



South Sudan

Acute Needs Analysis | July - September 2025

WHAT IS THE ACUTE NEEDS ANALYSIS?

The **2025 Acute Needs Analysis (ANA)** seeks to support needs-based humanitarian prioritisation by **identifying populations facing the most acute, life-threatening needs**. The analysis uses a standardised framework to consolidate a wide range of evidence and develops findings that are **comparable within and across crises**.

The ANA focuses on **intersectoral drivers of mortality to assess the risk of emergency mortality**. The ANA considers the impact of violence and insecurity on (access to) critical services. However, due to the complexity of anticipating conflict dynamics and impacts, **it does not include risk of direct trauma deaths**, nor does it provide a full picture of all humanitarian needs or community priorities.

More information on definitions, methods, and limitations can be found in Annex 1 on page 9.

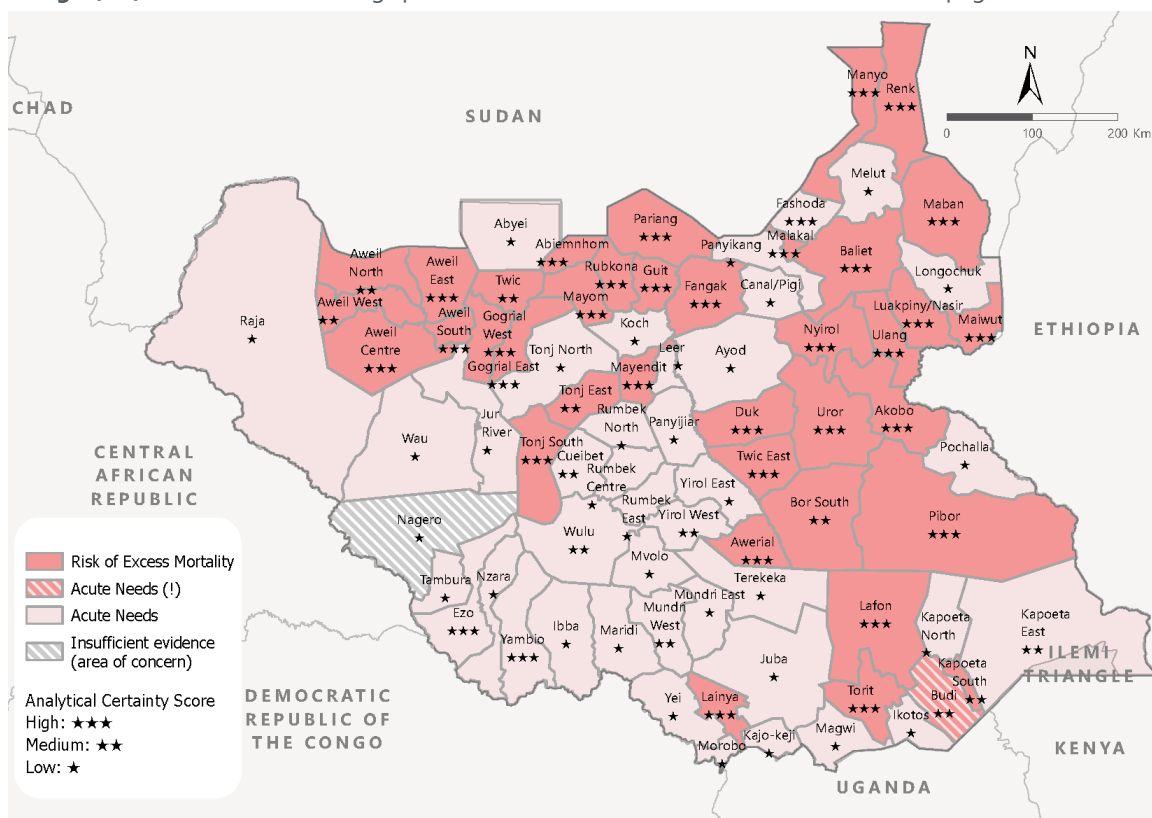
WHERE ARE THE MOST ACUTE NEEDS?

South Sudan entered 2025 at the intersection of multiple converging crises. **Renewed armed conflict since March 2025 – particularly intense in Upper Nile, the Equatorias, and Jonglei – was compounded by the third consecutive year of widespread flooding, continued economic collapse, and the sustained pressure of more than 1.3 million Sudanese refugees and South Sudanese returnees entering the country since April 2023.**¹ The result is a crisis of compounding system failures in which food insecurity, acute malnutrition, epidemic disease, and health system collapse are co-occurring at scale – and in which the populations most exposed are systematically those with the least capacity to cope.

In this context, repeated shocks compound quickly as conflict, flooding, and displacement disrupt markets and movement, erode access to basic services, and force households into negative coping. These dynamics are most acute in **Upper Nile and Jonglei, and across Unity and other counties bordering Sudan**, where large-scale displacement, restricted access, and service strain converge. At the same time, deteriorating WASH and overcrowded living conditions increase exposure to disease, while weak health and nutrition services limit the ability to mitigate illness and wasting once they emerge.

This analysis – covering July to September 2025 – uses primary and secondary data sources to assess life-threatening needs in all 80 counties across the ten states and three administrative areas of South Sudan.

Map 1: County-level analytical conclusions and corresponding level of certainty, ranging from low (*) to high (*)**. More detailed findings per administrative unit can be found in Annex 2 on pages 10-11.



Of the 80 counties assessed, 37 counties were identified as facing Risk of Excess Mortality (RoEM). Of the remaining counties, 42 were classified as Acute Needs (AN) and 1 was classified as an area of concern with data limitations (see Map 1). This analysis finds that an estimated 250,000 to 1,000,000 people may be in conditions of immediate, life-threatening need (see page 6). Beyond the scope of this analysis, broader humanitarian projections indicate that over 10 million people – roughly two-thirds of the national population – are expected to require humanitarian assistance in 2026.²

SYSTEM FAILURES DRIVING MORTALITY RISK

The acute needs documented in this analysis are not the product of failure in any single sector. They reflect the convergence of failures in food access, nutrition services, water and sanitation, and health care – failures that interact and reinforce one another in ways that increase the risk of preventable deaths.

