sudanese	Non Sudanese
Khartoum	Jebel Awlia	13,540	0	0	11,570	0	0	0	8,564	0
Khartoum	Um Bada	7,098	0	0	7,098	0	0	0	59,449	0
Khartoum	Bahri	29,468	0	0	29,437	0	0	0	100,426	0
Khartoum	Sharg An Neel	26,860	0	0	15,075	0	0	0	77,065	0
Khartoum	Karrari	18,300	0	0	18,230	0	0	0	3,327	0
Khartoum	Um Durman	8,068	0	0	8,008	0	0	0	5,810	0
Khartoum	Khartoum	6,455	0	0	6,455	0	0	0	15,253	0
North Darfur	Dar As Salam	148,795	0	108	210	123,197	0	0	22,619	0
North Darfur	El Fasher	712,045	0	46,000	400	643,970	0	0	24,432	0
North Darfur	At Tawisha	2,815	0	0	0	2,815	450	0	177,399	495
North Darfur	Melit	54,834	0	0	0	54,669	7,500	0	83,433	0
North Darfur	Um Kadadah	39,115	0	0	0	39,115	2,680	0	162,508	0
North Darfur	Al Lait	15,304	25	5,763	4,335	3,872	400	0	86,078	0
North Darfur	Tawila	228,351	4,638	0	0	211,477	23,207	0	174,488	0
South Darfur	As Salam - SD	16,250	1,025	0	0	0	70,880	65	212,145	0
South Darfur	As Sunta	101,130	750	900	1,700	700	3,570	4,452	53,737	0
South Darfur	Beliel	473,818	1,326	2,109	0	0	10,550	0	59,700	0
South Darfur	Buram	195,030	2,100	800	9,550	5,070	4,540	0	25,240	0
South Darfur	Kas	153,958	1,938	0	5	0	0	0	27,841	0
South Darfur	Nyala Janoub	78,932	0	750	0	1,105	0	0	89,210	0
South Darfur	Nyala Shimal	328,455	0	0	0	4,285	0	0	199,320	0
South Kordofan	Dilling	44,324	0	0	8,127	0	165	0	54,786	48
South Kordofan	Kadugli	84,810	0	0	6,649	0	12,236	0	228,351	0
South Kordofan	Habila - SK	59,211	0	0	2,484	0	130	0	6,472	0
South Kordofan	Delami	4,731	0	0	1,370	0	0	198	7,328	0
Aj Jazirah	Medani Al Kubra	5,810	0	0	3,204	0	0	5,120	44,324	0
Aj Jazirah	Sharg Al Jazirah	15,253	0	0	7,378	0	5	6,497	84,810	0
West Kordofan	As Sunut	8,774	0	5	1,380	0	0	0	27,076	0
West Kordofan	Al Lagowa	21,472	0	0	1,029	0	0	0	27,962	0

Source: IOM - DTM

Access routes

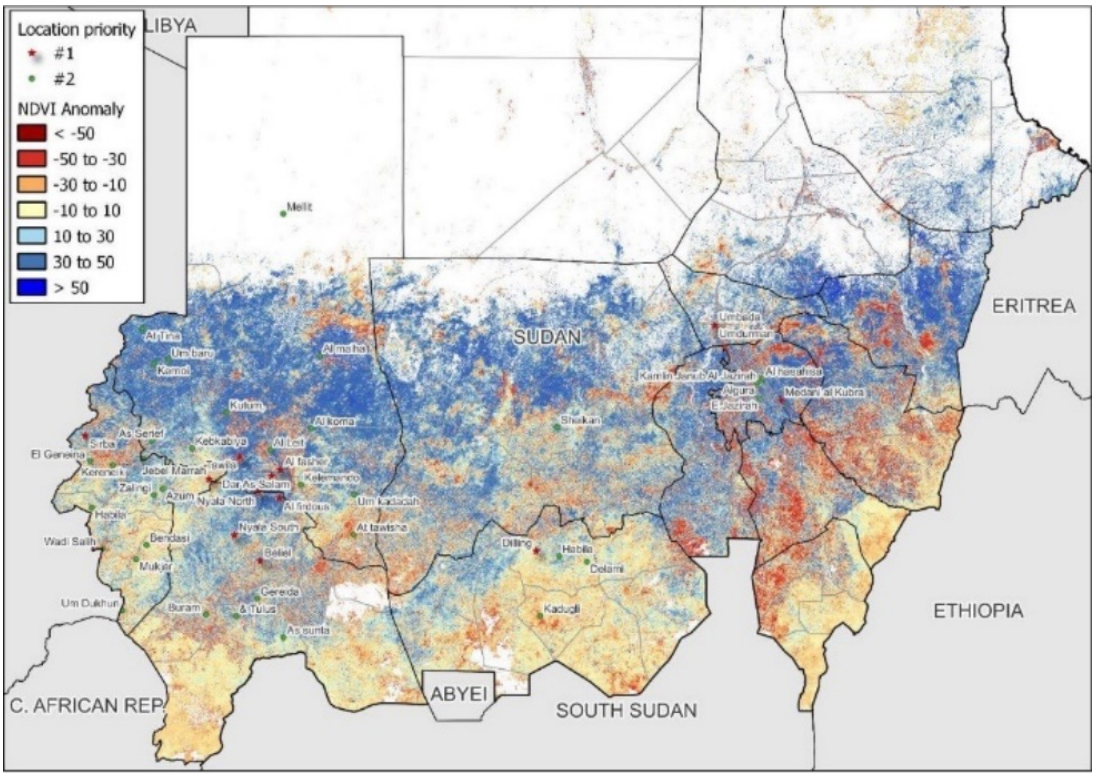
Figure 3. Entry/exit points in Sudan, December 2024



