BRIEF

Public Health and Site Assessment in Lagawa, Gereida, and Sabreen IDP sites Ad Du'ayn locality, East Darfur state

November 2025 | Sudan

Key Findings

- The assessed IDP camps face a critical public health crisis, with 85% of households reporting illness or healthcare needs and 58% of children reportedly ill, driven by high incidence of communicable diseases fever, cough, and diarrhoea along with poor healthcare service access, high medical and transportation costs and long waiting time.
- Acute malnutrition among children under five in the assessed IDP sites remains a critical public health concern, with a 19% GAM by WHZ based on the SMART survey done in Ad Du'ayn locality in April 2025, driven by high disease burden, poor preventive health services and child feeding practice, and recurrent stock-outs of therapeutic supplies.
- In the assessed IDP camps, over 50% of households face severe food insecurity according to the CARI, characterized by significant food consumption gaps, heavy reliance on food-based coping strategies, and use of crisis- and emergency level livelihood coping mechanisms, indicating near-complete depletion of household assets.
- The critical food insecurity situation, along with poor WASH, high disease burden, limited healthcare access, suboptimal child feeding practices, and high malnutrition rates, places population in camps in a situation of emergency.

Context and background

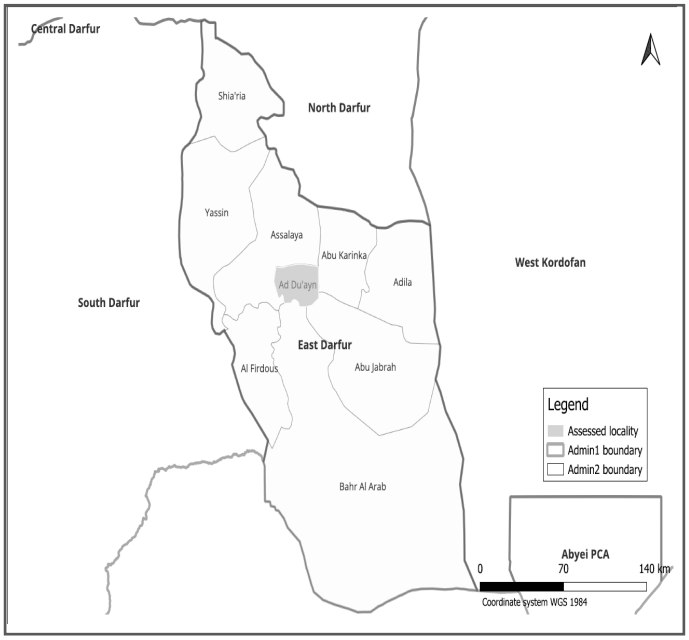
Since April 2023 the conflict in Sudan continues to escalate across many parts of the country. Widespread attacks on civilians, particularly women and children and the destruction of critical infrastructure have fulled an unprecedented humanitarian crisis, leaving over 30 million people in need of assistance and millions displaced.[1]

The Food Security and Livelihood Analysis (FSLA) categorized 62% of the population as acutely food insecure, with 22% falling into the severe and extreme categories.[2]

In 2025, a Standardized Monitoring Assessment for Relief to Transition (SMART) survey conducted in Ad Du'ayn locality (East Darfur) reported critical levels of Global Acute Malnutrition (GAM) (19%) and Severe Acute Malnutrition (5%), classified above the World Health Organization (WHO) emergency threshold.[3, 4]

This Brief presents the main findings of a joint public health and site assessment conducted on 14 and 15 September 2025, in three Internally Displaced Persons (IDP) sites in Ad Du'ayn locality, in East Darfur: Lagawa, Gereida and Sabreen. These findings provide critical evidence on key public health vulnerabilities, including health, FSL, WASH, and nutrition, and inform the prioritization of humanitarian response in the targeted areas.

