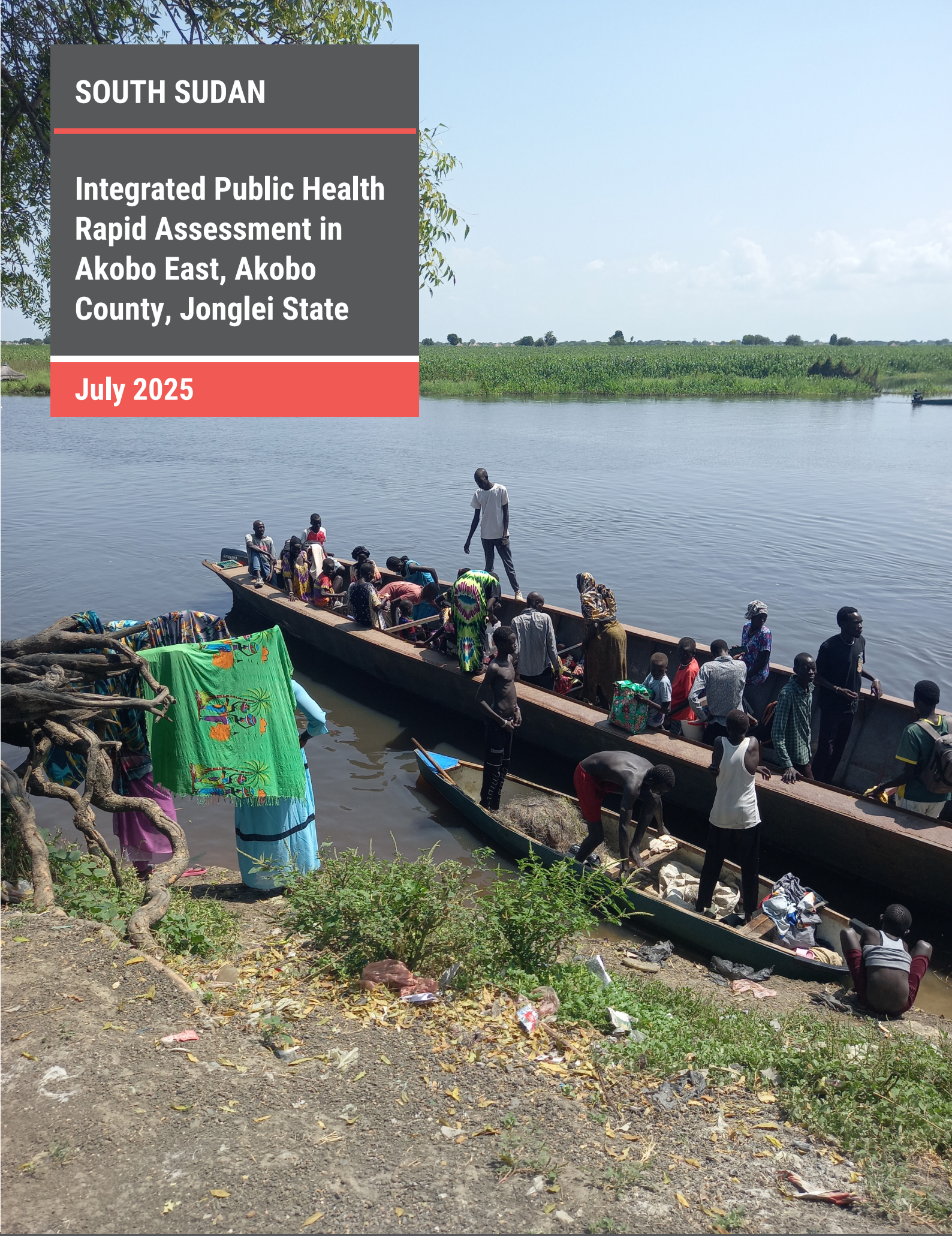
SOUTH SUDAN

Integrated Public Health Rapid Assessment in Akobo East, Akobo County, Jonglei State

July 2025



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SUMMARY

Akobo County, in northeastern Jonglei State, shares borders with Nyirol, Uror, Pibor, and Pochalla counties within Jonglei; Ulang County in Upper Nile State to the north; and Ethiopia to the east.[1] In March 2025, the County experienced significant population movements due to conflict in Nasir and Ulang counties, as well as the return of South Sudanese from Ethiopia. The eastern payams of Bilkey, Dengjok, and Gakdong host the majority of internally displaced persons (IDPs) and returnees, many of whom face severe food insecurity and limited access to basic services.[2] Chronic food insecurity and high rates of malnutrition persist, with the April 2025 IPC analysis classifying the county as Phase 4 (Emergency).[3] Health and nutrition services are overstretched, and logistical constraints hinder the timely delivery of humanitarian assistance.

Between **17 and 27 July 2025**, REACH conducted a mixed-methods assessment in Markath (Bilkey), Nukta (Dengjok), and Thokwath (Gakdong), targeting three population groups: returnees from Ethiopia and Sudan (arrived within the past 12 months), IDPs from Nasir and Ulang (arrived since March 2025), and the host community.
Primary data collection included **347 household surveys**, **14 key informant interviews (KIIs)**, and direct observations. KIIs were conducted with community leaders, members, and implementing partners. The household survey employed a **two-stage stratified random sampling approach**, aiming for **110 households per stratum**, with proportional distribution across sites. The sample provides **localised, representative results** but is **not generalisable to all of Akobo County**.

Key Messages

- The public health situation in Akobo East is of medium to high severity[4], with all population groups facing similar conditions, as evidenced by increasing levels of infectious diseases, including malaria, diarrhoea, and respiratory tract infections. These health threats are particularly high among children under five, who are also experiencing elevated levels of acute malnutrition. The convergence of infectious diseases and malnutrition is contributing to a deterioration in health outcomes and increasing vulnerability across all population groups.

- Critical gaps in health, nutrition and WASH services were identified, with limited health and nutrition coverage coupled with sanitation facilities falling below minimum emergency standards. These service gaps are further exacerbated by low dietary intake and inadequate individual water consumption, which heighten public health risks. The arrival of IDPs from Ulang and Nasir counties, as well as returnees from Ethiopia and Sudan, has placed additional pressure on already overstretched services, further straining the capacity of local operating partners to respond effectively.

- Humanitarian food assistance remains insufficient, with only 5.8% of IDPs, 16.2% of returnees, and 68.9% of host households registered. Food was the top concern across all groups, reported by over 90% of households, with nearly two-thirds facing poor or borderline food consumption and 91% experiencing moderate to very severe hunger. High food prices, insecurity, and limited production are forcing households to increasingly rely on severe coping strategies. As the rainy season progresses from August to October, urgent scale-up of food, health, nutrition and

[1] CSRF South Sudan: Akobo County Profile, Jonglei State.
[2] Interagency spot check Needs Assessment Report to conflict Affected IDPs in Akobo East, Akobo, Jonglei State. On file with REACH
[3] IPC "Acute Food Insecurity and Malnutrition Analysis APRIL 2025 – JULY 2025", 12 June 2025
[4] IMPACT key public health indicator thresholds are developed in line with internationally recognised benchmarks, including WHO guidelines, UNICEF standards, and the SPHERE Handbook, to determine the severity of public health situations or internal IMPACT recommendations where global benchmarks don't exist.

sanitation services is required to prevent further deterioration. Without sustained or expanded interventions, risks of worsening morbidity, malnutrition, and mortality will likely increase, particularly among vulnerable IDPs, returnees and children.

CONTENT

List of Acronyms

AFI:	Acute Food Insecurity
AMN:	Acute Malnutrition
FCS:	Food Consumption Score
FGD:	Focus Group Discussion
FSL:	Food Security and Livelihoods
FSNMS:	Food Security and Nutrition Monitoring System
HC	Host community
HH:	Household
HHS:	Household hunger scale
IDP:	Internally Displaced Person
IPC:	Integrated Phase Classification
IPHRA:	Integrated Public Health Rapid Assessment
RRC	Relief and Rehabilitation Commission
OTP	Outpatient Therapeutic Programme
TSFP	Targeted Supplementary Feeding Programme
UN	United Nations
CFR	Case Fatality Rate
WHO	World Health Organisation
KI:	Key Informant
LCS:	Livelihood Coping Strategies
MSF:	Médecins Sans Frontières
PLW:	Pregnant and Lactating Women
WASH:	Water, Sanitation and Hygiene

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CONTEXT AND RATIONALE

Akobo County is in the northeastern corner of Jonglei State. It shares borders with Nyirol, Uror, Pibor, and Pochalla counties within Jonglei State; Ulang County in Upper Nile State to the north; and Ethiopia to the east.[5]

Since the outbreak of conflict in Nasir and Ulang,[6] Akobo has received a significant number of internally displaced persons (IDPs), particularly in the eastern payams of Bilkey, Dengjok, and Gakdong. An initial assessment conducted in April 2025 reported the arrival of 3,897 individuals, amid worsening food shortages.[7] Many IDPs were found to be relying on wild foods and limited support from local communities. Health teams also reported a high number of admissions at the Outpatient Therapeutic Programme (OTP) and the Targeted Supplementary Feeding Programme (TSFP) nutrition sites. At the time, essential nutrition supplies, including Plumpy Nut, CB+, and CB++, were unavailable. According to the May report from the Relief and Rehabilitation Commission (RRC), approximately 5,612 people have settled within host communities in different settlements in Akobo East. Markath, a village in Bilkey Payam, is reported to host the majority number of IDPs as of May. As of writing, population movement dynamics in the region remain highly fluid and are expected to continue changing over the next 6 months at least.