Source: Logistic cluster Sudan, Chad, South Sudan

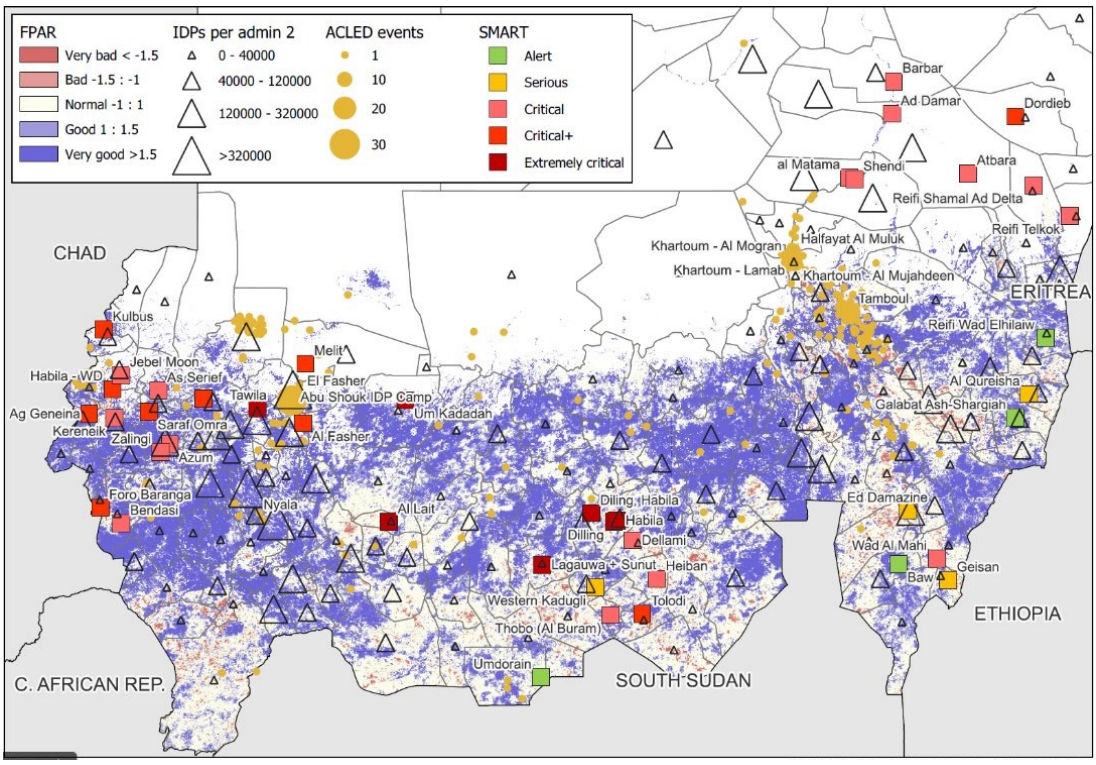
NDVI map

Figure 4. NDVI anomaly (September 2024 to 2017 – 2023 NDVI average), September 2024