Acute Food Insecurity: A Fractured Food System

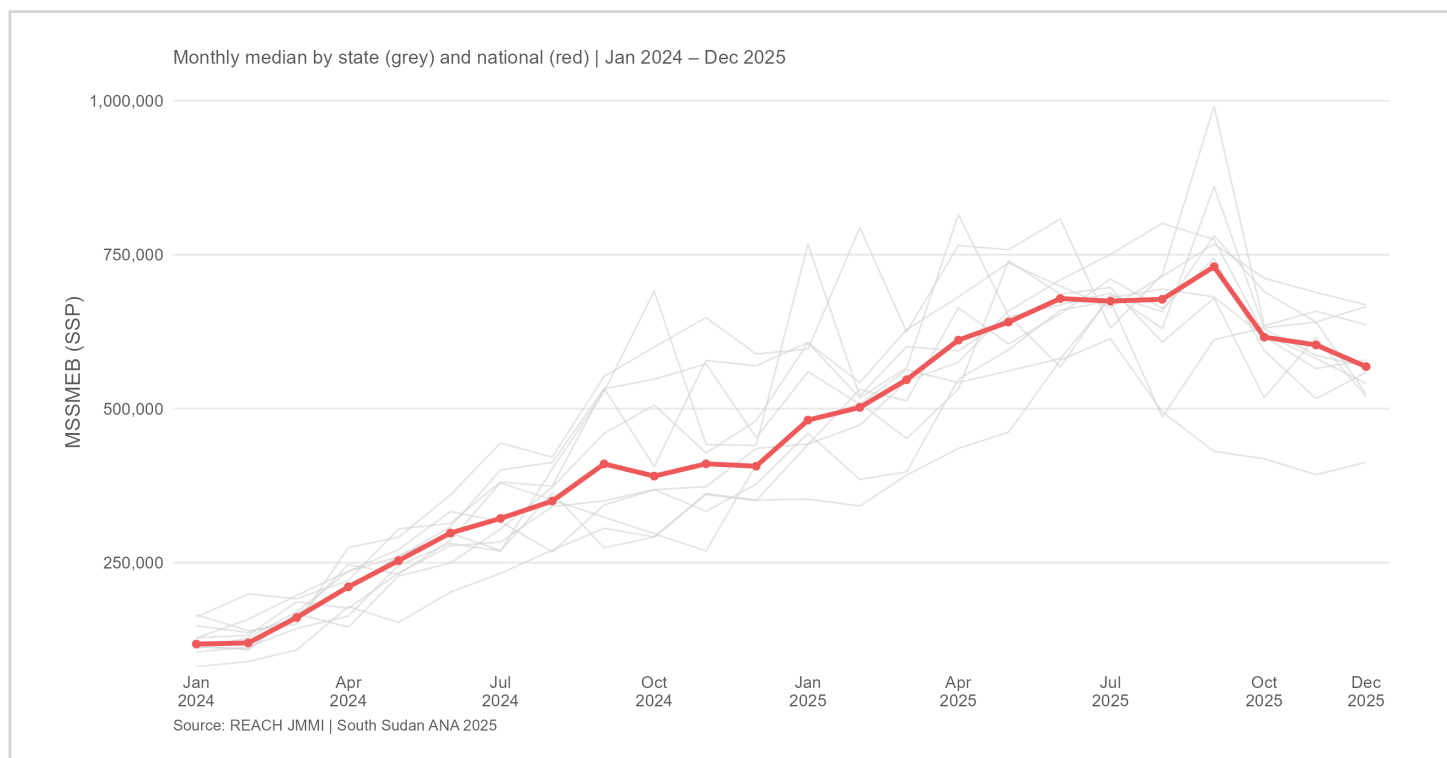
Our findings suggest that food insecurity is a foundational driver of mortality risk across South Sudan, operating both directly through starvation and indirectly by degrading immunity and resilience, making routine disease exposures life-threatening for populations already at the margin of survival. During April - July 2025, Integrated Phase Classification (IPC) analysis estimated that 7.7 million people – approximately 57 percent of the population – were in IPC Acute Food Insecurity (AFI) Phase 3 (Crisis) or worse, with 83,000 in IPC AFI Phase 5 (Catastrophe).³ Populations facing Phase 5 conditions were concentrated in Upper Nile and Jonglei,

where active armed conflict had disrupted all food access pathways simultaneously: agricultural production, markets, and humanitarian assistance.

At the county level, the depth of consumption failure is striking. In Nasir and Ulang (Upper Nile), 69 and 67 percent of households respectively recorded poor Food Consumption Scores (FCS), indicating inadequate dietary intake across multiple days.⁴ In Maiwut (Upper Nile), the figure reached 82 percent. In Gogrial West (Warrap), 18 percent of households reported very severe hunger using the Household Hunger Scale (HHS), and over 42 percent had adopted emergency-level livelihood coping strategies.⁴ In Maban and Baliet (Upper Nile), HHS very severe conditions affected 21 and 25 percent of households respectively – proportions that, in a context of absent or minimal humanitarian food assistance, can translate into catastrophic food deprivation.⁴

Findings suggest that the drivers of food insecurity are both structural and immediate. Conflict has disrupted agricultural cycles, destroyed livestock, and displaced farming communities at scale. Over 280,000 people were newly displaced within South Sudan during the July - September analysis period alone, part of over 820,000 displacement events tracked throughout 2025 (see Figure 4).⁵ Household purchasing power has been severely curtailed in conflict-affected states: the national median cost of the Multi-Sector Survival Minimum Expenditure Basket (MSSMEB) – the minimum amount required to meet a household's basic survival needs across food, health, WASH, shelter, and other essential sectors for one month – increased more than sixfold between January 2024 and September 2025 (from approximately 118,000 to 730,000 SSP), with some states recording increases of over 700 percent (Lakes) and 600 percent (Warrap) (see Figures 1 and 2).⁶

Figure 1: Multi-Sector Survival Minimum Expenditure Basket (MSSMEB) Cost in 2024 - 2025



The collapse of the South Sudanese Pound coupled with an approximately 143 percent annual inflation (FY2024/25) has priced households out of food markets, health care, and basic goods simultaneously, eliminating what was previously the primary fallback coping strategy for communities unable to produce enough food.^{6,7} In many counties, the interaction of market failure with agricultural disruption and displacement has removed all conventional food access pathways simultaneously.

The Sudan crisis has added a significant new dimension to food insecurity in Upper Nile. **Since April 2023, over 1.3 million South Sudanese returnees and Sudanese refugees have entered the country**, many arriving with no assets, in poor nutritional condition, and into reception/transit centres operating at several times their intended capacity.¹ **Among the arrivals, approximately 39,000 returnees were classified in IPC AFI Phase 5 (Catastrophe) in the mid-2025 IPC update** – representing conditions of extreme food deprivation compounded by transit camp dynamics.³ The concentration of displaced populations in counties with limited food production capacity and inadequate food assistance pipelines has driven acute food insecurity and associated malnutrition rates with crisis levels in transit and hosting communities that would otherwise have had more moderate risk profiles.

A Malnutrition Emergency of Exceptional Severity

South Sudan’s acute malnutrition crisis has reached levels that constitute a public health emergency in their own right in multiple counties. Critically, acute malnutrition both reflects and amplifies the wider system failures driving mortality risk. It is an outcome of severe food insecurity, unsafe water, inadequate sanitation, repeated disease exposure, and weak health and nutrition services. At the same time, undernutrition weakens immune function, particularly among children under five, making infections more frequent, more severe, and harder to recover from. In turn, disease can further worsen nutritional status by increasing nutritional needs

and reducing nutrient absorption, creating a reinforcing nutrition-infection cycle. Where this cycle occurs alongside WASH system failure and limited access to treatment, otherwise preventable illness and wasting are more likely to become life-threatening.