Matar/Burebiey entry point into Akobo, which saw an average of 3,271 individuals crossing weekly. Key reasons for return included reduced food rations, limited access to basic services, and a lack of livelihood opportunities in Ethiopia.[8] According to DTM Mobility Tracking Round 16, Akobo in June was hosting approximately 1,124 returnee households, totalling 6,735 individuals who returned from abroad.[9] Prior to the UNHCR dashboard going offline, UN agencies recorded 84,121 South Sudanese returnees from Ethiopia between August 1 and November 10, 2023. Of these, 12,703 were reported to have settled in Akobo County. Overall, the exact number of returnees in Akobo County is unclear. However, according to the RRC, approximately 1,133 households (6,800 individuals**)** are registered and settled in Akobo East

Akobo County has faced persistent acute food insecurity for many years. It has consistently been classified in IPC Phase 4 (Emergency) during the lean season (April to July) since 2022. The most recent IPC analysis update confirms that food security and nutrition conditions will remain extremely poor. Between April and July 2025, both Acute Food Insecurity (AFI) and Acute Malnutrition (AMN) are classified as Phase 4.[10] Conditions are expected to persist or even deteriorate over the coming months. Humanitarian needs are particularly acute in Eastern Akobo, where logistical challenges have hindered the prepositioning of Humanitarian Food Assistance (HFA). According to the implementing partners, even if HFA is eventually prepositioned, IDPs and recently arrived returnees may not receive assistance due to a lack of registration and targeting. Eastern Akobo hosts the majority of IDPs and returnees in the area and has a well-documented history of severe food insecurity.

The convergence of displacement, acute food insecurity, poor sanitation, and limited health resources has severely strained Akobo's health system. Between 28 September 2024 and 11 June 2025, the county recorded the highest number of cholera cases in Jonglei State, with 3,138 active cases. The case fatality rate (CFR) stands at 1.3%, exceeding the World Health Organisation's acceptable threshold.[11]

[5] CSRF South Sudan: Akobo County Profile, Jonglei State.
[6] Human Rights Watch: South Sudan Army Attacks Displace Thousands in Nasir - Communities at Risk as Crisis Deepens
[7]Interagency spot check Needs Assessment Report to conflict Affected IDPs in Akobo East, Akobo, Jonglei State. On file with REACH
[8] UNHCR South Sudan - Border Monitoring Report - April 2025
[9] IOM DTM South Sudan — Mobility Tracking (Round 16)
[10] IPC "Acute Food Insecurity and Malnutrition Analysis APRIL 2025 – JULY 2025", 12 June 2025
[11] South Sudan Cholera Dashboard

METHODOLOGY

Between 17 and 27 July 2025, the REACH team conducted primary data collection using a mixed-methods approach, which included 347 household (HH) surveys and 11 Key Informant Interviews (KIIs), as well as direct observations.

The assessment focused on three population groups: returnees from Ethiopia and Sudan who arrived within the past 12 months; IDPs from Nasir and Ulang counties who arrived since March 2025; and the host community. Data collection was conducted in three locations: Markath (Bilkey), Nukta (Dengjok), and Thokwath (Gakdong). These strata were selected based on the assumption that they host relatively homogeneous population groups, meaning they have similar access to services such as healthcare and humanitarian food assistance and experience comparable living conditions.

The sample size for the HH surveys was estimated through a two-stage stratified simple random sampling design, aiming to provide localised results representative of the target population assessed; however, findings are not generalizable across the overall population of Akobo County. The target number of households was 110 per stratum, based on assumptions of a 95% confidence level, a 10% margin of error, and a 10% non-response rate. Households were distributed proportionally across sites according to population size, and random location sampling techniques were applied for household selection.

Table 1 - Assessment Coverage by Location and Population Group

Payam	Selected site	Population group	# of HHs	# of individuals	Assessed HHs
Bilkey	Markath	IDP	309	1852	54
		Returnee	210	1265	81
		Host community	472	2834	90
Dengjok	Nukta	IDP	174	1045	27
		Returnee	42	251	17
		Host community	229	1371	23
Gakdong	Thokwath	IDP	167	1000	23
		Returnee	24	145	13
		Host community	95	570	19
Total		IDP	**650**	**3897**	**104**
		Returnee	**276**	**1661**	**111**
		Host community	**734**	**4775**	**132**
		Overall	**1660**	**10333**	**347**

Qualitative data collection included 11 KIIs conducted with community leaders, implementing partners, and community members. Observations were carried out at water points and health facilities.

A secondary data review was conducted prior to the assessment to better understand inter-group relations, population movement dynamics, humanitarian presence, and service provision.

Table 2 - Breakdown of qualitative data collection

Key Informant Interviews	
Community leaders KIs (1 IDP and 1 HC)	2
Community members KIs (3 IDPs, 1 HC, and 2 returnees)	6
Implementing partner KI	4
Water facility observation	8

Key definitions

- **Internally displaced persons:** For this assessment, IDPs refer to households (HHs) that have been forced or obliged to flee their homes in Nasir and Ulang counties of Upper Nile State due to the conflict in March and were living in Akobo County at the time of data collection.
- **Returnees:** For this assessment, returnees refer to households (HHs) who were temporarily forced to flee South Sudan due to persecution, war, or violence (i.e., refugees) and have since returned to their homes or places of habitual residence. This assessment will specifically focus on returnees from Ethiopia and Sudan who have arrived within the last 12 months.
- **Host Community:** HH who have never been displaced by the crisis and consider the assessed location as their area of origin and places of habitual residence.
- **Household:** A group of people who ate from the same cooking pot and slept under the same roof the previous night.