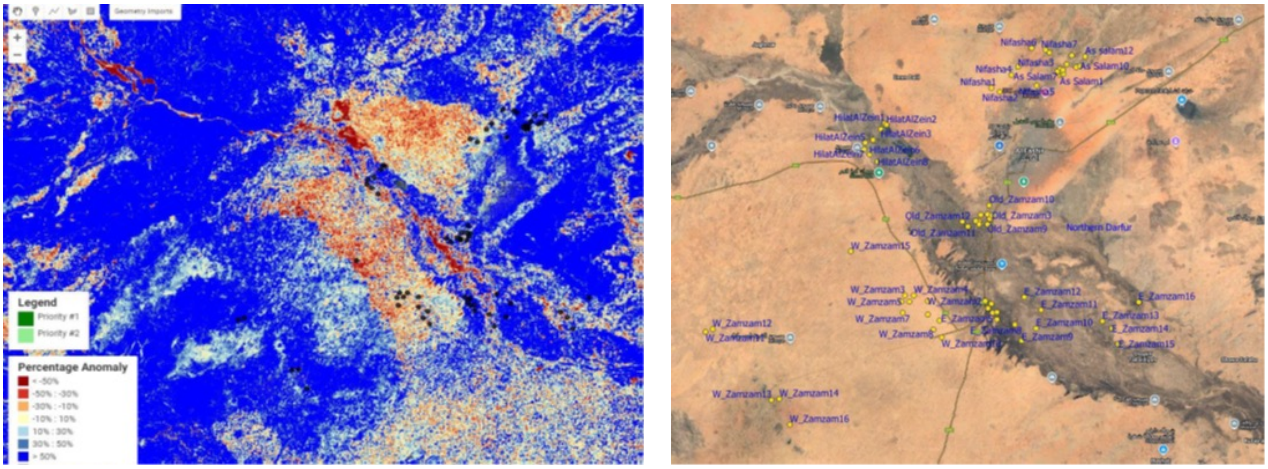
Source: JRC

Figure 5. NDVI anomaly, conflict events and acute malnutrition severity levels (from SMART survey)