Map 1: Assessment Coverage



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Site Assessment - site profiles

Lagawa site

- **Demographics: 4,420 households comprising of 30,940 individuals**, with over 70% of children, and 20% of adults (55% female, 45% male)
- **Shelter Occupancy**: Average of **7 individuals/shelter.** Households mostly reside in overcrowded shelters with some IDPs resorting to living in the open.
- **New Arrivals** (April-September 2025): **2,000 individuals**
- **Site management:** Local authorities (government)
- **IDP Origin:** Most of the IDPs originate from Central Darfur, Khartoum, North Darfur, South Darfur, West Darfur and West Kordofan.
- **Priority needs ranked:** Food, healthcare and shelter

Gereida site

- **Demographics**: **673 households comprising of 3,216 individuals,** with over 40% of children, and 46% adults (53% female, 47% male)
- **Shelter Occupancy**: Average of **5 individuals/shelter.** Households mostly reside in overcrowded shelters with some IDPs resorting to living in the open
- **New Arrivals** (April-September 2025): **400 individuals**
- **Site management:** Local authorities (government)
- **IDP Origin:** Most of the IDPs originate from North Darfur and South Darfur
- **Priority needs ranked:** Food, healthcare and shelter

Sabreen site

- **Demographics**: **4,810 households comprising of 24,544 individuals,** with over 40% of children, and 52% adults (47% female, 53% male)
- **Shelter Occupancy**: Average of **11 individuals/shelter.** Households mostly reside in overcrowded shelters
- **New Arrivals** (April-September 2025): **1,750 individuals**
- **Site management:** Local authorities (government)
- **IDP Origin:** Most of the IDPs originate from North Darfur and South Darfur
- **Priority needs ranked:** Food, healthcare and education

Site Assessment - service availability

Water, Sanitation and Hygiene (WASH)

According to key informants (site managers and INGO staff) the main sources of water include water trucking, storage tanks at distribution points, hafirs (water reservoirs), and, in some cases, donkey carts that deliver water door-to-door for sale. Access is limited due to insufficient supply and frequent interruptions, with households typically spending 30 minutes to one hour to collect water. Water is provided free of charge, as costs are subsidized by humanitarian actors.
While Lagawa and Gereida sites have public latrines, open defecation and wastewater overflow remain widespread. Sabreen lacks public latrines entirely, leaving most households without access to basic sanitation. In all sites, overcrowded or insufficient hygiene facilities have led individuals to bathe or shower outdoors at night, raising protection and health concerns. Water quality was consistently reported as poor, with key informants referencing cases of water-borne diseases affecting the population. **Overall, WASH conditions across the three sites are inadequate and insufficient to meet basic needs.**

Food Security and Livelihoods (FSL)

Food access is severely constrained across all three sites due to a combination of unsafe or restricted access to cultivation land, high food prices, and the cessation or irregularity of food distributions. Households rely on a mix of cash purchases, intermittent humanitarian assistance, bartering, and where possible - own production to meet their food needs. Communal kitchens exist in Lagawa and Gereida but not in Sabreen; however, across all sites no cooking fuel assistance provided.
Livelihood opportunities are similarly limited. Households depend heavily on casual labour, including agricultural work, construction, and small-scale market activities such as selling tea or charcoal. However, restricted access to land, livestock, productive assets, skills, and markets significantly undermines income earning potential. **Overall, livelihood conditions across the three sites are inadequate, leaving households with few sustainable means of supporting themselves.**

Health

According to key informants, health service is inadequate and access is limited primarily due to shortages in medicine and lack of transportation to the nearest health facility.
While key informants in Sabreen reported no major access barriers in the two weeks prior to data collection, broader systemic constraints persist, particularly the lack of essential drugs and the distance or cost of transport to functioning health facilities. In Lagawa and Gereida sites, key informants reported significant barriers such as shortage of medicine at health facility, lack of transport to the nearest health facility
as well as unavailability of specific treatment for diseases when obtaining health care during the same period.
Overall, health service availability and accessibility remain insufficient and unreliable.