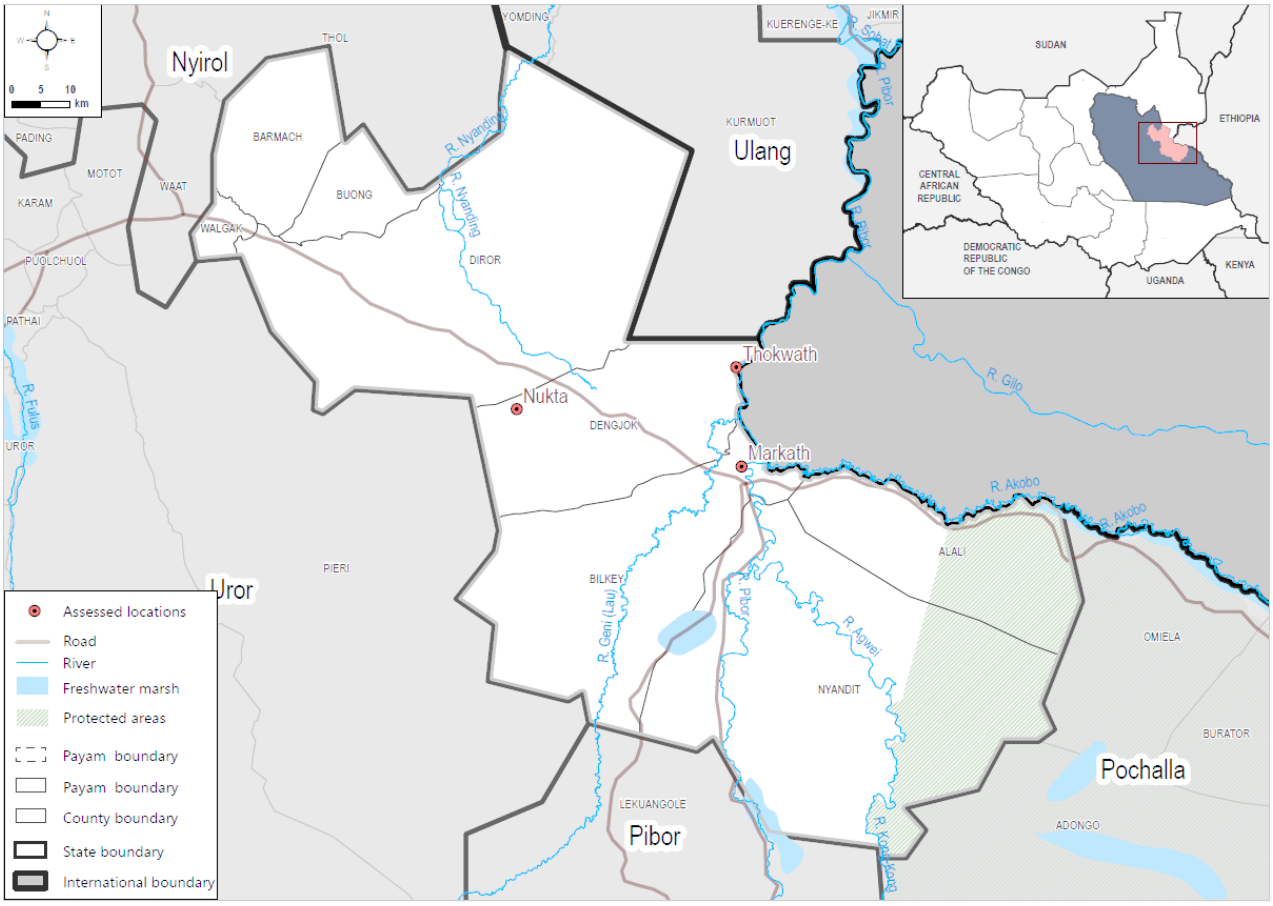
Assessment objectives

- To assess the severity of public health outcomes and identify initial public health priorities for humanitarian response to mitigate excess morbidity, malnutrition, and mortality in Akobo East, Akobo County.
- To understand the demographic composition of the target population.
- To understand the movement dynamics, including movement intentions and of IDPs and returnees in Akobo County.
- To estimate the proportion of the population with health care needs in the two weeks prior to data collection (any health care needs, unmet needs, needs by sex/age/symptom)
- To understand the main barriers for the target population in accessing health and nutrition services.
- To assess the availability and functionality of health and nutrition facility services.
- To estimate the coverage of Vitamin A supplementation among children 6-59 months of age
- To estimate the coverage of measles vaccination among children 9-59 months of age
- To estimate the coverage of oral cholera vaccinations among people 5+ years of age
- To estimate the proportion of the target population experiencing food consumption gaps.
- To estimate the proxy coverage of emergency food security interventions in the target population.
- To understand the availability and utilisation of food at the household level.
- To understand the main barriers for the target population in accessing food.
- To estimate the proportion of the population using livelihood-based coping strategies to access food or other basic needs, and their severity.
- To estimate the proportion of the population experiencing water consumption gaps, in terms of quantity (main source of drinking water).
- To estimate the proportion of the population with access to improved sanitation facilities
- To estimate the proportion of the target population with access to handwashing facilities with soap and water in their dwelling/yard/plot
- To estimate the proportion of the target population practicing daily hygiene management
- To understand the main barriers for the target population in accessing water.
- To estimate the proportion of households with access to basic WASH NFIs.
- To assess the main shelter types being used by the population.
- To assess the prevalence of shelter damage among the population.
- To estimate the proportion of the population with access to critical non-food items (soap, mosquito nets, water treatment tablets, blankets, tarpaulin, cooking supplies, jerry cans, etc.)

Geographical scope

Data collection was conducted across Akobo East, covering three 3 payams (Bilkey, Denjok and Gakdong), Akobo County, Jonglei State.

Figure 1 - Map of assessed location



FINDINGS

Participant Characteristics

The assessment engaged a slightly higher proportion of females (52.7%) than males (47.3%) across all groups, with children aged 0–5 years making up about 12–13% of the population. The average household size was five members, and most were headed by married individuals (92.2%), while single and widowed heads represented only a small share. These findings indicate a balanced gender distribution, a notable young child population, and predominantly married household leadership, which may influence household needs and vulnerability.

Table 3 - Participant Characteristics

Household-level data collection	Host community	IDP	Returnee	Overall
Gender of household members[12]				
Female	387 (54.3%)	278 (52.9%)	265 (50.7%)	937 (52.7%)
Male	326 (45.7%)	249 (47.1%)	258 (49.3%)	840 (47.3%)
Age groups				
Children aged 0-2 years	83 (11.6%)	64 (12.1%)	67 (12.8%)	217 (12.2%)
Children aged 3-5 years	101 (14.2%)	60 (11.4%)	59 (11.3%)	222 (12.5%)
Household size				
Average household size	5.4	5.1	4.7	5.1
Head of household marital status				
Married	126 (95.5%)	92 (88.5%)	102 (91.9%)	320 (92.2%)
Single	3 (2.3%)	8 (7.7%)	4 (3.6%)	15 (4.3%)
Widowed	3 (2.3%)	4 (3.8%)	4 (3.6%)	11 (3.2%)

Reported priority needs

Findings from both household-level survey and key informant interviews highlight consistent self-reported priorities across the assessed populations, with some variations between groups. **Food insecurity emerged as the most urgent concern for all groups**, reported by over 90% of households, while key informants noted that limited access to food assistance and reduced local production has intensified shortages. **Healthcare and WASH challenges were also highlighted**: although fewer households listed these as first priorities, KIs emphasised that inadequate health services and poor water and sanitation conditions continue to pose public health risks.

[12] Among the 1,936 individuals surveyed, 53.2% were female and 46.8% were male. The variable represents the sex of individuals as reported by the respondents themselves.

Table 4 - Priority Needs

Household-level data collection	Host community	IDPs	Returnees	Overall
First priority need				
Food	124 (93.9%)	94 (90.4%)	100 (90.1%)	318 (91.6%)
Healthcare	4 (3.0%)	0%	1 (0.9%)	5 (1.4%)
Shelter repair support	1 (0.8%)	0%	0%	1 (0.3%)
Livelihoods support	1 (0.8%)	1.0%	4 (3.6%)	6 (1.7%)
Drinking water	1 (0.8%)	0%	1 (0.9%)	2 (0.6%)
WASH NFIs	1 (0.8%)	0%	2 (1.8%)	3 (0.9%)
Shelter materials	0%	6 (5.8%)	2 (1.8%)	8 (2.3%)
Clothing & blankets	0%	3 (2.9%)	1 (0.9%)	4 (1.2%)
Second priority need				
WASH NFIs	30 (23.4%)	20 (19.2%)	17 (15.5%)	67 (19.6%)
Livelihoods support	26 (20.3%)	9 (8.7%)	13 (11.8%)	48 (14.0%)
Healthcare	20 (15.6%)	10 (9.6%)	14 (12.7%)	44 (12.9%)
Clothing and Blankets	17 (13.3%)	15 (14.4%)	20 (18.2%)	52 (15.2%)
Shelter repair support	16 (12.5%)	22 (21.2%)	16 (19.1%)	59 (17.3%)
Third priority need				
WASH NFIs	46 (35.7%)	24 (23.1%)	28 (25.2%)	98 (28.5%)
Clothing and blankets	31 (24.0%)	31 (29.8%)	27 (24.3%)	89 (25.9%)
Livelihoods support	25 (19.4%)	14 (13.5%)	19 (17.1%)	58 (16.9%)
Healthcare	10 (7.8%)	7 (6.7%)	8 (7.2%)	25 (7.3%)
Shelter repair support	4.7% (4.7%)	7 (6.7%)	12 (10.8%)	25 (7.3%)
Shelter materials	5 (3.9%)	13 (12.5%)	8 (7.2%)	26 (7.6%)

Differences between groups were evident in secondary priorities. **Host communities reported higher needs for WASH NFIs and livelihoods support**, reflecting gaps in water access and income opportunities. **IDPs placed greater emphasis on shelter repair and materials**, consistent with displacement-related vulnerabilities. **Returnees highlighted clothing and blankets alongside shelter and livelihood needs**, indicating difficulties in re-establishing themselves after returning. The alignment between household responses and community insights underscores the need to scale up food assistance, healthcare, and WASH interventions, while tailoring support for shelter, livelihoods, and basic household items to the specific needs of each population group.

Table 5 - Priority Concerns Reported by Community Leaders and Members

Self-reported need	Host community	IDPs	Returnees	Overall
First	Food	Food	Food	Food
Second	Health care	Health care	Health care	Health care
Third	WASH	Shelter (Materials)	Water	Water[13]

[13] In addition, three key informants highlighted WASH needs, specifically access to latrines. Separately, three key informants also mentioned water as a priority need.

Food Security and Livelihoods

Overall survey findings indicate that 38% of households are experiencing "poor" food consumption, while 44% are experiencing "borderline" food consumption, characterised by limited dietary diversity and inadequate meal frequency. Only 23% of households scored an "acceptable" food consumption score. Results from the Household Hunger Scale (HHS) show that 91% of households experience "moderate" hunger, 5% "severe" hunger, and 1% "very severe" hunger.

The Reduced Coping Strategy Index (rCSI) shows that 59% of households frequently use severe consumption-based coping strategies, 40% rely on moderate strategies, and only 1% do not depend on any consumption-based coping strategies.

Overall, these indicators suggest that the population in the assessed areas is experiencing high levels of food insecurity, with households relying on food-based coping mechanisms and facing significant food consumption gaps. Contributing factors include high food prices, the influx of IDPs and returnees, localised insecurity, and delayed seasonal rains, all of which have further exacerbated the deterioration of food security outcomes.

Table 6 - Results of Food Security and Livelihood Indicators – part 1

Household-level data collection	Host community	IDPs	Returnees	Overall
Food Consumption Score (FCS)				
Acceptable	29 (22%)	20 (19%)	29 (26%)	78 (22%)
Borderline	66 (50%)	49 (47%)	40 (36%)	155 (45%)
Poor	37 (28%)	35 (34%)	42 (38%)	114 (33%)
Household Hunger Scale (HHS)				
None/slight	4 (3%	0%	2 (2%)	6 (2%)
Little	2 (2%)	1 (1%)	4 (4%)	7 (2%)
Moderate	119 (90%)	98 (94%)	99 (89%)	316 (91%)
Severe	7 (5%)	3 (3%)	5 (5%)	15 (4%)
Severe Catastrophe	0%	2 (2%)	1 (1%)	3 (1%)
Reduced coping strategy index (rCSI)				
High	64 (60%)	41 (55%)	48 (62%)	152 (59%)
Medium	39 (37%)	33 (45%)	30 (38%)	102 (40%)
Low	3 (3%)	0%	0%	3 (1%)

Food Availability and Access

The survey shows that households rely on a combination of market purchases, social networks, and informal strategies to access food, with some variation across population groups. Market purchases remain the primary source of food overall (72%), particularly for host community households (78.8%) and returnees (73%), while slightly lower among IDPs (62.5%). Support from neighbours or relatives is more important for IDPs (21.2%) and returnees (17.1%) than for host communities (6.1%). Exchange of food for labour is used more frequently by host communities (9.1%) compared to IDPs (3.8%) and returnees (5.4%). Findings aligned with KIIs.