Global Acute Malnutrition (GAM) rates above 15 percent are classified as a nutrition emergency by international standards. Across South Sudan, at least 30 of 80 counties breach this threshold, and the geography of the most severe malnutrition rates maps substantially onto that of displacement, flooding, conflict, health service collapse, and limited therapeutic nutrition programming.

The most extreme malnutrition rates cluster across two regions: Northern Bahr el Ghazal and Unity State. In Northern Bahr el Ghazal, Aweil South recorded GAM of 30 percent – the highest rates documented nationally at the time of the analysis – while Aweil North returned 19 percent, above the nutrition emergency threshold.⁴ In Unity State, Rubkona recorded GAM of 29 percent – approaching thresholds associated with famine conditions – whereas Guit was at 15 percent but in a context of 80 percent surface water reliance and majority-household access barriers to health services.⁸ In Warrap, Twic and Gogrial East each recorded 23 percent GAM rates, and Tonj South and Tonj East returned 17 and 15 percent respectively – rates that, combined with high disease burden and reported health access barriers exceeding 80 percent of households, were assessed as sufficient to sustain a RoEM classification.⁴

Emergency levels of acute malnutrition extend across Upper Nile and Jonglei. In Upper Nile, Renk – a county functioning as a major transit hub for returnees – recorded 23 percent, strikingly high for an urban-transit context and reflecting the rapid nutritional deterioration of newly arrived populations; **Nasir exceeded 25 percent; Baliel, Malakal, and Manyo recorded 22 percent.**⁴ In Jonglei and the Greater Pibor Administrative Area, Pibor recorded 21 percent.

Figure 2: Multi-Sector Survival Minimum Expenditure Basket (MSSMEB) Cost by State in 2024 - 2025

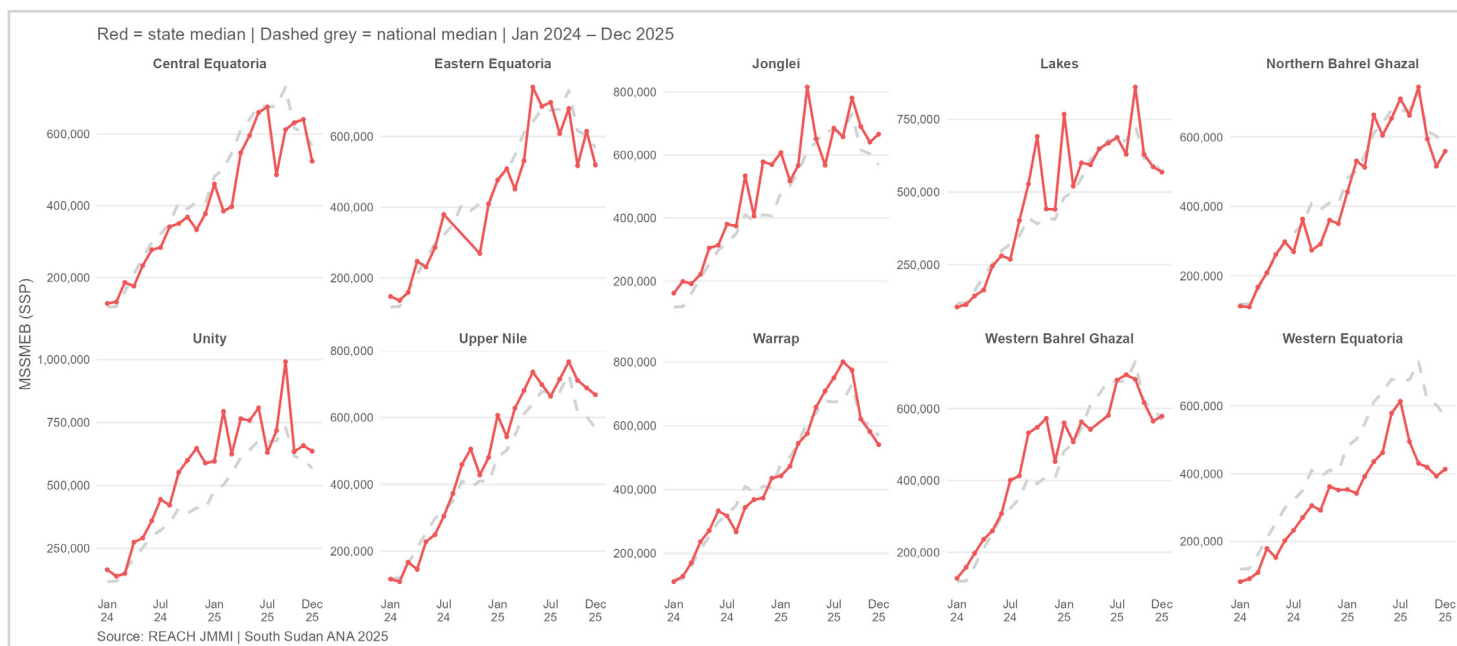
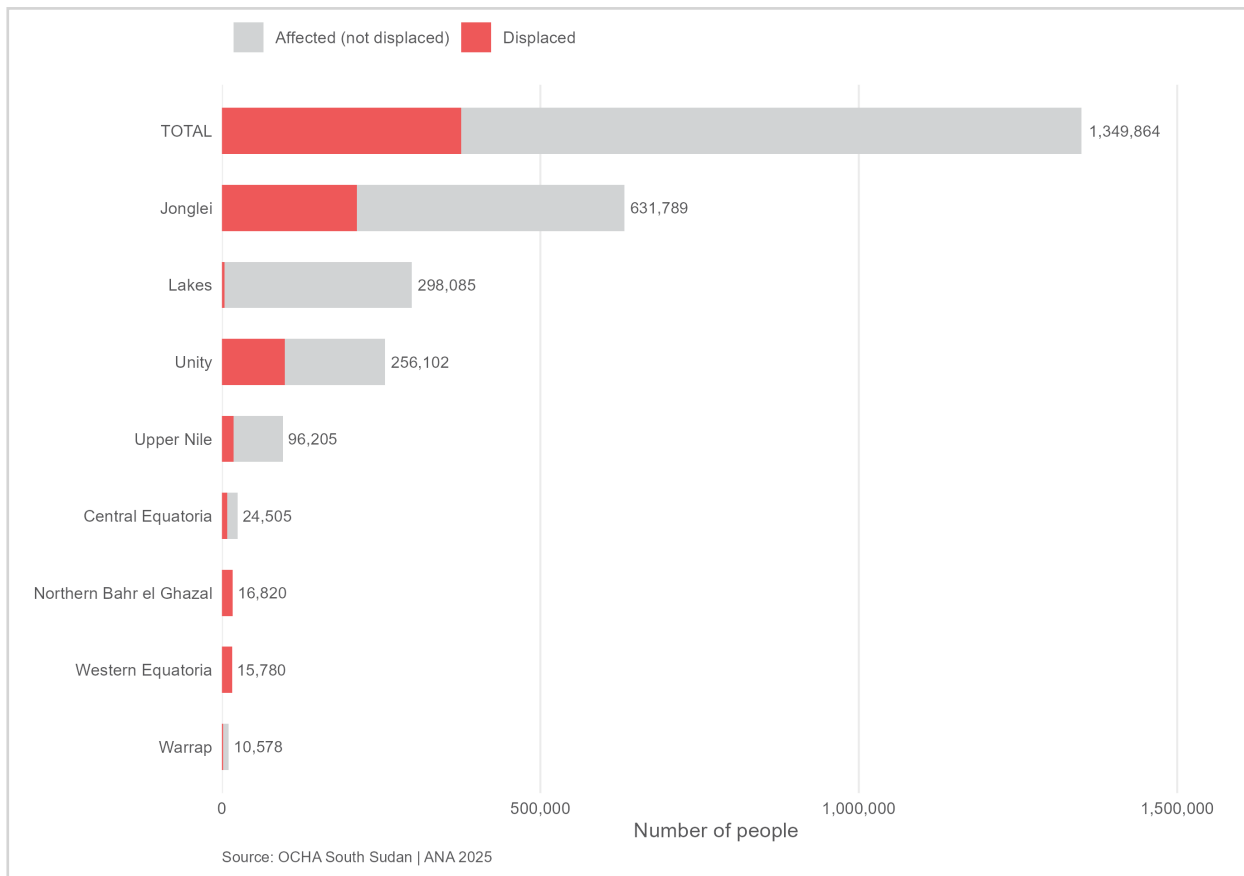