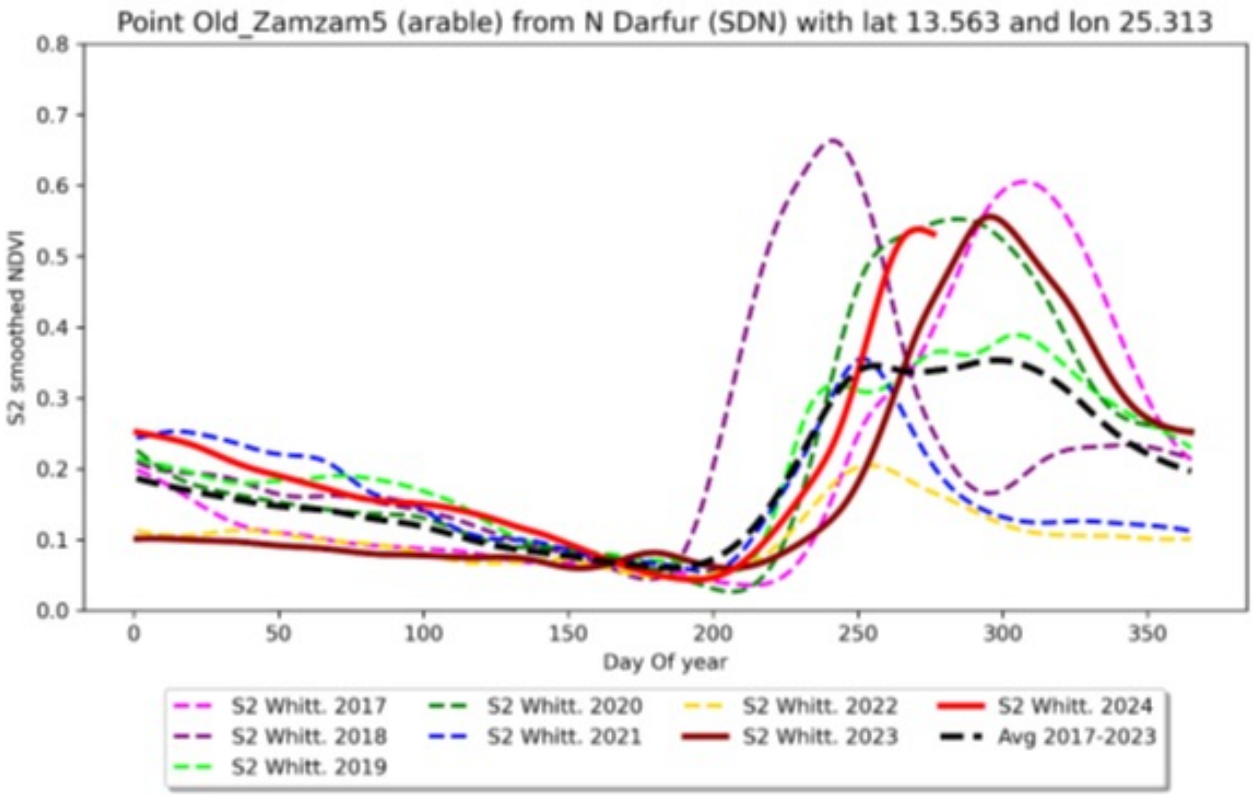
Source: GSU compilation using JRC data

Figure 6: NDVI anomaly map in El Fasher locality, September 2024



Source: JRC

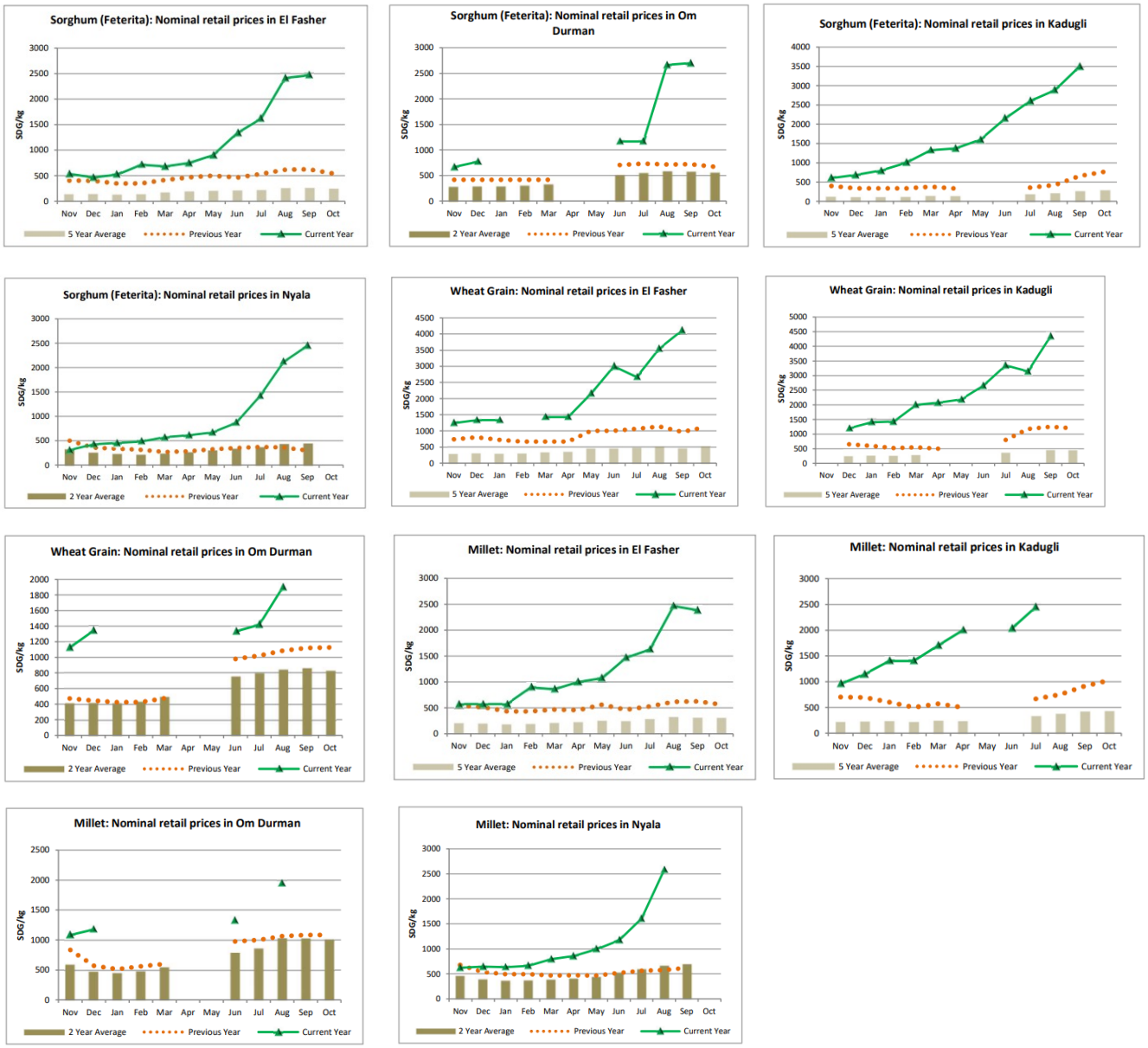
Figure 7: NDVI profile for Zamzam camp 2017 to 2023