Nutrition

Key informants across all sites reported visible signs of malnutrition, with households frequently skipping meals or facing prolonged food shortages. While nutrition services such as screening for children under five and the presence of service providers are available in each site, access remains limited and insufficient to meet the scale of needs. **Overall, nutrition services across the three sites are inadequate.**

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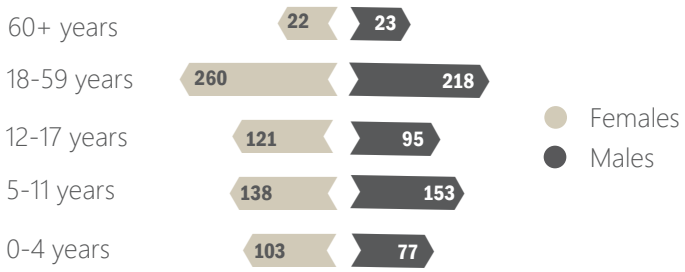
Public Health Assessment

Demographics

A total of 151 households were assessed, of which 17% (n=25) were male-headed households and 83% (n=126) were female-headed households. The predominance of female-headed households places women under heightened economic and care giving pressure, leaving them significantly more exposed to severe food insecurity and adverse health outcomes compared to male headed households.[5] The population structure reflects a predominantly youthful demographic, with a broad base of children aged 0–14, consistent with high birth rates and population growth. The working-age group (18-59) is relatively narrower, suggesting potential economic and social challenges due to higher dependency ratios. The elderly population (60+) is small, typical of developing countries with lower life expectancy.

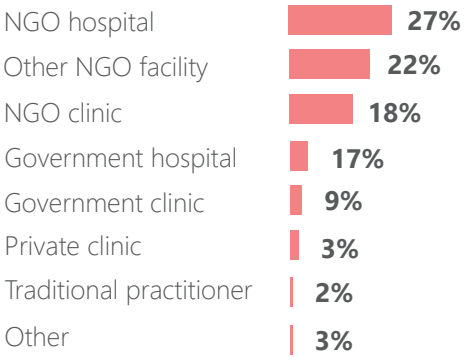
Figure 1: Age and gender distribution of 151 households assessed



Health

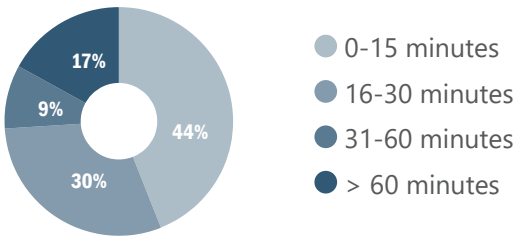
The health profile of the assessed IDP sites reflects a critical public health situation. Specifically, in the two weeks preceding data collection, 85% of households reported at least one household member in need of healthcare assistance, of which only 11% had unmet healthcare needs, highlighting the widespread burden of communicable diseases and the high demand for essential health services. The most frequently reported healthcare needs included preventive consultations (85%), and treatment for acute or chronic illnesses. Furthermore, fever (77%), cough (38%), diarrhoea (32%), fast or difficult breathing (20%), and eye infections (13%) were the most commonly reported illnesses during this period. A recent Lancet Global Health study in Sudan reported mortality was driven by preventable diseases and hunger, with intentional-injury deaths highest in Darfur and Kordofan.[6] In addition, households reported barriers to accessing healthcare, including high medication costs (70%) and long waiting times, as well as unavailability of specific health services (26%), high transportation costs (19%), and absence of functional health facilities nearby (13%).

Figure 2: % of households that needed to access healthcare (two weeks before data collection), by type of health facility consulted (select multiple responses)



The majority of households sought healthcare services from NGO-supported facilities, followed by government-run health facilities. Most households visited hospitals, which may reflect more complicated medical conditions due to delayed care-seeking behaviour, a shortage of qualified health workers, poor service quality, and limited primary healthcare delivery.