Figure 3: Number of People Affected and Displaced by Floods per State in 2025.

These rates are not incidental as they appear to largely follow the specific geography of overlapping shocks – flooding, conflict, displacement, and structural WASH failure – and reflect cumulative deprivations.

WASH System Collapse and Epidemic Mortality Risk

Findings point to the collapse of water, sanitation, and hygiene systems as a defining feature of the acute needs crisis across South Sudan. In most RoEM counties, WASH indicators extend beyond poor service quality to signal structural system failure, characterised by the near-universal absence of basic sanitation infrastructure and widespread reliance on unimproved water sources. This creates the conditions for recurrent outbreaks of epidemic disease, particularly cholera and acute watery diarrhoea, which can interact with acute malnutrition in ways that increase mortality risk and represent one of the most common risk pathways identified in this analysis.

South Sudan recorded its worst cholera outbreak in documented history in 2025, with over 95,000 cases and 1500 deaths between September 2024 - October 2025.⁹ The outbreak followed patterns of entrenched WASH system failure, with the highest case counts concentrated in counties where over 80% of households rely on unimproved sanitation and where many depend on untreated surface water sources.

In Warrap State, reported unimproved sanitation is near-complete: Twic, Gogrial East, and Gogrial West recorded rates of 91 to 99 percent of households relying on unimproved sanitation, with open defecation affecting

43 to 92 percent of households and 46 to 56 percent of households reporting more than 30 minutes' travel to their nearest water source; Gogrial West recorded 478 cholera cases and 19 confirmed deaths between July and September 2025.^{8,10}

In Upper Nile and Jonglei, the pattern is compounded by displacement density. **Between January and December 2025, an estimated 160,000 people were newly displaced in Upper Nile and over 250,000 in Jonglei (see Figure 4).** Across these areas, WASH indicators point to structural system failure: 97 percent of households in Maiwut reportedly rely on unimproved sanitation; in Baliel, open defecation affects 97 percent of households and 70 percent rely on surface water; and in Nasir and Ulang, 84 and 75 percent of households, respectively, rely on unimproved sanitation.⁸

In Unity State, WASH vulnerabilities were particularly severe in several RoEM counties: in Mayendit, 93 percent of households relied on unimproved sanitation, while in Guit, 80 percent relied on surface water for drinking. These conditions may be reflected in the scale of cholera transmission during the analysis period, with over 2,600 cases and 32 confirmed deaths recorded in Bentiu IDP camp in Rubkona, and over 1,500 cases recorded among flood-displaced communities in Mayendit.^{8,10}

In Northern Bahr el Ghazal, WASH deprivations were similarly acute: in Aweil Centre and Aweil East, 83 and 99 percent of households lacked improved sanitation, while 69 and 67 percent faced journeys of more than 30 minutes to the nearest water source. Cholera deaths were recorded in both counties during the analysis period.

Similar WASH deprivations were observed in Aweil North and South, where unimproved sanitation reportedly affected 86 and 87 percent of households, and long journeys to water were reported by 63 and 88 percent of households, respectively.^{8,10}

In Jonglei and GPAA, Pibor and Fangak record 81 to 92 percent of households without improved sanitation, while widespread reliance on surface water is compounded by extensive seasonal flooding that contaminates low-lying areas beyond levels typically observed in these flood-prone settings.⁸

These WASH conditions can compound mortality risk by increasing exposure to waterborne disease. **Poor sanitation contributes to a high-risk epidemic environment; unsafe water introduces pathogens directly into the household; distance to water increases likelihood of households relying on contaminated surface water, especially during floods when latrines overflow.** Each link in this chain increases the probability of diarrhoeal exposure, and diarrhoeal exposure in a malnourished population can reinforce the nutrition-infection cycle.