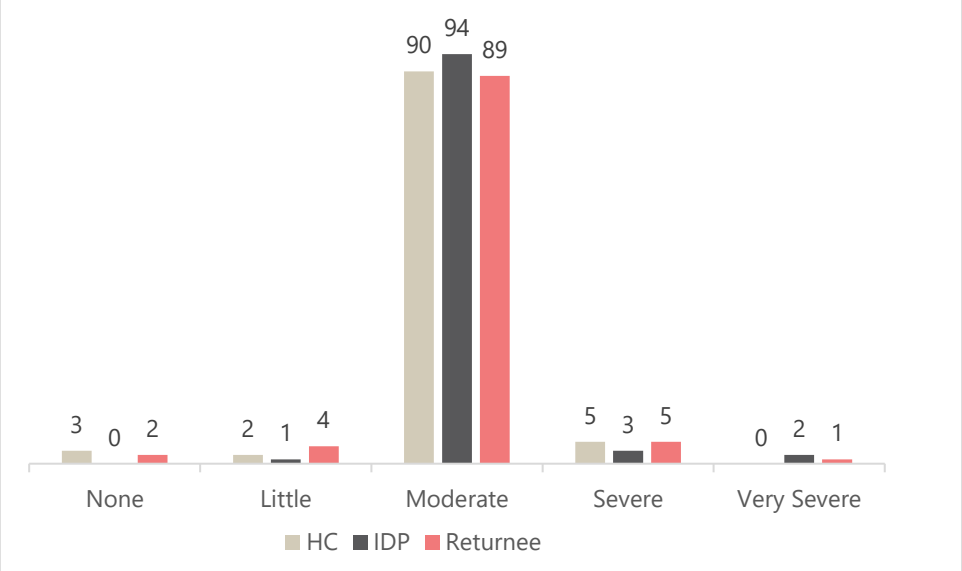
As a secondary source of food, differences are also evident. Support from neighbours or relatives is most common among returnees (40.9%) and IDPs (34.6%) versus host communities (16.7%). Borrowing or incurring debts is slightly higher among returnees (20%) than in host communities (19.7%) or IDPs (14.4%). Humanitarian food assistance is used more by host communities (26.5%) compared to IDPs (5.8%) and returnees (6.4%). However, access to food is constrained by distance and lack of transport (34.9%), limited food availability (32.0%), and insecurity along routes to and from food sources (28.8%).

Table 7 - Results of Food Security and Livelihood Indicators – part 2

Household-level data collection	Host community	IDPs	Returnees	Overall
First food source				
Market (purchase cash or credit)	104 (78.8%)	65 (62.5%)	81 (73.0%)	250 (72.0%)
Exchange of food for labour	12 (9.1%)	4 (3.8%)	6 (5.4%)	22 (6.3%)
Support from neighbours/relatives	8 (6.1%)	22 (21.2%)	19 (17.1%)	49 (14.0%)
Fishing	3 (2.3%)	1 (1.0%)	2 (1.8%)	6 (1.7%)
Humanitarian food assistance	2 (1.5%)	1 (1.0%)	2 (1.8%)	5(1.4%)
Gathering	1 (0.8%)	7 (6.7%)	0%	8 (2.3%)
Own crop/garden production	1(0.8%)	4 (3.8%)	1 (0.9%)	6 (1.7%)
Second food source				
Humanitarian food assistance	35 (26.5%)	6 (5.8%)	7 (6.4%)	48 (13.9%)
Borrowing/debts	26 (19.7%)	14 (14.4%)	22 (20.0%)	63 (18.2%)
Support from neighbours/relatives	20 (16.7%)	36 (34.6%)	45 (40.9%)	103 (29.8%)
Gathering wild food	13 (9.8%)	9 (8.7%)	12 (10.9%)	34 (9.8%)
Market (purchase cash or credit)	13 (9.8%)	11 (10.6%)	8 (7.3%)	32 (9.2%)
Fishing	10 (7.6%)	11 (10.6%)	7 (6.4%)	28 (8.1%)
Exchange of food for labour	4 (3.0%)	5 (4.8%)	6 (5.5%)	15 (4.3%)
Own crop/garden production	2 (2.3%)	4 (3.8%)	1 (0.9%)	8 2.3%)

KIs reported that high staple food prices severely limit purchasing power. In Akobo town, markets are supplied from Ethiopia and remain accessible, but in Thokwath (Gakdong Payam) and Nukta (Dengjok Payam), the absence of fully functional markets restricts availability and physical access. Households are forced to travel long distances to Akobo town or rely on wild foods, options further constrained by insecurity. According to the community KIs, a 50 kg sack of grain costs up to 300,000 SSP (50 USD), while one Malwa (3.5 kg) sells for about 13,000 SSP (2 USD), leaving many households unable to afford staple foods, particularly IDPs and returnees with minimal livelihood opportunities.

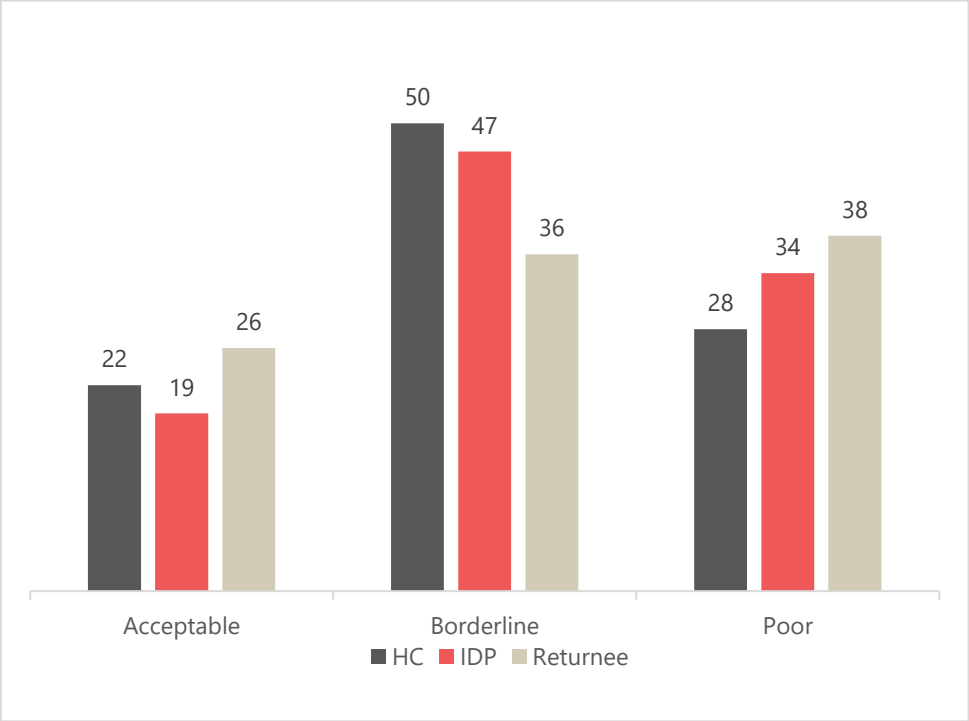
Figure 2- Percentage of Households by Household Hunger Scale



Fishing provides some relief but is risky and often requires long travel. Local food production remains constrained by insecurity and delayed seasonal rains. Most households cultivate only small plots near their homes, with crops still in early growth stages at the time of data collection. Maize harvests were unlikely to be ready by August, except in Gakdong and Dengjok payams, where rains were more favourable. In Bilkey, crops remained at the vegetative stage. However, the absence of flooding this year has improved access to farmland and created better cultivation conditions compared to last year, according to KIs. IIDPs missed the planting season due to displacement.

Humanitarian food assistance (HFA) coverage remains insufficient, particularly for displaced populations. Only 5.8% of IDP households, 16.2% of returnee households, and 68.9% of host community households reported being registered for assistance. In the two weeks prior to data collection, assistance received included food in-kind (41.7%), cash for food (26.1%), and cash for livelihoods such as inputs and assets (19.1%). KIs from returnees and IDPs reported that newly arrived IDPs from Nasir and Ulang since May, and returnees from Ethiopia and Sudan, have not received assistance. Those who arrived in March and April received a one-off cash transfer of 450,000 SSP, but overall support was untimely and inadequate. Ration sizes of 7 kg per person were reportedly insufficient to cover two weeks of food needs, especially as resources were often shared with displaced populations. The implementing partner reported that only three of six planned distribution cycles had been completed at the time of assessment.

Figure 3 - Percentage of Households by Food Consumption Score Category



Additional barriers to food access included long walking distances (4–5 hours) from Gakdong and Dengjok payams to Akobo town to reach both markets and HFA distribution points, as well as high transport costs. Implementing partners also reported challenges such as biased targeting by community leaders, who prioritised their own relatives, a concern echoed by community KIs, and limited pre-positioned food stocks due to funding cuts. The continued closure of the Akobo River to humanitarian deliveries has further constrained resupply, raising the possibility of shifting from food distributions to cash assistance for the remaining cycles if supplies do not arrive.