Figure 3: % of households by travel time to reach the nearest health facility on foot



Survey findings indicate that child morbidity is a critical public health concern in the assessed IDP sites. Of the 156 children between the age of 6-59 months, 58% were reportedly ill in the two weeks preceding data collection. This level is well above the IPC Acute Malnutrition (AMN) threshold of 20% for high morbidity.[7]

Fever, diarrhoea, cough, and other conditions such as skin and eye infections were the most commonly reported illnesses among children during the two weeks before data collection (See Table 1 below).[8]

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Table 1: % of children aged 6–59 months (n=156) in need of healthcare, by type of reported illness (2 weeks before data collection)

Type of illness	Frequency	Percentage
Fever	69	44%
Diarrhoea	47	30%
Cough	28	18%
Other	13	8%
Fast breathing	17	5%

Among the 91 children under 5 years old reported to have been ill in the two weeks preceding data collection, 79% were taken to seek healthcare. Consequently, 21% did not receive medical attention, increasing their risk of malnutrition and mortality. Caretakers reported that children who did receive care were primarily taken to formal health facilities, most commonly NGO-operated facilities, followed by government-run facilities (see figure 4 below).

Coverage of measles vaccination, vitamin A supplementation, and deworming remains below the WHO recommended target of 90%, thereby increasing the risk of infectious diseases, malnutrition, impaired child growth, and mortality.[9]

Figure 4: % of children under 5 years old in need of healthcare, by type of consulted health facility (2 weeks before data collection) (select multiple responses)

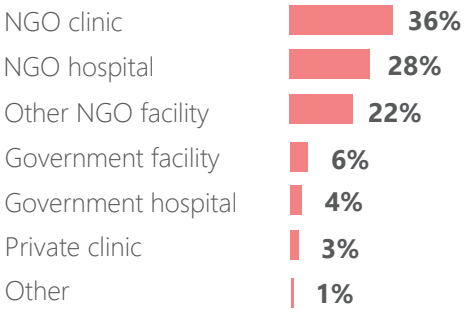

Table 2: % of children aged 9–59 months (n=156) covered by measles vaccination (6 months before data collection)

Measles vaccination	Frequency	Percentage
Maternal recall	130	83%
Vaccination card	4	3%
No	22	14%

Table 3: % of children aged 6–59 months (n=156) covered by Vitamin A (6 months before data collection)

Vitamin A	Frequency	Percentage
None	48	31%
Maternal recall	107	69%
Vaccination card	1	1%

Table 4: % of children aged 12–59 months (n=152) covered by deworming treatment (6 months before data collection)

Deworming	Frequency	Percentage
No	89	59%
Yes	62	41%
Don't know	1	1%

Nutrition

Among assessed households with children under five years of age (N=106), 56% (n=59) caregivers reported that children aged 6–59 months had undergone growth monitoring and malnutrition screening. This coverage is below the national target of ≥90%, leaving many children at elevated risk of malnutrition.[10] In parallel, among these households, 26 (25%) reported having malnourished children, supporting the findings from the April 2025 SMART survey in Ad Du'ayn locality, which reported a Global Acute Malnutrition (GAM) prevalence of 19%.

Among the 26 households with malnourished children, 23 were able to access feeding services, primarily through therapeutic feeding centers. However, critical gaps persist in referral pathways, availability of therapeutic foods, and preventive nutrition support. Respondents further indicated that access to nutrition services is constrained by recurrent stock-outs, long travel distances, shortages of qualified health staff, and weak referral systems. These barriers contribute to increased severity of malnutrition, reduced recovery rates, higher defaulting from treatment, and mortality levels exceeding minimum Sphere standards.[11]