Health System Failure in High-Need Areas

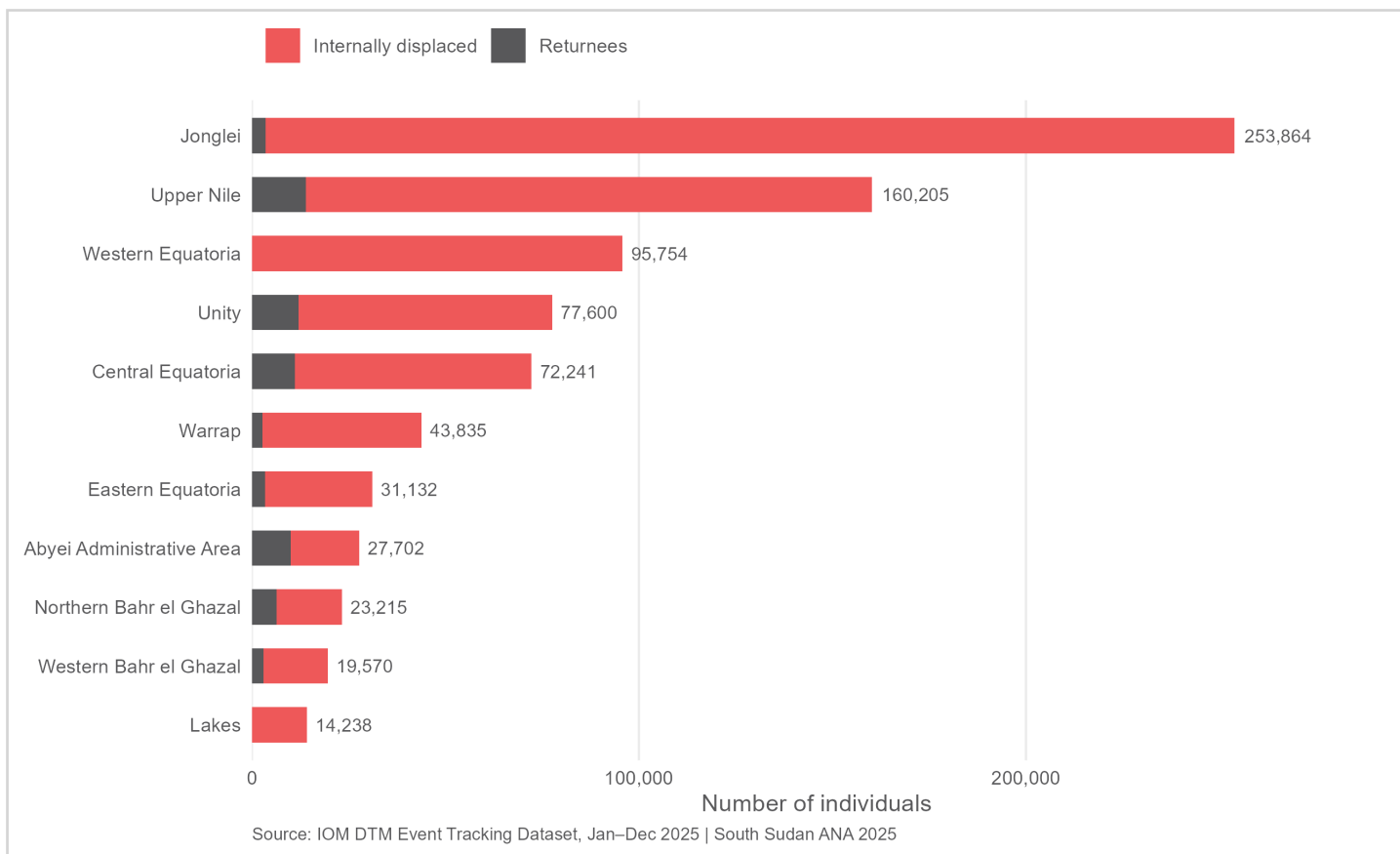
Our analysis suggests that the failure of health services is systematically concentrated in the areas of greatest need. **In the counties with the highest malnutrition rates, most severe food insecurity, and most intense disease burden, access to health services appears lowest** – meaning that the populations most likely to benefit from treatment are the least likely to receive it.

In Pibor (GPAA), only 5 percent of households reported having access to health services, meaning that the overwhelming majority of households cannot reach care. In Twic East (Jonglei), 99 percent of households report physical barriers to accessing health services.⁸

In Nasir, Ulang, and Maiwut (Upper Nile), active armed conflict has destroyed or closed the majority of health facilities, and the few that remain functional operate without consistent drug supplies or trained staff.¹¹ In Fangak (Jonglei), recurrent flooding has made physical access seasonal at best. During peak flood periods (June - September), communities are often isolated from any formal health care (see Figure 3).

Economic exclusion from health care operates as a parallel barrier, distinct from physical access but equally disabling. In Aweil North, only 19 percent of households reported being able to afford health services; in Rubkona, during an active cholera epidemic, the figure was 17 percent; in Guit, barriers to health affordability affect the majority of households.⁸ These patterns suggest that even where physical or security-linked access barriers are less pronounced, households may still be effectively excluded from health care by cost. In practice, this weakens one of the key mitigating pathways given that geographic proximity to health services does not necessarily translate into access. Across many RoEM counties, the combined effect of distance, cost, and reduced facility capacity limits the ability of health services to counteract epidemic and malnutrition risks.

Figure 4: Number of People Displaced per State in 2025



Conflict is one of the most direct drivers of health infrastructure collapse in Upper Nile and parts of Jonglei and the Equatorias. At least eight targeted attacks on health facilities were documented in 2025: in Old Fangak (Jonglei), the sole hospital serving over 40,000s people was bombed in May 2025; in Ulang (Upper Nile), the hospital was looted in April 2025.¹¹

Across Nasir (Upper Nile), where risk of famine has been documented in the latest IPC analyses and GAM exceeds 25 percent, the health system required to interrupt the nutrition-infection cycle is effectively absent as the main hospital in Nasir Town remains non-functional since March 2025.^{3, 4, 11}

How System Failures Interact

While each of the four system failures described above constitutes a severe crisis in its own right, the defining feature of life-threatening needs in RoEM counties is not the severity of individual failures but the mechanisms through which they interact. **Our deep-dive analysis consistently found that sector-level deprivations can become life-threatening when they reinforce one another through specific biological, logistical, and economic pathways.**

Findings suggest that the primary mechanism of RoEM in South Sudan operates through the nutrition-infection cycle. Acute malnutrition weakens immune function, making individuals – particularly children under five – acutely vulnerable to enteric pathogens. In counties where WASH system failure creates pervasive contamination through open defecation and surface water reliance, repeated diarrhoeal exposure accelerates wasting through direct nutrient loss. Cholera is the extreme expression of this cycle: survivable in well-nourished populations with oral rehydration, but with sharply elevated case fatality in severely malnourished populations where GAM rates are above 15 percent.¹² The simultaneous presence of emergency-levels of acute malnutrition and active cholera transmission constitutes the dominant mortality pathway across the majority of RoEM counties, including Rubkona, Gogrial West, Aweil East, Torit, and Renk.^{4, 8, 12}

The health system's role in this chain is as the point where the cycle could be broken – and where, in RoEM counties, it consistently fails. In Pibor, where effective health access stands at 5 percent; in Twic East, where 99 percent of households face physical barriers; in Rubkona, where only 17 percent can afford treatment during an active cholera outbreak – the absence of functional health services converts treatable conditions into fatal ones.⁸ Gaps in health system functionality remove the interventions that would otherwise interrupt the nutrition-infection cycle at the point of acute illness or severe acute malnutrition.