Table 8 - Food Security and Livelihood Indicators – part 3

Household-level data collection	Host community	IDPs	Returnees	Overall
Main barriers to accessing food				
Live too far from food sources/no means of transport	48 (36.4%)	40 (38.5%)	33 (29.7%)	121 (34.9%)
Security issues travelling to and from food sources	39 (29.5%)	29 (27.9%)	32 (28.8%)	100 (28.8%)
Not enough food is available	36 (27.3%)	42 (40.4%)	33 (29.7%)	111 (32%)
Transportation to food source too expensive	27 (20.5%)	17 (16.3%)	25 (22.5%)	69 (19.9%)
Damage to the main source of food	9 (6.8%)	12 (11.5%)	7 (6.3%)	28 (8.1%)
Main source of income				
First main income source				
Selling of collected firewood, charcoal, and wild foods	76 (57.6%)	63 (60.6%)	76 (68.5%)	215 (62.0%)
Remittances or support from a family member	12 (9.1%)	18 (17.3%)	16 (14.4%)	46% (13.3%)
Selling of own produced animal products	11 (8.3%)	6 (5.7%)	2 (1.8%)	19 (5.5%)
Selling of own-produced agricultural products	9 (6.8%)	(0%)	(0%)	19 (5.5%)
Humanitarian cash assistance	3 (2.3%)	(0%)	(0%)	3 (0.9%)
Salary and wages (professional, religious/spiritual, etc)	5 (3.8%)	(0%)	3 (2.7%)	8 (2.3%)
Second main income source				
Humanitarian cash assistance	25 (18.9%)	4 (3.8%)	1 (0.9%)	30 (8.6%)
Remittances or support from a family member	22 (16.7%)	20 (19.2%)	32 (28.8%)	74 (21.3%)
Selling of collected firewood, charcoal, and wild foods	19 (14.4%)	23 (21.1%)	17 (15.3%)	59 (17.0%)
Daily labour-casual	14 (10.6%)	4 (3.8%)	6 (5.4%)	24 (6.9%)
Loan from the community	10 (7.6%)	10 (9.6%)	7 (6.3%)	27 (7.8%)
Begging	8 (6.1%)	10 (9.6%)	5 (4.5%)	23 (6.6%)
Shopkeeper or trader	3 (2.3%)	2 (1.9%)	1 (0.9%)	6 (1.7%)
Selling of own produced animal products	4 (3.0%)	2 (1.9%)	5 (4.5%)	11 (3.2%)
Main source of energy used for food preparation				
Firewood	132 (100.0%)	104 (100%)	111 (100%)	347 (100%)
Livelihoods Coping Strategies Index				
None/minimal	96 (73%)	95 (91%)	97 (87%)	288 (83%)
Stress	(0%)	(0%)	1 (1%)	1 (0%)
Crisis	4 (3%)	(0%)	1 (1%)	5 (1%)
Emergency	32 (24%)	9 (9%)	12 (11%)	53 (15%)
Households registered and receiving a general food distribution/cash/voucher				
Yes	91 (68.9%)	6 (5.8%)	18 (16.2%)	115 (33.1%)
No	41 (31.1%)	98 (94.2%)	92 (82.9%)	231 (66.6%)
Food security and livelihood assistance modality in the last 30 days				
Food (in-kind)	36 (39.6%)	3 (50.0%)	9 (50.0%)	48 (41.7%)
Cash	26 (28.6%)	1 (16.7%)	3 (16.7%)	30 (26.1%)
Food (vouchers)	11 (12.1%)	(0%)	2 (11.1%)	13 (11.3%)

Coping Strategies

Across all population groups, livelihoods were broadly similar, with households relying primarily on firewood sales (62%), followed by remittances or support from family members (21.3%) and fish sales. KIs noted multiple barriers limiting income and access to resources, including depleted firewood sources, lack of fishing equipment, insecurity restricting access to productive areas, and seasonal challenges such as the rainy season. Limited or non-functional markets, long travel distances, and the difficulty of transporting heavy firewood further constrained households' ability to sustain a stable income.

Table 9 - Average number of days households across the population groups employed different coping strategies, in the 7 days prior to data collection

Reduced coping strategy index (rCSI)	Host community	IDPs	Returnees	Overall
High	64 (60%)	41 (55%)	48 (62%)	152 (59%)
Medium	39 (37%)	33 (45%)	30 (38%)	102 (40%)
Low	3 (3%)	0%	0%	3 (1%)
Reduced coping strategy index (rCSI)	**Mean**			
Rely on lower-quality food	3.06	2.77	3.04	
Borrowing	2.25	2.29	2.14	
Reducing meal size	2.65	2.75	2.75	
Reducing meals for adults	2.68	2.84	2.59	
Reducing number of meals	2.4	2.5	2.32	

The arrival of IDPs and returnees increased competition for already scarce livelihood opportunities, such as casual work in local markets. HC KIs reported that households had lost productive assets, including livestock, due to cattle raiding, while traditional income sources, such as cattle-based bride price, had declined. Women were reported to bear the brunt of labour-intensive activities like firewood collection, exposing them to protection risks, while men were more often engaged in fishing.

Households reported adopting various coping strategies to manage food and income shortages. These included relying on relatives and friends, reducing meal frequency and portion sizes, borrowing or purchasing food on credit, or engaging in risky practices such as fishing in unsafe areas or collecting wild foods from distant locations.

Water, Sanitation, and Hygiene

The WASH situation in the assessed locations is severe, exposing IDPs, returnees, and host communities to significant public health risks. While 91.6% of households reported access to improved water sources, 76.1% were classified as water insecure according to the Household Water Insecurity Experiences Scale (HWISE). Only 49.8% of households were able to collect water within 30 minutes, and approximately one-third (33.1%) lacked containers for safe collection and storage, with those who did have containers averaging three per household.

Key informants reported that water sources are far from households, with limited access to taps and boreholes. Nukta and Thokwath each have only one borehole, resulting in long queues and congestion at water points. Observations confirmed these issues: two sites had 10–20 people queuing, one site had fewer than 10, another had 20–50, and three water points were closed during the assessment. In Markas, water coverage is generally good, but solar-powered systems often fail during the rainy season. High monthly water fees (3,000 SSP per household) were reported as unaffordable for IDPs and returnees, forcing many to rely on unsafe river water. Additionally, access to public taps was limited, with most operating on a restricted schedule from 8:00 AM to 12:00 PM and 4:00 PM to 5:00 PM, while two boreholes remained functional 24 hours a day. These challenges highlight critical WASH needs, particularly improved access to safe and affordable water sources.

The majority of households (94.2%) do not treat their water, and KIs emphasised that purification tablets are largely unavailable. Some households rely on untreated river water or rainwater collection for drinking and cooking. These conditions, along with limited access to safe water points, contribute to elevated risks of waterborne diseases.

Table 10 - Results of Water, Sanitation, and Hygiene

Household-level data collection	Host community	IDPs	Returnees	Overall
Main source of drinking water				
Improved (public tap, borehole, etc.)	127 (96.2%)	83 (89.4%)	98 (88.2%)	218 (91.6%)
Non-improved (surface water)	5 (3.8%)	8 (7.7%)	12 (10.8%)	25 (7.2%)
Households collecting water in less than 30 minutes				
Less than 30 minutes	61 (50%)	46 (49.5%)	47 (50%)	154 (49.8%)
Less than an hour	48 (39.3%)	33 (35.5%)	41 (43.5%)	122 (39.5%)
Less than half a day	13 (10.7%)	14 (15.1%)	6 (6.4)	33 (10.7%)
Main water treatment methods				
Chlorine tablet	7 (5.3%)	7 (6.7%)	1 (0.9%)	15 (4.3%)
Boil water	1 (0.8%)	2 (1.9%)	0%	3 (0.9%)
No treatment	123 (93.2%)	94 (90.4%)	110 (99.1%)	327 (94.2%)
Households with access to functioning latrines				
Open defecation	50 (37.9%)	60 (57.7%)	62 (55.9%)	172 (49.6%)
Pit latrine with slab	51 (38.6%)	31 (29.8%)	25 (31.5%)	117 (33.7%)
Pit latrine without slab/open pit	23 (17.4%)	11 (10.6%)	11 (9.9%)	45 (13.0%)
Households with access to soap				
No soap in the house	125 (94.7%)	101 (97.1%)	103 (92.8%)	329 (94.8%)

Nearly half of households (49.6%) practice open defecation due to the lack of functioning latrines, a situation consistent across all population groups. KIs highlighted that the main barriers to improved

sanitation included shortages of tools, construction materials (e.g., slabs), funding, and manpower, compounded by the absence of NGO support for WASH programs in the assessed locations.

Hygiene practices are also poor, with 94.8% of households lacking access to soap, which hinders proper washing, bathing, and overall hygiene maintenance. KIs further reported that most women lack sanitary materials across the assessed population groups. The absence of hygiene items significantly increases vulnerability to waterborne and hygiene-related diseases.

Table 11- Results of Water, Sanitation, and Hygiene

Data collection method	Host community	IDPs	Returnees	Overall
HWISE (short set)				
Water Secure	35 (26.5%)	23 (22.1)	25 (22.5%)	83 (23.9%)
Water Insecure	97 (73.5%)	81 (77.9%)	86 (77.5%)	264 (76.1%)
Households owning an insecticide-treated mosquito net				
Yes	24.2%	12.5%	16.2%	18.2%
No	75.8%	87.5%	83.8%	81.8%

Findings indicate that ownership of insecticide-treated mosquito nets (ITNs) is critically low across all assessed groups in Akobo East. Overall, only 18.2% of households reported owning at least one ITN. Ownership was highest among host community households (24.2%), while returnees (16.2%) and internally displaced persons (IDPs) (12.5%) reported even lower coverage. Consequently, the vast majority of households (81.8% overall) remain without ITNs, with the highest gap among IDPs (87.5%).

The low level of ITN ownership poses a serious public health concern in a malaria-endemic setting like Akobo. Limited access to ITNs significantly increases the risk of malaria transmission, particularly among vulnerable groups such as children under five and pregnant women. Given the fragile health system, poor access to health services, and recent cholera outbreak in the county, the lack of malaria prevention tools further exacerbates the already high burden of disease.

WASH in health facilities

Across the three health facilities serving the assessed population in Bilkey, Dengjok, and Gakdong payams, significant gaps were identified in WASH service capacity, infection prevention, and control measures, as well as overall readiness for infectious disease outbreaks. Only Akobo Teaching Hospital has running water, while the PHCC in Dengjok and the PHCU in Gakdong lack this service. This indicates that these facilities may struggle to maintain adequate hygiene standards, which are crucial for preventing the spread of infections among patients and healthcare workers.