Source: JRC

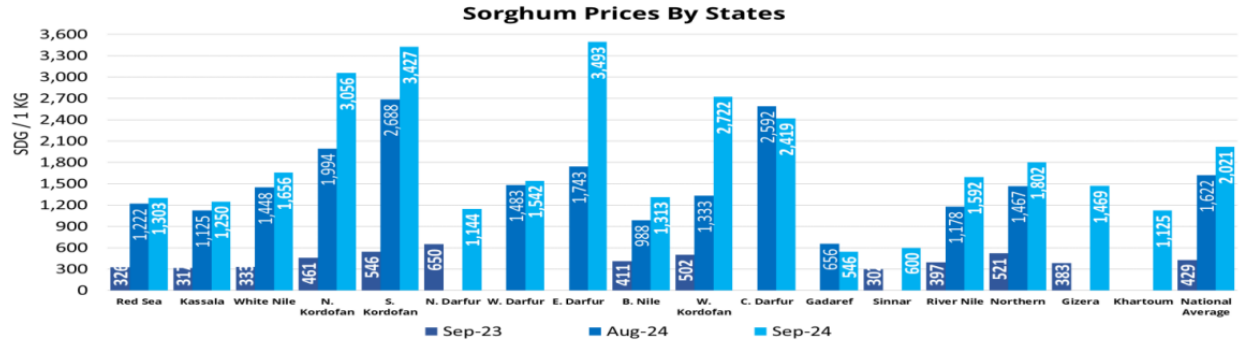
Price data

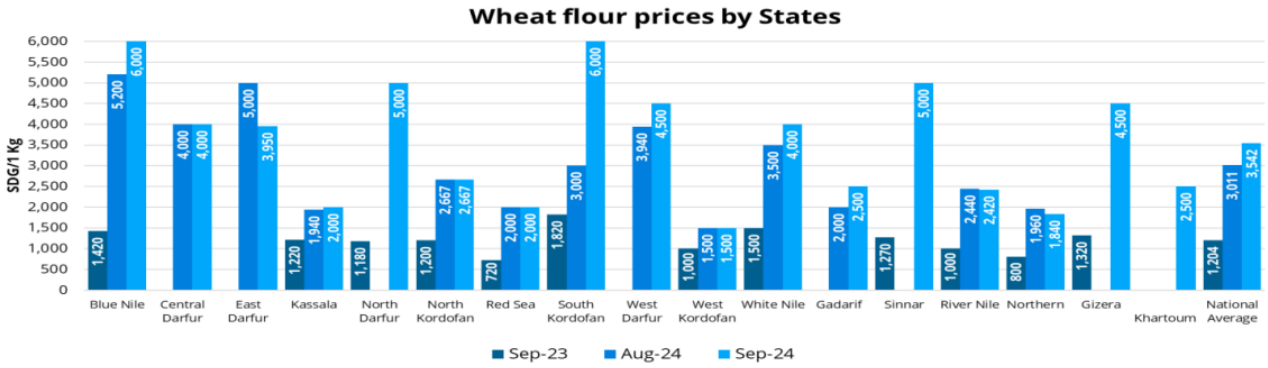
Figure 8: Sorghum, Wheat grain and millet prices in El Fasher, Om Durman, Kadugli and Nyala, October 2024



Source: FEWSNET

Figure 9: Sorghum and Wheat flour prices by States, September 2024

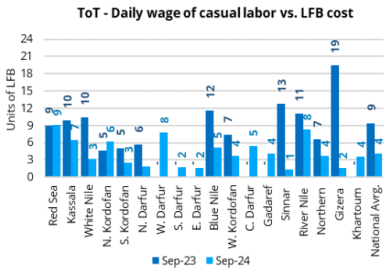


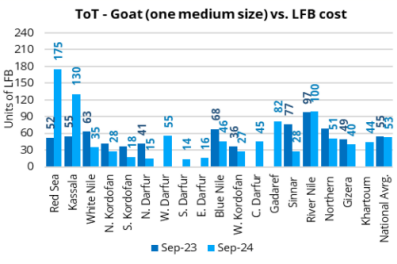


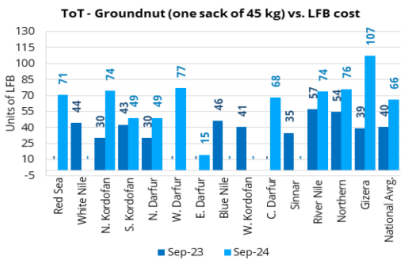
Source: WFP

Terms of Trade

Figure 10: Terms of Trade for Daily wage, Goat and Groundnut versus local food basket (LFB) cost, October 2024







Source: WFP October bulletin

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