Infant and Young Child Feeding in Emergencies

Out of 13 children under 6 months old, 10 were reportedly exclusively breastfed in the 24 hours prior to the date of data collection, which is above the WHO-UNICEF target of >60% for under six months of age.[12]
Among the 28 children aged 12-23 months, 19 were reportedly still being breastfed, while 7 children had ceased breastfeeding earlier than recommended. All children aged 6–23 months (n=42) consumed fewer than the recommended five food groups out of the eight food groups defined by WHO and UNICEF in the 24 hours preceding data collection, indicating universally inadequate dietary diversity.[13]
In comparison, the SMART survey conducted in April 2025 reported a Minimum Dietary Diversity (MDD) of 58% and a Minimum Acceptable Diet (MAD) of 8%, confirming critically poor child feeding practices among children under five in Ad Du'ayn locality. This indicates that complementary feeding practices represent an extremely critical risk factor according to the IPC Acute Malnutrition (AMN) severity risk factor classification.[14]
Caretakers identified lack of financial resources to purchase food (90%), high food prices (75%), and limited awareness of appropriate complementary feeding practices (12%) as the three main barriers to adequate child feeding in the assessed IDP camps. Overall, suboptimal complimentary feeding and early cessation of breastfeeding, combined with poor dietary diversity, remain major risk factors. These conditions compromise nutritional status, weaken immunity, and impair growth and development, substantially increasing the risk of malnutrition and child mortality.

Food Security and Livelihoods (FSL)

Overall, the assessment findings indicate that the IDP population is experiencing widespread and severe food deprivation, increasing the risk of further individual food deprivation within households.
Households' food consumption score across the assessed IDP sites was critically low, with 9% classified as acceptable thus meets daily energy requirement for active and health life, 21% classified as borderline, and 70% as poor, corresponding to IPC AFI Phase 4, likely contributing to worsening public health outcomes in the assessed IDP camps.[15]
The Household Hunger Scale score analysis reveals that, in the 30 days preceding data collection, 5% of households experienced no hunger, 9% little hunger, 76% moderate hunger, 2% severe hunger, and 9% very severe hunger. This indicates that the majority of households experienced moderate hunger, suggesting widespread food access constraints among the surveyed population.
The Consolidated Approach for Reporting Indicators (CARI) analysis indicates that 96% of households are moderately or severely food insecure, reflecting a critical level of food insecurity among the IDP population and a heightened risk of malnutrition and excess mortality.[16]

Figure 5: % of households by Household Hunger Scale (HHS) score (4 weeks before data collection)

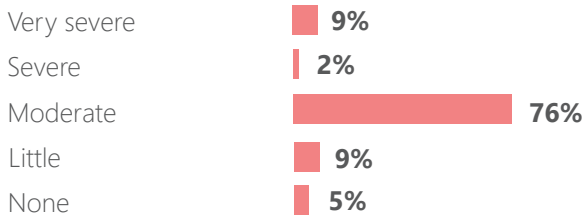

Table 5: % of households by Living Coping Strategy Index (LCSI) (4 weeks before data collection)

LCSI	Frequency	Percentage
None	1	1%
Stress	12	8%
Crisis	49	32%
Emergency	89	59%

Table 6: % of households by Consolidated Approach for Reporting Indicators (CARI) categorization

CARI	Frequency	Percentage
Marginally food insecure	6	4%
Moderately food insecure	69	46%
Severely food insecure	76	50%

Water, Sanitation and Hygiene (WASH)

The assessed IDP sites in Ad Du'ayn experienced severe water stress, due to inadequate handwashing practices and limited access to safe drinking water. These conditions forced households to alter daily activities and substantially increased the risk of waterborne and other infectious diseases, highlighting critical gaps in water supply, hygiene, and sanitation services. Similarly, the April 2025 SMART survey in Ad Du'ayn locality found that only 9.2% of households had access to improved water sources and 33.2% to improved sanitation facilities, underscoring persistent WASH service gaps.