Nutrition

In May 2025, an implementing partner working in Akobo County conducted mass MUAC screenings in the payams of Bilkey, Denjok, and Gakdong. The screenings targeted all population groups, including returnees and IDPs. A total of 2,950 children were screened across three locations: 1,200 in Bilkey, 950 in Denjok, and 800 in Gakdong.

Table 12 - Mass MUAC Screening Results by Payam, May 2025

Mass MUAC Screening Results by Payam, May 2025				
Payam	**Total Children Screened**	**Proxy GAM (%)**	**Proxy SAM (%)**	**Notes**
Bilkey	1,200	15%	3%	Includes host community, IDPs, and returnees
Denjok	950	16%	2%	
Gakdong	800	10%	1.5%	
Overall	2,950	14.5%	2.3%	Weighted average across all payams

Findings revealed concerning levels of acute malnutrition, with proxy Global Acute Malnutrition (GAM) rates of 15% in Bilkey, 16% in Denjok, and 10% in Gakdong. The prevalence of Severe Acute Malnutrition (SAM) was recorded at 3% in Bilkey, 2% in Denjok, and 1.5% in Gakdong. In Bilkey, five cases of SAM with complications were identified and referred for admission to stabilisation centres. However, a KI indicated that the stabilisation centre at Akobo Teaching Hospital was experiencing a shortage of nutrition supplies at the time of data collection, which might jeopardise the effectiveness of treatment.

Between June and July 2025, a notable surge in admissions was recorded in Akobo County, according to the Nutrition Cluster Information Dashboard.[14] The increase was reported to be driven by several factors, including an influx of IDPs from neighbouring counties, seasonal migration patterns (cattle keepers returning from dry season grazing areas), heightened food insecurity due to frequent disruptions along the Burebiey River route to Ethiopia, the cholera outbreak, and August to September flooding in parts of the county. As a result, admission rates have surpassed pre-crisis (February 2025) levels in Nasir and Ulang by approximately 25%. IDPs have been disproportionately affected, with a higher incidence of severe acute malnutrition compared to host community members.

Multiple challenges have severely constrained response capacity. Several nutrition facilities closed in March 2025 following USAID budget cuts, directly reducing treatment capacity for SAM cases. Seasonal flooding has restricted mobility and hindered outreach activities, while weak referral systems and transport challenges have limited access to stabilisation centres for complicated cases. Insecurity has further disrupted service delivery. Screening and admission activities in parts of Akobo County had been intermittently suspended due to insecurity incidents, including cattle raiding, which continue to undermine humanitarian operations. However, in the assessment areas, nutrition sites were operational More recent data suggest that the prevalence of acute malnutrition in Bilkey, Dengjok and Gakdong increased sharply between May and June/ July. Between 25 June and 3 July 2025, MedAir conducted a mass MUAC screening across the three payams, reaching 5,614 individuals, including 2,042 children aged 6–59 months (984 boys, 1,058 girls) and 3,572 pregnant and lactating women (PLWs).[15] The assessment revealed a critical nutrition situation among children under five, with 31.3% acutely malnourished (GAM) and 10.9% severely malnourished (SAM). Site-level GAM and SAM rates were similarly alarming: Bilkey (30.9% GAM, 11.6% SAM), Dengjok (33.0% GAM, 12.4% SAM), and Gakdong (30.4% GAM, 6.5% SAM).

[14] South Sudan Nutrition Information Dashboard

[15] Akobo Health and Nutrition Assessment conducted by Medair on file with REACH.

Table 13 - Mass MUAC Screening Results by Payam, June-July 2025

Mass MUAC Screening Results by Payam, June-July 2025				
Payam	**Children Screened**	**Proxy GAM (%)**	**Proxy SAM (%)**	**Notes**
Bilkey	1,145	30.9%	11.6%	
Denjok	515	33.0%	12.4%	
Gakdong	382	30.4%	6.5%	
Total	**2042**	**31.3%**	**10.9%**	
	PLW Screened			Includes host community, IDPs, and returnees
Bilkey	1745	37.4%		
Denjok	1296	28.4%		
Gakdong	531	39.4%		
Total	**3572**	**34.4%**		

Maternal malnutrition was also high, with 34.4% of PLWs acutely malnourished by MUAC, highlighting widespread household vulnerability. Despite this burden, programme coverage among children was critically low at 5.3%, indicating that the majority of acutely malnourished children are not accessing life-saving treatment. Coverage among PLWs was higher at 64.5%, meeting Sphere minimum standards but still insufficient given the high prevalence of maternal malnutrition.

The combination of extremely high GAM and SAM prevalence, low programme coverage, supply chain gaps, and operational challenges indicates a nutrition emergency in Akobo County. Without urgent interventions to scale up treatment, strengthen service delivery, and improve community awareness, both children and mothers remain at high risk of preventable morbidity and mortality.

Health

Overall, 38.2% of people reported being sick in the two weeks preceding data collection, with 12.2% unable to access healthcare services. Among those who were sick, the most commonly reported symptoms were fever (79.1%), cough (57.2%), and diarrhoea (24.5%). Morbidity among children under five was high across all population groups, with more than half (54.8%) reported sick during the recall period, well above the IPC AMN threshold of 20% for high morbidity prevalence.[16] Notably, 10.8% of children under five had unmet health needs.

[16] IPC AMN Technical Manual Version 3.0

Table 14 - Results of Health Indicators – part 1

Individual-level data collection				
Individuals reporting being sick during the two weeks prior to data collection	**Host community**	**IDPs**	**Returnees**	**Overall**
Overall	276 (38.6%)	202 (38.3%)	194 (37.1%)	679 (38.2%)
Female	163 (42.1%)	116 (41.6%)	96 (36.2%)	378 (40.3%)
Male	112 (34.4%)	86 (34.7%)	98 (38.0%)	300 (35.7%)
Individuals needed to access health care in the last two weeks by age group				
Children aged 0-2 years	49 (59.0%)	43 (67.2%)	46 (68.7%)	140 (64.8%)
Children aged 3-5 years	47 (46.5%)	23 (38.3%)	28 (47.5%)	100 (45.0%)
Main symptoms reported in the past 2 weeks				
Fever	229 (83.3%)	153 (75.7%)	147 (75.8%)	537 (79.1%)
Cough	159 (57.8%)	118 (58.4%)	105 (54.1%)	388 (57.2%)
Diarrhoea	63 (22.9%)	57 (28.2%)	46 (23.7%)	166 (24.5%)
Individuals reporting unmet healthcare needs, by % of individuals with a health problem in the two weeks prior to data collection				
Overall	27 (9.8%)	28 (13.9%)	28 (14.4%)	83 (12.2%)
Female	18 (11%)	19 (16.4%)	13 (13.5%)	50 (13.2%)
Male	9 (8%)	9 (10.5%)	15 (15.3)	33 (11.0%)
Children aged 0-2 years	8 (16.3%)	5 (11.6%)	7 (15.2%)	20 (14.3%)
Children aged 3-5 years	2 (4.3%)	3 (13%)	1 (3.6%)	6 (6.0%)
	N (**248**)			
Government hospital	139 (56.0%)	90 (51.7%)	103 (62.0%)	335 (56.3%)
Government health centre	105 (42.3%)	73 (42.0%)	75 (45.2%)	259 (43.5%)
Other government facility	45 (18.1%)	17 (9.8%)	9 (5.4%)	71 (11.9%)
Private clinic	47 (19.0%)	34 (19.5%)	24 (14.5%)	105 (17.6%)
NGO hospital	1 (0.4%)	14 (8.0%)	2 (1.2%)	17 (2.9%)
Traditional healer	12 (4.8%)	10 (5.7%)	6 (3.6%)	29 (4.9%)
Household-level data collection				
Main barriers to accessing healthcare				
Long waiting time for the services	47 (35.6%)	44 (42.3%)	42 (37.8%)	133 (38.3%)
Specific service sought unavailable	37 (28.0%)	22 (21.2%)	30 (27.0%)	89 (25.6%)
Could not afford the cost of medication (price increased)	21 (15.9%)	18 (17.3%)	18 (16.2%)	57 (16.4%)
Could not afford the cost of medication (at regular price)	19 (14.4%)	10 (9.6%)	10 (9.0%)	39 (11.2%)
Health facility too far away	19 (14.4%)	21 (20.2%)	15 (13.5%)	55 (15.9%)
Could not afford the cost of consultation/service	11 (8.3%)	3 (2.9%)	6 (5.4%)	20 (5.8%)

The main barriers to healthcare were long waiting times (38.3%), unavailability of specific services (25.6%), and the cost of medication (16.4%). These findings are consistent with those of KIs, who highlighted persistent shortages of essential medicines, inadequate healthcare services, and limited antenatal care for women, particularly in Nukta (Dengjok) and Thokwath (Gakdong) payams. KIs further emphasised that the current Health Sector Transformation Project (HSTP) does not include transport

options for referrals, which severely affects the ability to transfer seriously ill patients from rural villages. The absence of referral transport compounds existing barriers and leaves many patients without timely access to life-saving care. Across the locations surveyed, 79% of households were able to reach the nearest health facility within an hour.