A second compounding mechanism operates through geographic isolation, eliminating all protective pathways simultaneously. In Upper Nile (Nasir, Ulang, Maiwut, Longochuk) and parts of Jonglei (Fangak, Twic East), conflict and flooding have simultaneously collapsed

services and increased the exposed population. In Nasir, 69 percent of households have poor food consumption and 84 percent lack improved sanitation.^{4, 8} In Baliet, HHS very severe hunger affects 25 percent of households alongside 97 percent open defecation and 70 percent surface water reliance.⁸ Displacement concentrates already-vulnerable populations into areas with the least health infrastructure and lowest food access, while eroding coping strategies – market access, agricultural production, social networks – that might otherwise provide resilience. In Pibor, where GAM rates of 21 percent indicate a wide burden of acute malnutrition, effective health access is reported at 5 percent, and an estimated 290,000 people across the county have been affected by flooding. This combination produced the highest single-county magnitude estimate of life-threatening needs in our analysis.⁸

Economic exclusion threads through all compounding patterns. The collapse of the South Sudanese Pound coupled with approximately 143 percent annual inflation has simultaneously priced households out of food markets, health care, water treatment products, and hygiene items.^{6, 7} In Aweil North, only 19 percent of households can afford health services; in Rubkona, 17 percent during an active cholera epidemic.⁸ Where economic exclusion operates simultaneously across food, health, WASH, and nutrition sectors, households have no remaining pathway to reduce mortality risk through self-provisioning or market access (see Figures 1 and 2).

WHO IS AT RISK?

ESTIMATES OF MAGNITUDE

In addition to the geography of acute needs, the ANA sought to capture an estimate of the magnitude of needs to **help identify where the risk of loss of life is greatest** and ensure that small pockets of the population with very severe needs living outside of areas categorised with RoEM **are not overlooked.**

The estimate of magnitude provides **an indicative range of the number of people at risk of preventable loss of life** due to public health causes. It combines data on overlapping deprivations in food, water, and living conditions with information on health-related vulnerabilities and the mitigating capacity of health systems. The calculation method requires household-level data.

The ANA estimates that between 250,000 and 1,000,000 people in South Sudan were facing conditions of immediate, life-threatening need during the July - September 2025 analysis period. The width of the range reflects not uncertainty about whether a crisis of this scale exists, but genuine difficulty in estimating its precise magnitude across counties where population denominators are contested, conflict restricts data collection, and conditions are dynamic. **The lower bound represents a figure the evidence firmly supports; the upper bound reflects plausible worst-case exposure given the structural drivers at work.**

These magnitude estimates should be read as an indication of the scale and geography of risk, not a precise population count. Uncertainty operates on multiple dimensions: population denominators in many counties are contested or outdated; the boundary between RoEM and Acute Needs is, by the nature of indirect evidence, not always sharply defined; and pockets of households facing potentially life-threatening needs were consistently identified outside counties classified as RoEM. As a result, the absence of a RoEM classification should not be read as the absence of severe or potentially life-threatening need. The counties with the least data are often those with the highest risk, meaning the analysis may systematically underestimate need in the most inaccessible areas.

Additionally, the refugee and returnee population – approximately 605,000 people as of December 2025, largely concentrated in Upper Nile and Ruweng Administrative Area – requires dedicated sub-population analysis that was not fully possible within this analytical cycle; county-level RoEM conclusions in hosting and transit areas are relevant to, but do not substitute for, a systematic refugee-specific risk assessment. With over 10 million people – roughly two-thirds of the national population – being projected to require humanitarian assistance in 2026; the ANA figure identifies the subset for whom the risk of preventable death is most immediate.²

Acute Needs in Displacement Sites

For this analysis, REACH collected primary data in September 2025 across six displacement sites (Bentiu, Bor, Juba, Maban, Malakal and Renk), surveying 1,088 households. This assessment was conducted to help address data gaps for displaced populations, as some country-wide surveys did not cover displacement sites or urban areas. The findings informed the ANA, particularly the deep-dive analysis, where multiple sources were triangulated to validate or reject Risk of Excess Mortality flags from the quantitative flagging analysis.

Our findings show that severe food insecurity persisted even at the start of the harvest season. This was driven by reliance on unsustainable livelihoods, limited access to diverse food and income sources, and widespread use of coping strategies to manage substantial consumption gaps. Conditions were most concerning in Bor, Renk and Bentiu, where ‘very severe’ hunger levels (HHS) indicative of IPC AFI Phase 5 conditions were recorded for 9 percent of households in the former PoC in Bor, 9 percent in Renk Transit Centre, and 8 percent in Bentiu IDP camp.¹³

WASH conditions were particularly inadequate in Bor and, to a lesser extent, Juba, with open defecation reported by 100 percent of households in Bor and 69 percent in Juba, alongside significant constraints on access to drinking water. Humanitarian key informants, including public health experts, reported that disease outbreaks were common across all six sites and were compounded by congested living conditions. Access to health services was especially limited in Juba and Bor, where a majority of ill household members did not seek care (54 and 67 percent, respectively).

Overall, the findings highlight that populations in displacement sites are facing a convergence of severe food insecurity, inadequate WASH, elevated health risks, and overstretched services, with vulnerabilities further compounded by climate shocks and an economic crisis. While the 2025 harvest may ease some consumption gaps, the majority of households in these displacement sites across Bor, Juba, Renk and Bentiu reported not planting any crops in the two months prior to data collection, and access to humanitarian food assistance was limited in most sites – reinforcing the concern that life-threatening needs are highly concentrated in these settings.

Geography of Risk

The geographic distribution of life-threatening risk is concentrated but not confined to a single region. The highest densities are found in Jonglei State and the Greater Pibor Administrative Area, where severe malnutrition, structural WASH collapse, near-total health access failure, and recurrent flooding have converged across multiple counties. Upper Nile carries the second largest concentration, shaped by a distinct combination of active armed conflict, mass displacement from Sudan, cholera transmission in high-density transit and IDP settings, and severe food insecurity including risk of famine in Nasir.

Unity State, particularly around the Bentiu displacement site in Rubkona, presents a pattern defined by particularly high malnutrition rates and an active cholera epidemic with documented deaths. Northern Bahr el Ghazal and Warrap present a different configuration: less defined by active conflict and displacement than by chronic, structural failure – emergency-level malnutrition, near-universal WASH inadequacy, and cholera transmission in populations whose coping capacity has been progressively eroded over years of compounding shocks. Beyond these five primary concentrations, RoEM has also been identified across parts of Eastern Equatoria, Lakes State, and the Unity-NBeG border zone, in counties where epidemic-driven, flood-driven, or displacement-driven mortality pathways converge.

A NOTE ON THE EVOLVING CONTEXT

This analysis reflects conditions in South Sudan between July and September 2025. In many parts of the country, the situation has changed materially since the data used for this analysis was collected, and the conclusions should be understood as a baseline rather than a current snapshot. Several developments are particularly significant for interpreting the analysis findings.

A particularly significant evolution is the renewal of armed conflict in Jonglei State beginning in December 2025. Intense fighting in central and northern Jonglei resulted in over 280,000 people being newly displaced, widespread destruction of civilian infrastructure, and a near-complete collapse of humanitarian access across several counties.¹⁴

Several counties that this analysis assessed as Acute Needs (rather than RoEM) on the basis of more stable conditions in the analysis period are likely to have deteriorated significantly; and counties already assessed as RoEM under July - September conditions may have experienced further compounding of the drivers identified in this analysis.