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Methodology Overview

IMPACT conducted this assessment in coordination with Alight Sudan to provide a brief overview of the public health situation, including service availability and site conditions, across 3 IDP sites in Ad Du'ayn locality (East Darfur): Lagawa, Gereida, and Sabreen. The joint Public Health and Site assessment used quantitative method consisting of 2 types of interviews:

1. The **site assessment** involved 2 structured (quantitative) key informant interviews (KIIs) per IDP site, one with a site manager and one with an INGO staff member, across three IDP sites, Sabreen, Lagawa, and Gereida, resulting in a total of 6 KIIs. The interviews focused on key site characteristics and the availability of basic services, using the preapproved CCCM sector tool for the locality.
2. The **public health assessment** involved 151 structured household interviews across three IDP sites: 83 in Sabreen, 59 in Lagawa and 9 in Gereida. The interviews captured key information on Food Security and Livelihoods (FSL), Nutrition, Health, and Water, Sanitation, and Hygiene (WASH). Since the three camps are relatively homogeneous and geographically proximate, they were treated as a single stratum for sampling purposes. Using a 95% confidence interval, a 10% margin of error, and a 10% buffer, a total sample of 151 households was randomly assigned and proportionally allocated across the three sites using Probability Proportional to Size (PPS) sampling. Overall findings are weighted to account for differences in sample sizes and population across sites.

The Coping and Acute Risk Index (CARI) was computed using the Food Consumption Score (FCS), Livelihood Coping Strategies (LCS), reduced Coping Strategies Index (rCSI), and food expenditure share. Please note that the Food Expenditure Survey (FES) was collected through one single question, maintaining a 30-day recall period. Triangulated site and household level results provide an overview of service availability and public health status of internally displaced persons (IDPs) in the targeted sites, representative only of these populations.

Endnotes

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[1] Sudan: IOM Displacement Matrix, December 17 2025
[2] SMART Nutrition survey conducted in East Darfur Ad Du`ayn, Abu Jabra and Yasin Locality April-May 2025.
[3] Sudan, World Vision, Action Against Hunger Canada, El Daein locality, SMART survey final report, East Darfur, Sudan, April 2025.
[4] World Health Organization, Malnutrition in children, cut-off values for public health significance.
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[5] OCHA Sudan, Women, Food Insecurity, and Famine Risk in Sudan, Gender Snapshot, 21 July 2025.
[6]The Lancet Global Health. War-time mortality in Sudan: a multiple systems estimation analysis
World Health Organization, The top 10 causes of death, August 2024.
[7] Integrated Food Security Phase Classification (IPC), Technical Manual Version 3.0. - Evidence and Standards for Better Food Security and Nutrition Decisions, April 2019.
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[9] World Health Organization, Global Nutrition Targets 2030 to improve maternal, infant, and young child nutrition.
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[12] World Health Organization, Global nutrition targets 2030: breastfeeding brief, October 2025.
[13] World Health Organization and the United Nations Children's Fund (UNICEF), Indicators for assessing infant and young child feeding practices 2021.
[14] Global Nutrition Cluster, Guidelines for Conducting Nutrition Humanitarian Needs Assessment and Analysis - Version 2.0, 2024.
[15] Integrated Food Security Phase Classification (IPC), Technical Manual Version 3.0. - Evidence and Standards for Better Food Security and Nutrition Decisions, April 2019.
[16] World Food Programme, Consolidated Approach for Reporting Indicators of Food Security (CARI), 3rd edition, December 2021.

ABOUT IMPACT

Founded in 2010 and headquartered in Geneva, IMPACT Initiatives is a leading applied research organization and the largest independent provider of data in crisis-affected contexts. Through our initiatives we enable humanitarian and other aid actors to make better, evidence-based decisions by delivering timely, relevant, and methodologically rigorous data and analysis. Our extensive presence across crisis-contexts allows us to collect data directly from crisis-affected people wherever needed, including among the most vulnerable and hard-to-reach.

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