Table 15 - Results of Health Indicators – part 2

Individual-level data collection				
Children 6-59 months who received vitamin A supplementation during the six months prior to data collection	**Host community**	**IDPs**	**Returnees**	**Overall**
Overall	119 (78.8%)	64 (62.1%)	78 (81.2%)	265 (74.9%)
Female	54 (81.8%)	25 (59.5%)	24 (68.6%)	104 (72.2%)
Male	65 (76.5%)	39 (63.9%)	54 (88.5%)	162 (76.7%)
Children aged 0-2 years	56 (76.7%)	39 (69.6%)	50 (84.7%)	147 (77.4%)
Children aged 3-5 years	63 (80.8%)	25 (53.2%)	28 (75.7%)	118 (72.0%)
Children 9-59 months who received the measles vaccination				
Overall	123 (87.2%)	73 (76.9%)	76 (83.5%)	275 (83.3%)
Female	55 (87.1%)	29 (72.5%)	25 (75.7%)	108 (74.8%)
Male	69 (87.3%)	44 (80%)	51 (87.9%)	167 (76.4%)
Children aged 0-2 years	54 (87.3%)	37 (77.1%)	44 (81.5%)	137 (77.7%)
Children aged 3-5 years	68 (87.2%)	36 (76.6%)	32 (86.5%)	138 (73.8%)
Participants who have received oral cholera vaccination				
Overall	426 (63.8%)	335 (67.9%)	331 (68.1%)	1098 (66.2%)
Female	245 (66.4%)	186 (70.5%)	175 (69.7%)	609 (65.8%)
Male	181 (60.7%)	149 (65.1%)	157 (66.4%)	490 (62.3%)
Children aged 0-2 years	27 (73.0%)	20 (69.6%)	25 (80.0%)	71 (69.4%)
Children aged 3-5 years	81 (80.2%)	42 (70.0%)	46 (79.0%)	170 (74.3%)
Households having access to healthcare within one hour by their normal means of transportation				
Yes	103 (78.0%)	85 (81.7%)	87 (78.4%)	275 (79.3%)

Across all assessed population groups, access to key vaccinations was relatively similar. Overall, 66.2% of children over 5 years have received at least one dose of the cholera vaccine, 83.4% of children aged 9–59 months have received a measles vaccination, and 74.9% of children aged 6–59 months have received Vitamin A supplementation in the past six months. While measles vaccination coverage is relatively high, coverage for cholera vaccination and Vitamin A supplementation remains below optimal levels, leaving a significant proportion of children unprotected.

Key informants reported that most women in rural areas give birth at home, which significantly increases the risk that children may miss essential vaccinations. Additional barriers to immunisation include long distances to health facilities and potential vaccine stockouts, particularly in Gakdong and Dengjock payams. These findings highlight the urgent need to strengthen routine immunisation services, enhance outreach in rural and hard-to-reach areas, and ensure follow-up for children who miss scheduled vaccinations.

Shelter

Table 16 - Results of Shelter Indicators

Household-level data collection				
Types of shelter	**Host community**	**IDPs**	**Returnees**	**Overall**
Tukul[17]	125 (94.7%)	84 (80.8%)	92 (82.9%)	301 (86.7%)
Rakooba (Rectangular-shaped grass roof house)[18]	6 (4.5%)	19 (18.3%)	16 (14.4%)	41 (11.8%)
Shelter issues				
Major damage to the roof	33 (25.0%)	50 (48.5%)	47 (42.3%)	130 (37.6%)
Leaks/floods during rain	26 (19.7%)	18 (17.5%)	19 (17.1%)	63 (18.2%)
Damage to walls	23 (17.4%)	31 (30.1%)	33 (29.7%)	87 (25.1%)
Damage to windows	22 (16.7%)	15 (14.6%)	20 (18.0%)	57 (16.5%)
Total collapse / too damaged but still living inside	23 (17.4%)	10 (9.7%)	25 (22.5%)	58 (16.8%)
Minor damage to roof (cracks, openings)	15 (11.4%)	14 (14.6%)	3 (2.7%)	38 (11.0%)

Survey results show that most households live in tukuls (86.7%), with only 11.8% residing in rakoobas. Despite this, shelter conditions remain precarious: 37.6% reported major roof damage with risk of collapse, 25.1% reported wall damage, and 18.2% experienced leaks during rain. Over two-thirds (69.7%) reported inadequate space for sleeping due to leaking roofs, noise, and overcrowding, while 63.3% cited insufficient space overall, and 58.0% lacked essential sleeping items such as bedding, mattresses, and mats.

KIs confirmed that inadequate shelter affects all population groups. Many IDP and returnee households are forced to share shelters with host families, leading to overcrowding and lack of privacy, while new arrivals often lack the resources to build their own shelters. Leaking roofs and shortages of repair materials (grasses and plastic sheets) further exacerbate vulnerabilities. Barriers to improving shelters include limited financial resources, restricted access to building materials during the rainy season, impassable roads, insecurity, and limited NGO support.

Access to essential NFIs, including clothes, shoes, and blankets, is also limited. Many IDPs fled from Nasir and Ulang counties without belongings, leaving households with only one or two sets of clothes. The arrival of new IDPs has further strained host household capacities. KIs highlighted a general shortage of clothing, bedding, and shoes, while barriers to accessing NFIs include lack of money to purchase items, limited NGO support, and increased demand among displaced populations.

[17] It is typically constructed using local materials such as mud or earth for the walls, wooden poles or branches for support, and a thatched grass roof. Tukuls are often used as permanent or semi-permanent shelters.
[18] A **rakooba** is a temporary or semi-permanent shelter structure, usually built using wooden poles for the frame and covered with materials like grass, plastic sheeting, or iron sheets.

DISCUSSION

The findings highlight significant vulnerabilities across health, nutrition, food security, livelihoods, WASH, shelter, and access to essential non-food items, with overlapping risk factors compounding the challenges faced by affected populations. Differences between host communities, IDPs, and returnees are evident, with displaced populations generally facing higher risks and reduced coping capacity.

High morbidity in the assessed locations reflects the interaction of infectious diseases, malnutrition, and limited healthcare access. Children under five are disproportionately affected, with reported symptoms including fever, cough, and diarrhoea. Historical data suggest recurrent outbreaks of cholera, measles, and other vaccine-preventable diseases, often intensified by seasonal flooding and displacement.[19] IDPs and returnees consistently report higher illness prevalence due to overcrowding, longer distances to functional health facilities, and service disruptions. By contrast, host communities are affected but less severely, highlighting the differential impact of displacement and limited access to care. Barriers such as long waiting times, unavailable services, and high medication costs continue to impede timely treatment. Gaps in vaccination coverage, particularly for cholera and Vitamin A supplementation, further increase susceptibility to outbreaks across all groups.

Acute malnutrition remains a critical concern, driven by population movements, seasonal migration, food insecurity, and localised flooding. Service gaps, including facility closures, insecurity, transport constraints, and weak referral systems, limit access to treatment and increase the risk of SAM complications. IDPs consistently show higher rates of severe malnutrition than host communities. Recent mass MUAC screenings by MedAir (25 June–3 July 2025) in Bilkey, Dengjok, and Gakdong reached 5,614 individuals, including 2,042 children aged 6–59 months and 3,572 PLWs. Findings revealed a critical situation among children under five, with 31.3% GAM and 10.9% SAM, exceeding IPC Phase-5 thresholds. Site-level rates were similarly alarming: Bilkey (30.9% GAM, 11.6% SAM), Dengjok (33.0% GAM, 12.4% SAM), and Gakdong (30.4% GAM, 6.5% SAM), underscoring the urgent need for targeted nutrition interventions.

Food insecurity emerged as the most urgent concern for all groups, reported by over 90% of households. It is driven by high prices, limited market access, delayed rains, and insufficient humanitarian assistance. IDPs and returnees face additional constraints in accessing markets and food assistance. Many households engage in firewood sales or risky livelihood activities, including unsafe fishing, to meet immediate needs. Negative coping strategies, including meal reduction, borrowing, and sale of productive assets, are more pronounced among IDPs and returnees, indicating progressive erosion of coping capacity. Host communities experience indirect pressure due to competition over scarce resources following new arrivals, highlighting the interconnectedness of population groups in shared local systems. While these findings reflect conditions in the surveyed locations, they cannot be generalised to the entire county. Historically, Akobo County experiences persistent acute food insecurity, often reaching IPC Phase 4 (Emergency) during the lean season (April–July). Between April and July 2025, both acute food insecurity and acute malnutrition remained at Phase 4 levels.[20]

Water insecurity, inadequate sanitation, and poor hygiene practices continue to drive disease risk, with IDPs and returnees disproportionately affected due to limited access to safe water sources and hygiene materials. Health facilities, except Akobo Teaching Hospital, lack adequate WASH services, undermining infection prevention and outbreak response. At the household level, long collection times, reliance on unsafe water sources, and limited hygiene materials increase vulnerability to

[19] South Sudan: WHO Voices from the Field 2025

[20] IPC "Acute Food Insecurity and Malnutrition Analysis APRIL 2025 – JULY 2025", 12 June 2025

waterborne diseases, particularly among displaced populations who often live in overcrowded or informal settlements.

Shelter conditions remain precarious, with damaged roofs and walls, inadequate sleeping space, and widespread overcrowding. IDPs and returnees, particularly those sharing with host families, face compromised privacy and safety. Access to NFIs such as clothing, bedding, and shoes is limited, especially for new arrivals. Financial barriers, poor road access, insecurity, and limited NGO support constrain shelter improvements and NFI provision, leaving households exposed to environmental hazards, disease, and protection risks.

Vulnerabilities across health, nutrition, food security, and WASH are expected to persist or worsen in the coming months. Seasonal rainfall and localised flooding will likely disrupt livelihoods, limit market access, and increase the risk of waterborne disease outbreaks. Acute malnutrition is projected to rise, particularly among IDPs and returnees with limited access to food and nutrition services. Humanitarian assistance is unlikely to meet the needs of newly arrived populations, while logistical challenges, including impassable roads, insecurity, and weak NGO presence, will delay a timely response.