The findings from this analysis should therefore be treated as a conservative baseline for Jonglei. A REACH crisis situation alert in January 2026 documented over 230,000 people newly displaced, four health facilities looted, and 24 nutrition sites closed as a result of renewed fighting.¹⁵ **FEWS NET warns that risk of famine (IPC Phase 5) has likely expanded to north-central Jonglei and Upper Nile** citing the compounding effects of conflict-driven displacement, disrupted food access, and an already severe malnutrition baseline.¹⁴

In other parts of the country – notably the Equatorias and parts of Greater Bahr el Ghazal – conditions have been more stable, though the structural drivers of acute need (WASH failure, high malnutrition rates, economic exclusion from health care) identified in this analysis remain in place and continue to generate ongoing mortality risk in the absence of sustained response. At the same time, localized violence can still trigger sudden deteriorations even in comparatively stable areas: **in December 2025, a REACH emergency assessment documented conflict-driven displacement from Nagero (Western Equatoria) towards Bazia, in Wau County,** increasing pressure on services and host communities in parts of Greater Bahr el Ghazal.¹⁶

ABOUT REACH

REACH Initiative facilitates the development of information tools and products that enhance the capacity of aid actors to make evidence-based decisions in emergency, recovery, and development contexts. The methodologies used by REACH include primary data collection and in-depth analysis, and all activities are conducted through inter-agency aid coordination mechanisms. REACH is a joint initiative of IMPACT Initiatives, ACTED, and the United Nations Institute for Training and Research - Operational Satellite Applications Programme (UNITAR - UNOSAT).



Global Affairs
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ANNEX 1: METHODOLOGY OVERVIEW

HOW WAS THE ANALYSIS CONDUCTED?

The ANA is a structured analysis designed to identify populations facing the most acute, life-threatening conditions resulting from a breakdown of critical systems in contexts in which mortality data is unavailable. It aims to inform big-picture humanitarian prioritisation decisions.

The analysis assesses the functionality of critical systems (health, nutrition, food, water, and living conditions), triangulated with immediate mortality drivers (acute malnutrition and morbidity). Severe deprivations in any or multiple of these public health systems are investigated further to determine whether they are severe enough to result in a Risk of Excess Mortality (RoEM).

The analysis consists of two critical phases. During the quantitative phase, preliminary “flags” are raised when emergency thresholds are exceeded across multiple indicators, based on global reference frameworks (SPHERE, WHO, IPC, etc.). Analysts then verify, triangulate, and interpret these flags with contextual evidence during the Deep-dive phase, using structured analysis techniques, to reach a final ANA category for each area or group:

- **Excess Mortality:** Timely evidence confirms mortality rates exceed the World Health Organisation (WHO) Emergency Threshold (>1 death/10,000 people/day, >2 for children under 5 years old).
- **Risk of Excess Mortality (RoEM):** Very severe gaps in multiple mortality drivers are interacting in a way that suggests excess mortality is likely occurring within the analysis timeframe, or is imminent.
- **Acute Needs (AN):** Evidence confirms very severe gaps in at least one mortality driver, but not to the extent that there is immediate concern for excess mortality.
- **No evidence of AN:** There is no evidence of very severe gaps in mortality drivers.

In some cases, (nearly) all available evidence suggests potential concern for RoEM due to multiple systems failing, but a specific data gap prevents final confirmation of RoEM. Those areas are categorised as **“Acute Needs (!)”**.

WHO IS NOT INCLUDED IN THE ANALYSIS?

For South Sudan, the ANA assessed all 80 counties drawing on the most recent available data from IPC food security and nutrition analyses, WASH and health surveillance, displacement tracking, outbreak reporting, and field assessments. A quantitative analysis was conducted at county level, with supplementary deep-dive analysis for clusters of counties sharing similar risk profiles.

Refugees, asylum-seekers, and returnees represent a significant analytical gap. As of December 2025, South Sudan hosts 605,062 refugees and asylum-seekers (approximately 95 percent Sudanese), concentrated primarily in Upper Nile (49 percent) and Ruweng Administrative Area/Jamjang (23 percent). The evidence base was insufficient for a fully parallel, refugee-specific analysis in this cycle. This is a key interpretive limitation: county-level RoEM conclusions in hosting and transit areas are relevant but do not substitute for dedicated analysis of refugee sub-populations and sites, which often experience distinct risk profiles related to site-specific density, service structures, and disease transmission patterns.

DISCLAIMER

While the analysis framework and process are standardised to promote consistency and reduce cognitive biases, conclusions depend on the availability, reliability, and timeliness of data, as well as the quality of contextual interpretation. Each area is assigned an **analytical certainty score**, reflecting the degree of confidence in the conclusion (★/★★/★★★) based on the type and quality of the data and the strength of triangulation.

The ANA does not speak to community priorities and should not replace sectoral assessments, nor does it provide a comprehensive view of the full breadth and depth of intersectoral humanitarian needs.

The ANA considers the impact of violence and insecurity on access to and functionality of critical systems, and its possible cascading impacts on public health. However, due to limitations in nowcasting and anticipating conflict dynamics, **the ANA does not assess the risk of direct trauma deaths.**

The ANA in South Sudan assesses the situation for the period of **July to September 2025. Contextual changes after this time window have not been reflected in the results.**

More detailed information on the methodology can be accessed [here](#)

ANNEX 2: ANALYSIS CONCLUSIONS

Unit of Analysis	Analytical Conclusion	Certainty Score
Abiemnhom	RoEM	***
Abyei	Acute Needs	*
Akobo	RoEM	***
Akoka	Acute Needs	*
AweilCentre	RoEM	***
Aweil East	RoEM	***
Aweil North	RoEM	**
Aweil South	RoEM	***
Aweil West	RoEM	**
Awerial	RoEM	***
Ayod	Acute Needs	*
Baliet	RoEM	***
Bor South	RoEM	**
Budi	Acute Needs (!)	**
Canal/Pigi	Acute Needs	*
Cueibet	Acute Needs	**
Duk	RoEM	***
Ezo	Acute Needs	***
Fangak	RoEM	***
Fashoda	Acute Needs	***
Gogrial East	RoEM	***
Gogrial West	RoEM	***
Guit	RoEM	***
Ibba	Acute Needs	*
Ikotos	Acute Needs	*
Juba	Acute Needs	*
Jur River	Acute Needs	*
Kajo Keji	Acute Needs	*
Kapoeta East	Acute Needs	**
Kapoeta North	Acute Needs	*
Kapoeta South	RoEM	**
Koch	Acute Needs	*
Lafon	RoEM	***
Lainya	RoEM	***
Leer	Acute Needs	*
Longochuk	Acute Needs	*
Luakpiny/Nasir	RoEM	***
Maban	RoEM	***
Magwi	Acute Needs	*
Maiwut	RoEM	***
Malakal	RoEM	***
Manyo	RoEM	***
Maridi	Acute Needs	*
Mayendit	RoEM	***
Mayom	RoEM	***
Melut	Acute Needs	*
Morobo	Acute Needs	*
Mundri East	Acute Needs	*
Mundri West	Acute Needs	**