Category	Domain	Evidence	Standard (If applicable)	Severity			
				Host community	IDPs	Returnees	Overall
Health Outcomes	Mortality	Not available					
	Malnutrition	MUAC score (under 5) Bilkey: 15% Denjok: 16% Gakdong: 10%	>10% GAM by MUAC	High			
	Morbidity	In the 2 weeks prior to data collection, 9.8% of HC individuals, 13.9% of IDPs, and 14.4% of returnees reported having a healthcare need.	>20% of people with any health care need in 2 weeks	Low	Medium	Medium	Medium
		In the 2 weeks prior to data collection, 52.2% of HC children under five, 53.2% of IDP, and 58.7% of returnees reported having been sick	v >40% of children sick in last 2 weeks	High	High	High	High
Direct Contributing Factors	Household Food Security	Food security outcomes are indicative of an IPC AFI Phase 3. Lack of HFA for IDPs and returnees (only 5.8% of IDP households and 16.2% of returnee households).	20% Severe and Very Severe hunger Very few households have acceptably diverse food consumption (<40% Acceptable FCS or High HDDS). >80% Household convergence Matrix classification of P3, P4 or P5 Survival food sources or mainly for aid	Medium	Medium	Medium	Medium

		Overall, 91.6% have access to an improved water source: 50.1% borehole and 41.5% public tap/standpipe	Most households have access to an improved water source (80%)	Low	Low	Low	Low
	Household Water Security	Approximately one-third of households (33.1%) in the assessed areas lack water containers to collect and store drinking water. Among households that do have containers, the average number of containers is three per household		Medium	Medium	Medium	Medium
	HH Assets and Coping	Overall, 15% of HHs (HC 24%, IDP 9% and returnees 11%) employed emergency coping Overall, 62% of the HHs reported (HC 60.6%, IDP 68.5% and 62%) that their main source of income is selling firewood	Most households are relying on humanitarian assistance, begging, or other severe coping strategies (>50%); Exhausted survival income sources or mainly rely on aid	Medium	Medium	Medium	Medium
	Living Conditions	Overall, type of shelter: 86.7%of the HHs are living in Tukul, with 37.6% reporting to the roof		Low	Low	Low	Low

Indirect Contributing Factors	Natural and built environment	Open defecation is widely practised, with 37.9% of HC, 57.7% of IDPs, and 55.9% of returnees.	Most households have access to a latrine (80%	Medium	High	High	High
	Market Functionality	Reported purchasing barriers: 96% High prices, 92% lack of money and 17% limited goods KIs reported that high food prices and low incomes are driving severe food insecurity, particularly among IDPs and returnees.	Availability of critical items Financial accessibility of critical items Damage to market infrastructure or functionality	High	High	High	High
	WASH Service Adequacy	Overall, 49.8% can fetch water within 30 minutes (HC 50% IDPs 49% and 50%)	Some households can fetch water within 30 minutes (50-<80%)	Medium	High	Medium	High

	Health Service Adequacy	Overall, 12% of individuals (HC 9.8%, IDPs 13.9%, returnees 14.4%) have unmet needs. Overall, 79.3% of HHs (HC78%, IDP81.7% and returnee 78.4%) can healthcare within one hour 66% of children over five received cholera vaccination, 83% of children 9–59 months received measles vaccination, and 75% of children 6–59 months received Vitamin A in the last six months.	>20% of individuals with an unmet healthcare need; At least 80% of population access healthcare in 1 hour; 95% measles vaccination coverage; 95% coverage of vitamin A doses within last 6 months	Medium	Medium	Medium	Medium
	Nutrition Service Adequacy	Not assessed					

Assessing Overall Severity for Public Health Classification – base this off the public health outcome indicators (morbidity, malnutrition, mortality) **High** – Indicates the population is currently experiencing emergency levels, or risk of emergency levels, of public health outcomes (morbidity, malnutrition, or mortality) **Medium** – Elevated but not necessarily emergency levels of public health outcomes **Low** – Non-emergency or elevated levels of public health outcomes.	**Medium to High severity public situation based on the severity of morbidity and malnutrition**	Low	Medium	High
Risk of Excess Mortality Statement		**09**	**22**	**14**

Table 17 - Comparison between IPHRA Indicator Thresholds

CONCLUSION AND RECOMMENDATIONS

The assessment highlights significant vulnerabilities across health, nutrition, food security, livelihoods, WASH, shelter, and access to essential non-food items. IDPs and returnees remain the most affected, facing compounded risks due to population movements, inadequate services, and limited coping capacity. Seasonal factors, insecurity, and logistical constraints are likely to exacerbate these challenges between August and October, increasing the risk of disease outbreaks, malnutrition, and protection concerns.

Addressing these vulnerabilities requires timely and targeted humanitarian interventions, including strengthened nutrition and health services, improved WASH and shelter support, and enhanced access to food and livelihoods. Coordinated efforts that consider the specific needs of displaced populations are critical to mitigate risks, reduce vulnerabilities, and improve overall resilience.

The following recommendations are proposed to guide humanitarian actors in addressing urgent gaps and strengthening resilience among affected populations. They are prioritised by severity and expected timeline for implementation.

Table 18 - Recommendations

Risk of Excess Mortality Dimension	Severity	Period	Recommendation
Nutrition	**High**	Short term	Strengthen the coverage of OTP and CMAM services in Gakdong, Denjok, and other IDP/returnee-hosting areas to ensure timely treatment of acute malnutrition in children. Integrate nutrition services with health and WASH programming to reduce relapse rates and prevent complications.
Morbidity	**Medium**	Medium-term	Strengthen primary healthcare delivery, ensuring essential medicines, trained staff, and functional referral and emergency transport systems. Scale up disease surveillance and early warning systems to quickly detect and respond to outbreaks.
Household Food Consumption	**Medium**	Short-term	Improve coverage of FSL interventions by completing the new registration process to ensure the inclusion of vulnerable IDP and returnee households. Address urgent food consumption gaps through timely, sufficient, and equitable food assistance.
Health Service Adequacy	**Medium**	Medium-term	Strengthening access to health services through mobile clinics and outreach activities. Support immunisation and preventive health interventions to address gaps and reduce the risk of disease outbreaks.
Sanitation and Hygiene	**High**	Medium-term	Strengthen access to safe water through the development or rehabilitation of water sources. Support household hygiene practices through the provision of hygiene materials and kits. Enhance WASH services at health facilities to prevent infections and improve outbreak response.
Livelihoods	**Medium**	Short term	Expand livelihood support programs for IDPs and returnees.
Living Conditions	**High**	Short term	Provide support to improve access to essential non-food items, including bedding, blankets, and clothing. Support shelter improvements and repairs for vulnerable households, including both displaced populations and host communities.

ANNEX

References

1. CSRF South Sudan: Akobo County Profile, Jonglei State.
2. Interagency spot check Needs Assessment Report to conflict-affected IDPs in Akobo East, Akobo, Jonglei State. On file with REACH
3. IPC "Acute Food Insecurity and Malnutrition Analysis APRIL 2025 – JULY 2025", 12 June 2025
4. IMPACT key public health indicator thresholds are developed in line with internationally recognised benchmarks, including WHO guidelines, UNICEF standards, and the SPHERE Handbook, to determine the severity of public health situations.
5. Sphere standards handbook 2018
6. Among the 1,936 individuals surveyed, 53.2% were female and 46.8% were male. The variable represents the sex of individuals as reported by the respondents themselves.
7. Human Rights Watch: South Sudan Army Attacks Displace Thousands in Nasir - Communities at Risk as Crisis Deepens.
8. UNHCR South Sudan - Border Monitoring Report - April 2025
9. IOM DTM South Sudan — Mobility Tracking (Round 16)
10. South Sudan Cholera Dashboard
11. WFP-VAM: Livelihood Coping Strategies – Food Security
12. South Sudan: Nutrition Information Dashboard
13. IPC AMN Technical Manual Version 3.0
14. It is typically constructed using local materials such as mud or earth for the walls, wooden poles or branches for support, and a thatched grass roof. Tukuls are often used as permanent or semi-permanent shelters.
15. A rakooba is a temporary or semi-permanent shelter structure, usually built using wooden poles for the frame and covered with materials like grass, plastic sheeting, or iron sheets.
16. South Sudan: WHO Voices from the Field 2025

Analysis

The household data were cleaned and analysed using IPHRA R scripts, which were developed by IMPACT HQ. Various statistics have been computed on the data, including percentages, means, and medians. The analysed data were presented in both tabular and Excel files. KIIs analysis was conducted using the REACH Data Saturation Analysis Grid (DSAG). The quantitative data were cleaned and analysed two days after data collection, and preliminary findings were drafted and shared with key partners, including donors, within seven days after the last day of data collection.

Limitations

The IPHRA methodology is intended to be a lightweight method to assess the key public health outcomes and service coverage indicators compared to other more robust methods. Given the suggested IPHRA methods, there are several key limitations:

- **Not a causal analysis** – The IPHRA method intends to understand the severity of public health needs and service gaps, however, given this focus it may not fully explain the reasons or causes of the results. Some analysis and triangulation with qualitative components may give an indication, but it will likely be limited.
- **Not generalizable** – Cluster sampling approaches are not recommended for IPHRA assessments. The allowance of purposive sampling means that results (although representative

per strata) shouldn't be generalised to a wider population beyond the sites and facilities assessed.

- **Likely not reaching saturation** – For the qualitative components, sample sizes are likely not adequate to reach a full saturation of responses in the population. The intent of these is to provide some light-touch information to triangulate with household survey results.

For more information on the research design, refer to the Terms of Reference.