ANNEX 2: ANALYSIS CONCLUSIONS

Unit of Analysis	Analytical Conclusion	Certainty Score
Mvolo	Acute Needs	*
Nagero	Insufficient evidence, but area of concern	*
Nyirrol	RoEM	***
Nzara	Acute Needs	*
Panyijjar	Acute Needs	*
Panyikang	Acute Needs	*
Pariang	RoEM	***
Pibor	RoEM	***
Pochalla	Acute Needs	*
Raja	Acute Needs	*
Renk	RoEM	***
Rubkona	RoEM	***
Rumbek Centre	Acute Needs	*
Rumbek East	Acute Needs	*
Rumbek North	Acute Needs	*
Tambura	Acute Needs	*
Terekeka	Acute Needs	*
Tonj East	RoEM	**
Tonj North	Acute Needs	*
Tonj South	RoEM	***
Torit	RoEM	***
Twic	RoEM	**
Twic East	RoEM	***
Ulang	RoEM	***
Uror	RoEM	***
Wau	Acute Needs	*
Wulu	Acute Needs	**
Yambio	Acute Needs	***
Yei	Acute Needs	*
Yirol East	Acute Needs	*
Yirol West	Acute Needs	**

ANNEX 3: LIST OF SOURCES

The 2025 ANA in South Sudan draws on a wide range of primary and secondary quantitative data sources. In addition, the analysis uses qualitative sources – including humanitarian reports, key informant inputs, and contextual updates – to triangulate and interpret the findings.

The table below outlines the main evidence used to assess critical systems and mortality drivers, as well as the primary data sources.

System	Evidence Used	Primary Sources
Food	<p>Individual / household food consumption: Household Hunger Scale (HHS) Food Consumption Score (FCS) Reduced Coping Strategies Index (rCSI) IPC Acute Food Insecurity (AFI) phase classification</p> <p>Household food security: Use of emergency livelihoods coping strategies (LCS)</p> <p>Market functionality: Market Functionality Score (MFS)</p>	<p>FSNMS 2025 (Food Security and Nutrition Monitoring System)</p> <p>IPC (Integrated Food Security Phase Classification)</p> <p>REACH JMMI (Joint Market Monitoring Initiative)</p>
Living Conditions	<p>Living conditions / shelter: % of households with inadequate shelter</p> <p>Sanitation and hygiene: % of households with unimproved sanitation facility</p> <p>Flooding and Displacement # of people displaced (by any trigger) # of people displaced by floods # of people affected by floods</p>	<p>ISNA 2025 (Intersectoral Needs Assessment)</p> <p>IOM DTM 2025</p> <p>OCHA Flood Displacement Data</p>
Water	<p>Household water consumption: % of households relying on surface water as primary drinking water source</p> <p>Household water security (access): % of households with distance to main water source for drinking > 30 minutes % of households reporting not enough water to meet household needs</p>	<p>ISNA 2025 (Intersectoral Needs Assessment)</p>
Health and Nutrition Services	<p>Accessibility / affordability: % of households with access to health services % of households able to pay for health services</p> <p>Availability: Health facilities per population (PHC/SHC) % of functioning primary health care (PHC) facilities % of functioning secondary health care (SHC) facilities</p>	<p>ISNA 2025 (Intersectoral Needs Assessment)</p> <p>Health Cluster (facility mapping / service availability)</p>
Health Outcomes	<p>Nutrition status: Global Acute Malnutrition (GAM) by WHZ (combined) % of children 6–59 months GAM by MUAC</p> <p>Health status: U5 common childhood illness incidence per 1,000, per epiweek U5 acute respiratory infection incidence per 1,000, per epiweek Evidence of measles outbreak Evidence of cholera outbreak Cholera suspected/confirmed cases per 1,000 population per week (all ages)</p>	<p>FSNMS 2025 (Food Security and Nutrition Monitoring System)</p> <p>Health Cluster IDSR (Integrated Disease Surveillance and Response)</p> <p>Health Cluster Cholera Dashboard</p>

ANNEX 4: ENDNOTES

- 1 UNHCR (2025). [South Sudan Refugee and Returnee Response Operational Dashboard](#), December 2025.
- 2 HNRP (2026). [South Sudan Humanitarian Needs and Response Plan 2026](#). OCHA.
- 3 IPC (2025). [South Sudan: Acute Food Insecurity Data April–July 2025 and Projection for August–December 2025](#). Integrated Food Security Phase Classification.
- 4 FSNMS (2025). [Food Security and Nutrition Monitoring System, Round 31, South Sudan 2025](#). WFP/FAO/Government of South Sudan. Dataset on file with REACH (Round 30; Round 31 datasets on file)
- 5 IOM DTM (2025). [South Sudan Event Tracking Dataset: January–December 2025](#). International Organization for Migration, Displacement Tracking Matrix.
- 6 REACH JMMI (2025). [South Sudan Joint Market Monitoring Initiative 2025](#). REACH Initiative.
- 7 IMF (2025). [South Sudan: Article IV Consultation and Staff Report, FY2024/25](#).
- 8 ISNA (2025). [South Sudan Intersectoral Needs Assessment 2025](#). International Organization for Migration. Dataset on file with REACH. Note: ISNA health access figures are based on household survey responses about reported barriers to care, not facility-level functionality assessments.
- 9 WHO (2025). [Cholera in South Sudan — One Year On](#). World Health Organization.
- 10 Health Cluster (2025). [South Sudan Cholera Dashboard: July–September 2025](#). Health Cluster South Sudan.
- 11 MSF (2025–2026). Médecins Sans Frontières South Sudan: press releases and situation reports on attacks on health facilities, [including Old Fangak hospital bombing](#) (May 2025) and [Ulang hospital looting](#) (April 2025).
- 12 Pavlinac, P. B., et al. (2020). “[Malnutrition and enteric disease co-occurrence among children in low-resource settings](#).” *The Lancet Global Health*, 8(5)
- 13 REACH (October 2025). [South Sudan Displacement Sites Assessment Factsheet: Severe Acute Needs in six displacement sites](#). REACH Initiative.
- 14 FEWS NET (January 2026). [South Sudan: Key Message Update January–May 2026](#).
- 15 REACH (January 2026). [Jonglei Crisis Situation Alert: Looming escalation of violence will deepen chronic humanitarian crisis in Jonglei State](#). REACH Initiative.
- 16 REACH (December 2025). [Nagero and Wau Emergency Assessment: Escalation of violence drives mass displacement from Nagero County](#). REACH Initiative.